

U.S. Department of  
Homeland Security

United States  
Coast Guard



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# Merchant Mariner Medical Manual



**COMDTINST M16721.48**

**August 2019**

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COMMANDANT INSTRUCTION M16721.48

Subj: MERCHANT MARINER MEDICAL MANUAL

- Ref:
- (a) Title 46 United States Code (U.S.C.), Subtitle II, Part E
  - (b) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)
  - (c) Title 46, Code of Federal Regulations (CFR), Part 10, Subpart C
  - (d) Title 46 CFR Parts 401 and 402
  - (e) 80 Federal Register (FR) 8586, February 18, 2015

1. **PURPOSE.** This Manual provides guidance for evaluating the physical and medical condition of applicants for merchant mariner medical certificates. The guidance in this Manual should assist medical practitioners, the maritime industry, individual mariners, and U.S. Coast Guard (hereinafter, Coast Guard) personnel in evaluating an applicant's physical and medical status to meet the requirements of References (a) through (d).
2. **ACTION.** All Coast Guard Directorates, Offices, and Headquarters Units under the Assistant Commandant for Prevention Policy (CG-5P) should comply with the provisions of this Manual. Mariners who are required to hold a valid medical certificate should use the guidance in this Manual to demonstrate their medical and physical qualifications. Medical providers who conduct mariner medical certification examinations should use the guidance in this Manual to conduct complete and appropriate medical certification evaluations. Internet release is authorized.
3. **DIRECTIVES AFFECTED.** This Manual replaces prior guidance on the medical evaluation of Merchant Mariners. Medical and Physical Evaluation Guidelines for Merchant Mariner Credentials, Navigation and Inspection Circular (NVIC) 04-08, Commandant Publication (COMDTPUB) 16700.4, and Guidance on the Issuance of Medical Certificates, NVIC 01-14,

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A																										
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NON-STANDARD DISTRIBUTION:

COMDTPUB 16721, are hereby cancelled. Part A of the Marine Safety Manual, Volume III, Marine Industry Personnel, COMDTINST M16000.8 (series) [MSM] has not been updated since 1999, and may contain some information that conflicts with the guidance in this Manual. Until Part A of the MSM is updated, the guidance in this Manual supersedes the MSM in any areas where they may conflict.

4. BACKGROUND.

- a. Service on vessels may be arduous and impose unique physical and medical demands on mariners. The public safety risks associated with the medical and physical conditions of mariners on vessels are important considerations for the safe operation of vessels and the safety and well-being of the crew. In the event of an emergency, immediate response may be limited to the vessel's crew, and outside help may be delayed.
- b. References (a) and (c) require that covered mariners be medically and physically able to perform their duties. Reference (b) requires each party to establish standards of medical fitness for seafarers. This convention applies to mariners on seagoing vessels, defined as vessels which operate beyond the Boundary Line, and does not apply to inland mariners. Reference (d) contains special requirements for registration for Great Lakes Pilots, including the requirement to "pass a physical examination given by a licensed medical doctor." With the exception of hearing, visual acuity, and color vision, none of these references contains specific standards for determining whether mariners are physically and medically qualified.
- c. The Coast Guard provided additional detail on mariner medical and physical requirements through guidance published in NVIC 04-08, NVIC 01-14, and Part A of MSM Volume III, Chapter 4. NVIC 04-08 detailed mariner physical ability guidelines, acceptable vision and hearing standards, medical conditions that are subject to further review, and the recommended evaluation data for each condition. The additional specificity provided by NVIC 04-08 helped to reduce the subjectivity of the physical and medical evaluation process and promoted more consistent evaluations. NVIC 04-08 also helped to reduce application processing time by reducing uncertainty regarding the appropriate physical and medical information needed to evaluate applications.
- d. In the years since publication of NVIC 04-08, information received from public comment, medical appeals, and the recommendations of the Merchant Mariner Medical Advisory Committee (MEDMAC) highlighted the need to provide additional specificity and clarity on mariner medical and physical requirements. It also underscored the potential for confusion caused by having medical evaluation guidance contained in several different guidance documents. In response, the Coast Guard began a series of revisions to the medical evaluation guidelines, published as Change 1 to NVIC 04-08, in June 2013, and Change 2 to NVIC 04-08, in April 2016. Reference (e) proposed further revision to NVIC 04-08, specifically requesting public comment on proposed policy clarifications regarding the issuance of medical waivers for diabetes mellitus, cardiomyopathy and sleep disorders.

- e. NVIC 04-08 also required additional policy clarification and reference updates following publication of the final rule on the Implementation of the Amendments to the International Convention on Standards for Training, Certification and Watchkeeping for Seafarers, 1978, and Changes to National Endorsements (78 FR 77795, Dec. 24, 2013). New guidance was required to address the medical certificate and related processes, including procedures for application, issuance, and cancellation of the medical certificate. Incorporating the additional guidance, the required reference updates, the policy clarifications proposed in Reference (e), and the changes previously incorporated into Change 1 and Change 2 to NVIC 04-08 triggered issuance of a new policy document, in accordance with the Coast Guard Directives System, COMDTINST M5215.6 (series).
- f. This Manual consolidates guidance on mariner medical evaluations, previously contained in NVIC 04-08, NVIC 01-14, and Part A of MSM Volume III, Chapter 4, into one document, and serves as a resource for mariner applicants, medical practitioners, employers, and Coast Guard personnel. It also provides written documentation of medical evaluation practices that were not previously contained in any guidance document, making these practices transparent and consistent.
  - (1) The Manual provides information to mariner applicants on the Coast Guard's processes for evaluating physical and medical status to determine fitness for merchant mariner medical certification.
  - (2) The Manual provides information for medical practitioners who perform merchant mariner medical examinations. The information includes guidance on the conduct of general medical examinations, provides detail on medical conditions that are subject to further review, and incorporates flexibility in the recommended evaluation data for those conditions.
  - (3) The Manual provides guidance to Coast Guard personnel who evaluate mariner medical examinations, promoting consistency in the medical certification process.
- g. Since this Manual clarifies and consolidates prior medical evaluation guidance, the Coast Guard does not expect it to result in higher rates of medical disqualification or in increased processing time for the medical certificate application. Instead, the Coast Guard anticipates that use of this Manual will promote medical evaluations that are less subjective and more efficient because the information needed will be clear at the outset of the application process.
  - (1) The Manual represents the Coast Guard's current thinking on mariner medical evaluation and is issued for guidance purposes to outline methods of best practice for compliance with the applicable law.
  - (2) Applicants for the medical certificate may use an alternative approach to demonstrate compliance with the merchant mariner medical standards, if the approach satisfies the requirements of the applicable statutes and regulations. While not required, those who wish to discuss alternative approaches may contact the National Maritime Center (NMC) Medical Evaluations Division, which is responsible for implementing this

guidance. Contact information for the NMC Medical Evaluations Division is listed in [Paragraph 11](#), below.

- h. This Manual has been developed by the Coast Guard in consultation with experienced maritime community medical practitioners and industry stakeholders serving on the Merchant Mariner Medical Advisory Committee (MEDMAC), and the Merchant Marine Personnel Advisory Committee (MERPAC).
    - (1) In addition, the public was afforded the opportunity to participate in the development of medical policy by providing comment and serving on working groups at the public meetings of MEDMAC. The public was also afforded opportunity to comment on drafts of the policies contained in this Manual, and its predecessor, NVIC 04-08. *See* 80 FR 8586 (February 18, 2015) [Diabetes, cardiomyopathy and sleep disorders], 80 FR 4582 (January 28, 2015) [Medications], 78 FR 17917 (March 25, 2013) [Seizures], and 77 FR 55174 (September 7, 2012) [Implantable Cardioverter Defibrillators].
    - (2) The Coast Guard also considered the medical evaluation guidelines utilized by other Federal transportation mode authorities.
  - i. The Coast Guard mariner medical evaluation and certification process seeks to determine whether an applicant meets the medical and physical standards for merchant mariners based upon the information available to the Coast Guard at the time of the certification decision. The Coast Guard recognizes that some maritime work environments may require additional medical and physical standards related to factors that include, but are not limited to, specific duty requirements, austere work environments, lack of access to definitive medical care, and operational tempo. Nothing in this Manual precludes marine employers from establishing more rigorous medical or physical ability guidelines.
  - j. The guidance in this Manual may also be helpful to maritime academies when determining whether entrants into a cadet program are physically and medically qualified. A cadet with a condition that may lead to disqualification, as outlined in Chapters 8 through 25 of this Manual, should be advised as early as possible that he or she may not be physically or medically eligible to receive a credential upon graduation.
5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally binding requirements on any party outside the Coast Guard.
6. MAJOR CHANGES. This Manual consolidates, clarifies, and updates prior guidance on the merchant mariner medical evaluation.
- a. The material was reorganized into a manual format instead of a NVIC to improve utility and ease of use for the regulated community and others who reference the document. Additionally, the name and number of the Manual will not change with every future issuance of the document, reducing the risk of confusion.

- b. Provisions were added that clarify confusion between 46 CFR 15.401(c), which requires a medical certificate in order to serve under the authority of the merchant mariner credential (MMC), and Table 1 to 46 CFR 10.302(a), which provides no medical requirements for certain entry-level mariners (In accordance with 46 CFR 10.107, entry-level mariner means a mariner holding no rating other than ordinary seaman, wiper, steward's department, or steward's department food handler (F.H.)). To resolve this confusion, the Coast Guard will no longer require medical certificates for entry-level mariners on vessels not subject to STCW who do not serve as food handlers.
- c. Material was added that provides detailed processing guidance to the National Maritime Center so that Coast Guard personnel will have a standardized process for dealing with a number of situations that recur regularly.
- d. Information was added to provide more detail on the relationship between medical certificates for pilots and the requirement for annual pilot physicals.
- e. Information was added to provide clarity and guidance on conduct of the merchant mariner general medical examination, in accordance with 46 CFR 10.304(a).
- f. The guidance now includes the process to be followed when the Coast Guard receives information indicating that a medical certificate holder has developed a medical condition that poses a significant risk of sudden incapacitation, or is taking medication that poses a significant risk of impairment. The process includes procedures for cancelling medical certificates for mariners who no longer meet medical certification criteria.
- g. Finally, much of the guidance from NVIC 01-14 relating to implementation and transition provisions for moving to issuance of separate medical certificates is no longer relevant and, therefore, was not included in this Manual.

## 7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. The development of this Manual and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, Commandant (CG-47). This Manual is categorically excluded under current Department of Homeland Security (DHS) categorical exclusion DHS (CATEX) A3 from further environmental analysis in accordance with the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1 and the Environmental Planning (EP) Implementing Procedures (IP).
- b. This Manual will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policy in this Manual must be individually evaluated for compliance with the National Environmental Policy Act (NEPA) and Environmental Effects Abroad of Major Federal Actions, Executive Order 12114, Department of Homeland Security (DHS) NEPA policy, Coast Guard Environmental Planning policy, and compliance with all other applicable environmental mandates.

8. **DISTRIBUTION.** No paper distribution will be made of this Manual. An electronic version is located on the following Commandant (CG-612) websites. Internet: <http://www.dcms.uscg.mil/directives> and CGPortal: <https://cg.portal.uscg.mil/library/directives/SitePages/Home.aspx>. A link is also located on the NMC site: <https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/National-Maritime-Center/>.
9. **RECORDS MANAGEMENT CONSIDERATIONS.** This Manual has been evaluated for potential records management impacts. The development of this Manual has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., National Archives and Records Administration (NARA) requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirements.
10. **CHAPTER GUIDE.** While all chapters of this Manual provide information useful to mariner applicants, as well as the medical practitioners who treat and evaluate them, certain chapters may be of particular interest to specific audiences. Table 1, Chapter Guide, summarizes the contents of the Chapters in this Manual and likely primary audiences.

**Table 1: Chapter Guide.** The following abbreviations are used in the Table: Coast Guard evaluators (CG); Company and Vessel Owners and Operators (OO); Mariner applicants (MA); Medical practitioners (MP).

Chapter Number	Chapter Name	Brief Description of Contents	Of primary interest to:
1	Medical Certification Standards	Medical certification standards for each credential.	CG, MA
2	The Medical Certificate	Contents of the certificate, application procedures, and a sample medical certificate.	CG, MA
3	Medical Certificate Processing	Guidance on the medical review process, as well as waivers and limitations.	CG, MA, OO
4	The Merchant Mariner Medical Examination	Guidance on the merchant mariner medical examination.	MA, MP
5	Vision and Hearing Standards	Guidance on evaluating vision and hearing.	CG, MA, MP
6	Physical Ability Guidelines	Guidance on evaluating whether MAs are physically able to perform the function of the credential.	CG, MA, MP



Chapter Number	Chapter Name	Brief Description of Contents	Of primary interest to:
7	Medications Subject to Further Review	Guidance on evaluating MAs who take certain medications.	CG, MA, MP
8	Medical Conditions Subject to Further Review	Guidance on medical conditions subject to further review.	CG, MA, MP
9 - 25	Specific Medical Conditions	Detailed guidance on listed conditions and supplemental information to be submitted for review.	CG,MA, MP

11. **QUESTIONS.** All questions regarding implementation of this Manual should be directed to the NMC Medical Evaluations Division at [iasknmc@uscg.mil](mailto:iasknmc@uscg.mil). The NMC can also be contacted by telephone at: 1-888-I-ASK-NMC.
12. **FORMS/REPORTS.** The forms referenced in this Manual are available from USCG Electronic Forms on the Standard Workstation, or on the Internet at <http://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/National-Maritime-Center/> or <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-C4IT-CG-6/The-Office-of-Information-Management-CG-61/Forms-Management/> ; on the Coast Guard Portal at <https://cg.portal.uscg.mil/library/forms/SitePages/Home.aspx>; and available to the public at [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/forms/CG\\_719K.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/forms/CG_719K.pdf) , and [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/forms/CG\\_719KE.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/forms/CG_719KE.pdf) .
13. **REQUESTS FOR CHANGES.** Changes will be issued as necessary. All requests for changes should be directed to the Office of Merchant Mariner Credentialing (CG-MMC), at (202) 372-2357, or [MMCPolicy@uscg.mil](mailto:MMCPolicy@uscg.mil).

R. V. TIMME /s/  
 Rear Admiral, U.S. Coast Guard  
 Assistant Commandant for Prevention Policy

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## **CHAPTER 1. MEDICAL CERTIFICATION STANDARDS**

### **A. Medical Certification**

The standards for merchant mariner medical certification are contained in 46 CFR, Part 10, Subpart C. The standards include requirements for vision, hearing, general medical examination and demonstration of physical ability.

#### **1. Vision Requirements.**

Title 46 CFR 10.305 provides the vision standards for medical certification. Guidance on vision standards and waivers is contained in Chapter 5 of this Manual, Vision and Hearing Standards.

#### **2. Hearing Requirements.**

Title 46 CFR 10.306 provides the hearing standards for medical certification. Guidance on hearing standards and waivers is contained in Chapter 5 of this Manual, Vision and Hearing Standards.

#### **3. The General Medical Examination.**

Title 46 CFR 10.304 requires that the general medical exam be documented and of sufficient scope to ensure that the applicant for medical certificate has no conditions that pose significant risk of sudden incapacitation or debilitating complication. The regulation also requires documentation of any conditions requiring medications that impair cognitive ability, judgment or reaction time. Chapter 4 of this Manual provides guidance on the merchant mariner general medical examination, and Chapter 7 provides guidance on medications that are subject to further review.

#### **4. Physical Abilities.**

The duties and responsibilities that a mariner may perform can vary widely by credential. Mariners should be physically capable of performing all potential duties, both routine and emergency, associated with their credential(s). Chapter 6 of this Manual, Physical Ability Guidelines, provides guidance on typical mariner duties.

### **B. Table of Medical and Physical Requirements for Mariner Endorsements.**

[Table 1-1](#) lists the medical and physical requirements for mariner endorsements. It expands the contents of Table 1 to 46 CFR 10.302(a) to provide further guidance to applicants. If an applicant applies for more than one credential at the same time, the most stringent of the requirements that applies to each credential will prevail.

COMDTINST M16721.48  
Medical Certification Standards

**Table 1-1: Medical and Physical Requirements for Mariner Endorsements**

<b>Credential</b>	<b>Vision Test</b>	<b>Hearing Test</b>	<b>General Medical Exam</b>	<b>Demonstration of Physical Ability</b>
(1) Deck officer, including pilots	Yes §10.305(a)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(2) Engineering officer	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(3) Radio officer	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(4) Offshore installation manager, barge supervisor, or ballast control operator	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(5) Able seaman	Yes §10.305(a)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(6) QMED	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(7) Able seafarer deck	Yes §10.305(a)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(8) RFPNW	Yes §10.305(a)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(9) Able seafarer engine	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(10) RFPEW	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(11) Electro-technical rating	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(12) Tankerman	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(13) Lifeboatman and Proficiency in survival craft and rescue boats other than fast rescue boats (PSC)	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(14) Lifeboatman-Limited and Proficiency in survival craft and rescue boats other than fast rescue boats—limited (PSC—limited)	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(15) Fast Rescue Boat	Yes §10.305(b)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(16) Food handler serving on vessels to which STCW does not apply	No	No	No (See <a href="#">Note 1</a> )	No
(17) Food handler serving on vessels to which STCW applies	No	No	No (See <a href="#">Note 1</a> )	Yes §10.304(c)
(18) Ratings, including entry level, serving on vessels to which STCW applies, other than those listed above. This includes endorsements as Vessel personnel with designated security duties and security awareness (VPDSD and SA).	No	No	No	Yes §10.304(c)
(19) Ratings, including entry level, serving on vessels to which STCW does not apply, other than those listed above. (See <a href="#">Note 2</a> ).	No	No	No	No
(20) Vessel security officer	Yes §10.305(a)	Yes §10.306	Yes §10.304(a)	Yes §10.304(c)
(21) Staff Officers (46 CFR 10.301(c)). (See <a href="#">Note 3</a> ).	No	No	No	No

NOTE 1 to [Table 1-1](#), Food Handlers: Applicants for food handler endorsement are not required to submit to a general medical exam, but must obtain a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace (*See* 46 CFR 10.304(b)). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the practitioner.

- a. *Communicable disease* is defined in 46 CFR 10.107(b) as “any disease capable of being transmitted from one person to another directly, by contact with excreta or other discharges from the body; or indirectly, via substances or inanimate objects contaminated with excreta or other discharges from an infected person.”
- b. The Department of Health and Human Services periodically publishes, in the *Federal Register*, a list of infectious and communicable diseases transmissible through the food supply, and that list provides examples of communicable diseases for the purposes of 46 CFR 10.304.
- c. The Medical Practitioner need not perform any additional testing unless it is deemed clinically necessary. Applicants and currently employed food workers should report information about their health as it relates to diseases that are transmissible through food. Circumstances that the medical practitioner should consider when certifying an applicant include, but are not limited to, the following:
  - (1) Whether the applicant reports that they have been diagnosed with, or exposed to an illness due to organisms including, but not limited to, Salmonella Typhi, Shigella species, Shiga-toxin producing Escherichia coli, or Hepatitis A virus within the past month;
  - (2) Whether the applicant reports that they have at least one symptom caused by illness, infection, or other source that is associated with an acute gastrointestinal illness such as diarrhea, fever, vomiting, jaundice, or sore throat with fever; or
  - (3) Whether the applicant reports that they have a lesion containing pus, such as a boil or infected wound, which is open or draining and is on the hands, wrists, or exposed portions of the arms.

NOTE 2 to [Table 1-1](#), Entry Level Ratings Serving on a Vessel to which STCW does not apply:

- a. Entry-level mariner means a mariner holding no rating other than ordinary seaman, wiper, steward’s department, or steward’s department food handler (F.H.) (*See* 46 CFR 10.107).

- b. MMC applicants holding only an entry-level national endorsement need not meet the medical and physical requirements unless they are serving on a vessel subject to STCW (*See* 46 CFR 10.301(a) and line 19 in Table 1 to 46 CFR 10.302(a)). Therefore, MMC applicants holding or seeking only an entry-level national endorsement, without food handler endorsement, are not required to apply for or hold a valid medical certificate, except as indicated in Paragraph B.3 of Chapter 2 of this Manual.

NOTE 3 to [Table 1-1](#), Staff Officers: Applicants holding only a staff officer endorsement need not meet the medical and physical requirements (*See* 46 CFR 10.301(c)). Therefore, MMC applicants holding or seeking only a staff officer endorsement are not required to apply for or hold a valid medical certificate.

### **C. Requirements for Conduct of Medical Exams, Tests, and Demonstrations of Physical Ability.**

1. In accordance with 46 CFR 10.302(b), all exams, tests, and demonstrations must be performed, witnessed, or reviewed by a licensed medical doctor, licensed physician assistant, licensed nurse practitioner, or a designated medical examiner (DME). All licensed medical practitioners must hold a valid license issued in the United States (U.S.), a U.S. possession, or a U.S. territory. Examinations for Great Lakes Registered Pilots must be conducted by a licensed medical doctor in accordance with the physical exam requirements in 46 CFR 402.210 (*See* [Paragraph D.4.](#) of this Chapter).
2. A DME means a licensed physician, licensed physician assistant, or licensed nurse practitioner who has been trained and approved to conduct medical and physical examinations of merchant mariners on behalf of the U.S. Coast Guard and may be delegated limited authority to grant waivers and approve physical/medical suitability for service (*See* 46 CFR 10.107).
3. The terms *medical doctor* and *physician* mean an individual who has been educated, trained and licensed to practice medicine as a medical doctor (M.D.) or doctor of osteopathy (D.O.).
4. Exams, tests and demonstrations performed, witnessed, or reviewed by holders of foreign medical licenses, or by chiropractors or naturopathic doctors, are not accepted under current regulations.
5. All applicants who require a general medical exam must be physically examined. Examinations based solely on documentary review and/or patient history review are unacceptable (*See* Table 1 to 46 CFR 10.302(a) and 46 CFR 10.304).
6. Individuals who submit false information to the Coast Guard may be subject to criminal prosecution under 18 U.S.C. 1001.

**D. Medical Certification Requirements for Specific Endorsements.**

1. Entry-level, Staff Officer, and Tankerman Person in Charge.

Although 46 CFR 15.401(c) requires a medical certificate in order to serve under the authority of the MMC, Table 1 to 46 CFR 10.302(a) does not provide any medical requirements for certain entry-level mariners. To resolve confusion between these two regulations, the Coast Guard will not require a medical certificate for those mariners who are not required to undergo a general medical exam or a demonstration of physical ability under 46 CFR 10.302 (*See Table 1-1 of this Chapter: Medical and Physical Requirements for Mariner Endorsements, rows (19) and (21)*).

- a. Mariners with only an entry-level national endorsement or a staff officer endorsement do not require a medical certificate.
- b. Mariners with only an endorsement as Tankerman Person in Charge (PIC) Restricted to Fuel Transfers on Towing Vessels do not require a medical certificate (*See CG-MMC Policy Letter 01-17 which can be found at [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc\\_policy\\_letter\\_01-17\\_final\\_3\\_9\\_17-date.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc_policy_letter_01-17_final_3_9_17-date.pdf)*).

2. Food Handler Endorsement.

- a. Applicants for endorsement as food handler are required to produce a statement from a licensed physician, physician assistant, or nurse practitioner certifying that the applicant is free from communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b).
- b. Communicable disease is defined in 46 CFR 10.107(b) as “any disease capable of being transmitted from one person to another directly, by contact with excreta or other discharges from the body; or indirectly, via substances or inanimate objects contaminated with excreta or other discharges from an infected person.” The Department of Health and Human Services periodically publishes, in the Federal Register, a list of infectious and communicable diseases transmissible through the food supply, and that list provides examples of communicable diseases for the purposes of 46 CFR 10.304.
- c. The medical practitioner’s communicable disease certification may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the practitioner.
- d. The medical practitioner need not perform any additional testing unless it is deemed clinically necessary. Applicants and currently employed food workers should report information about their health as it relates to diseases that are transmissible through food. Circumstances that the medical

practitioner should consider when certifying an applicant include, but are not limited to, the following:

- (1) Whether the applicant reports that they have been diagnosed with, or exposed to an illness due to organisms including, but not limited to, Salmonella Typhi, Shigella species, Shiga-toxin producing Escherichia coli, or Hepatitis A virus within the past month;
  - (2) Whether the applicant reports that they have at least one symptom caused by illness, infection, or other source that is associated with an acute gastrointestinal illness such as diarrhea, fever, vomiting, jaundice, or sore throat with fever; or
  - (3) Whether the applicant reports that they have a lesion containing pus, such as a boil or infected wound, which is open or draining and is on the hands, wrists, or exposed portions of the arms.
- e. If the mariner applicant does not provide a statement regarding communicable diseases, in accordance with 46 CFR 10.304(b), the medical certificate will contain a limitation stating “No food handling.”

3. First Class Pilots and Those Individuals Serving As Pilots.

- a. Title 46 CFR 11.709 requires that every credentialed first-class pilot serving as a pilot on a vessel of 1600 Gross Register Tons (GRT) or more have a thorough physical examination each year, that this physical examination meets the same requirements for originally obtaining the medical certificate as specified in 46 CFR, part 10, subpart C, and that it be recorded on an Application for Medical Certificate, Form CG-719K.
- b. Every other year, the results of the examination must be submitted to the Coast Guard, no later than 30 calendar days after completion of the physical examination, in accordance with 46 CFR 11.709(b).
- c. An individual’s first-class pilot endorsement becomes invalid on the first day of the month following the anniversary of the individual’s most recently completed Coast Guard-required physical examination, in accordance with 46 CFR 11.709(d). The individual may not operate under the authority of that endorsement until a physical examination has been satisfactorily completed.
- d. For the purposes of 46 CFR 11.709(b) and (d), the Coast Guard considers the date of “the individual’s most recently completed Coast Guard-required physical examination” as follows:
  - (1) In the years that the mariner is required to submit the results of the annual physical to the Coast Guard, the Coast Guard will consider the date of “the individual’s most recently completed Coast Guard-required physical

examination” to be the same as the *date of examination* listed on the medical certificate (See Paragraph C.1. of Chapter 2 of this Manual).

(2) In the years that the mariner is not required to submit the annual physical examination to the Coast Guard, the Coast Guard will consider the date of “the individual’s most recently completed Coast Guard-required physical examination” to be the same as the date that the medical practitioner signs the Application for Merchant Mariner Medical Certificate, Form CG-719K.

- e. Title 46 CFR 15.812 (b)(3)(iii) and (c)(3) requires that other licensed individuals who serve as pilots on certain types of vessels must have a current physical examination, in accordance with the provisions of 46 CFR 11.709. These individuals must meet the same requirements of Paragraphs D.3.a through D.3.d of this Chapter. Individuals with endorsements as pilot, master, or mate (and individuals applying for those credentials) who do not, in fact, serve as first-class pilots or otherwise serve as pilots, in accordance with 46 CFR 15.812(b)(3) and (c), are not required to have an annual physical examination.
- f. The Coast Guard may initiate appropriate administrative action in the event that any first-class pilot, or any other individual serving as a pilot (as described above), does not meet the physical examination requirements specified in 46 CFR 10.301 and 46 CFR 11.709, up to and including suspension or revocation of the mariner’s credential, in accordance with 46 CFR part 5.

#### 4. Great Lakes Registered Pilots.

- a. A Great Lakes Registered Pilot must be “physically competent to perform the duties of a U.S. Registered Pilot and meet the medical requirements prescribed by the Commandant” (See 46 CFR 401.210(a)(4)). The annual physical examination required by 46 CFR 402.210(a) must be reported “on the form furnished by the Director” and must be given by a “licensed medical doctor.” The Director, Office of Great Lakes Pilotage at Coast Guard Headquarters (Director), has designated the Application for Medical Certificate, Form CG-719K, as the required form for physical examinations, replacing the previous requirement to use Page 3 of the Application for Registration as United States Registered Pilot, Form CG-4509.
- b. To satisfy all original, renewal and annual physical reporting requirements of 46 CFR 401.210 and 402.210, Great Lakes Registered Pilots are responsible for annually submitting the Application for Medical Certificate, Form CG-719K, to the Director, at: Commandant (CG-WWM-2), ATTN: Great Lakes Pilotage, U.S. Coast Guard, Stop 7509, 2703 Martin Luther King Jr. Ave. SE, Washington, DC 20593-7509. The Director will forward the application for

medical certificate to the NMC for evaluation and determination of fitness for medical certification.

- c. The Director may suspend and/or revoke or refuse to register or renew a Great Lakes Registered Pilot's registration when that Pilot does not continuously meet the standards of this Manual (*See* 46 CFR 401.210 and 46 CFR 401.240). Evidence obtained from any physical examination may be used by the Coast Guard to cancel a mariner's medical certificate.



## **CHAPTER 2. THE MEDICAL CERTIFICATE**

### **A. Medical Certificate Overview.**

1. The medical certificate, issued by the Coast Guard under 46 CFR part 10, subpart C, serves as proof that a mariner meets the medical and physical standards for merchant mariners. The Coast Guard retains final authority for determining whether a mariner applicant is medically and physically qualified for the medical certificate (*See* 46 CFR 10.302(a)).
2. All credentialed mariners who are required to meet the medical and physical standards for merchant mariners are required to hold a valid medical certificate in order to operate under the authority of their merchant mariner credential (MMC) (*See* 46 CFR 15.401(c)). Mariners who are not required to undergo a general medical exam or a demonstration of physical ability under 46 CFR 10.302 are not required to hold a medical certificate.
3. In order to avoid foreign port state control actions, and to comply with 46 CFR 15.401, companies and vessel operators should:
  - a. Ensure that all seafarers employed by the company or operator carry a valid medical certificate when operating under the authority of their MMC on vessels subject to the STCW; or when engaged on a vessel calling on a port in a country ratifying the Maritime Labour Convention (MLC).
  - b. Determine whether employed mariners have a valid medical certificate in accordance with 46 CFR 15.401(c).

### **B. Background.**

1. The STCW Convention requires signatory parties to establish standards of medical fitness for seafarers and procedures for the issuance of a separate medical certificate.
  - a. In order to comply with the Convention, seafarers must hold a valid medical certificate when serving at sea under the authority of their STCW credential.
  - b. While initially an STCW provision, the Coast Guard implemented the change to a separate medical certificate for all credentialed mariners who are required to meet the medical and physical standards for merchant mariners, including those holding only a national endorsement.
2. In addition, the Maritime Labour Convention (MLC), which entered into force on August 20, 2013, requires all mariners (including entry-level, food handlers, and staff personnel) serving on vessels to have a valid medical certificate.
  - a. Until such time that the United States ratifies the MLC, the Coast Guard cannot mandate enforcement of its requirements for U.S. mariners. However, Article V, Paragraph 7 of the MLC contains a “no more favorable treatment clause” that

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- requires ratifying governments to impose Convention requirements on all vessels—even those from a non-ratifying government—when calling on their ports. As a result, U.S. vessels that cannot demonstrate compliance with the MLC may be at risk of port state control actions, including detention, when operating in the port of a ratifying nation.
- b. The MLC does provide that medical certificates meeting STCW requirements also satisfy the MLC requirement. Medical certificates issued under 46 CFR part 10 meet the requirements of MLC Regulation 1.2.
3. In the event that a vessel is not subject to STCW but may be subject to the MLC as it is calling on a port in a country that has ratified the MLC, the vessel operator should ensure that all mariners serving on the vessel are in possession of a valid medical certificate.

**C Medical Certificate Key Terms.****1. Date of Examination.**

The date that the Coast Guard approves issuance of the medical certificate will serve as the *date of examination* listed on the medical certificate. It will not necessarily coincide with the date the medical practitioner signs the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E; nor will it necessarily coincide with the date that the medical certificate is actually issued to the mariner.

- a. An applicant seeking an original MMC may be approved for issuance of the medical certificate on a particular date, while the MMC may not be issued for an undetermined amount of time as the applicant completes professional requirements, as appropriate.
- b. An applicant may be issued a time-limited medical certificate with a medical waiver. Time-limited certificates may be limited to 1 or 2 years, depending on the conditions of the medical waiver. The *date of examination* listed on the medical certificate establishes the anniversary date for the medical waiver. A mariner may have to apply for a new medical certificate, in compliance with the expiration date and waiver conditions, before the issuance date for his or her MMC.

**EXAMPLE:** On February 4, 2016, an applicant is approved for issuance of a time-limited medical certificate with a 1-year expiration and waiver conditions. The *date of examination* listed on the medical certificate is February 4, 2016. The mariner meets all professional qualifications and is approved to test for an endorsement approximately 2 weeks later. The mariner uses the full 1-year approved-to-test period and passes all professional examinations. The medical certificate will expire on February 3, 2017, even though the mariner's MMC may not have been issued.

## 2. Date of Expiration.

Because of differing legal requirements, each medical certificate will have three expiration dates and validity periods, as appropriate. One will be the expiration date for STCW (*See* 46 CFR 10.301(b)(1)). A second expiration date will be for Pilots under 46 CFR 15.812 (*See* 46 CFR 10.301(b)(2)). The third will be for the national endorsement (*See* 46 CFR 10.301(b)(3)). Mariners who have a medical certificate must remain aware of the expiration dates on their medical certificate and the applicability of the dates to their current employment.

- a. *STCW Endorsement expiration date:* The validity period applicable to a mariner holding an STCW endorsement that authorizes service onboard vessels to which STCW applies will be for up to 2 years, unless the mariner is under the age of 18, in which case the maximum period of validity will be 1 year (*See* 46 CFR 10.301(b)(1)).
- b. *Pilot expiration date:* The validity period applicable to a mariner who serves under an endorsement as a First Class Pilot (*See* 46 CFR 11.709) or who serves as pilot under 46 CFR 15.812 will be a maximum period of 2 years (*See* 46 CFR 10.301(b)(2)). Although first-class pilots and those serving as pilots under 46 CFR 15.812 continue to be subject to the annual physical examination requirements of 46 CFR 11.709(b), a new medical certificate will only need to be issued every 2 years.
- c. *National Endorsements expiration date:* The validity period applicable to all other mariners (mariners sailing only under the authority of the national endorsement on their MMC) will be for a maximum period of 5 years (*See* 46 CFR 10.301(b)(3)).

## 3. Time-Restricted Medical Certificates.

Mariners receiving a waiver of certain medical conditions may be issued a time-limited certificate. Those certificates will expire in either 1 or 2 years, depending on the condition. Applicants must comply with the terms of their waiver letters in order to be issued a new medical certificate (*See* 46 CFR 10.303(c)).

## D. Medical Certificate Contents.

The medical certificate will include the following information blocks:

1. Authorizing authority and the requirements under which the document is issued;
2. Name (Last, first, middle);
3. Date of birth (day/month/year);
4. Gender (Male/Female);
5. Date of examination (day/month/year);

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6. Hearing meets the standards in Section A-I/9 (Y/N);
7. Visual acuity meets standards in Section A-I/9 (Y/N);
8. Color vision meets standards in Section A-I/9 (Y/N);
9. Fit for look-out duties (Y/N);
10. Unaided Hearing Satisfactory (Y/N);
11. No limitations or restrictions on fitness (Y/N). If “N”, specify limitations or restrictions;
12. Is the mariner free from any medical condition likely to be aggravated by service at sea or to render the seafarer unfit for such service or to endanger the health of other persons on board? (Y/N);
13. Expiration dates of certificate;
14. Identification checked at examination (Y/N);
15. Official stamp (including name) of the issuing authority;
16. Signature of the authorized person; and
17. Mariner’s signature confirming that the mariner has been informed of the contents of the certificate and of the right to appeal in accordance with 46 CFR 1.03-40. The medical certificate is not valid until signed by the mariner.

**E. General Guidance on the Application for Medical Certificate.**

1. To qualify for a medical certificate, mariner applicants must provide evidence of meeting the medical and physical standards on the Application for Medical Certificate, Form CG-719K or the Application for Medical Certificate, Short Form CG-719K/E, as described below in Paragraphs E.1.a - b of this Chapter. The Coast Guard retains final authority for determining whether a mariner applicant is medically and physically qualified (*See* 46 CFR 10.302(a)).
  - a. Mariner applicants who are required to submit a general medical exam (*See* Table 1 to 46 CFR 10.302(a) and Table 1-1 in Chapter 1 of this Manual) must provide evidence of meeting the medical and physical standards on the Application for Medical Certificate, Form CG-719K.
  - b. Mariner applicants who are not required to submit a general medical exam (*See* Table 1 to 46CFR 10.302(a) and Table 1-1 of Chapter 1 of this Manual), may apply using the Application for Medical Certificate, Short Form CG-719K/E.
2. In accordance with 46 CFR 10.302(b), all exams, tests, and demonstrations must be performed, witnessed, or reviewed by a licensed medical doctor, licensed physician assistant, licensed nurse practitioner, or a designated medical examiner (DME). All

licensed medical practitioners must hold a valid license issued in the United States (U.S.), a U.S. possession, or a U.S. territory. Examinations for Great Lakes Registered Pilots must be conducted by a licensed medical doctor in accordance with the physical exam requirements in 46 CFR 402.210 (*See* Paragraph D.4 of Chapter 1 of this Manual).

- a. A DME means a licensed physician, licensed physician assistant, or licensed nurse practitioner who has been trained and approved to conduct medical and physical examinations of merchant mariners on behalf of the Coast Guard and may be delegated limited authority to grant waivers and approve physical/medical suitability for service (*See* 46 CFR 10.107).
  - b. The terms *medical doctor* and *physician* mean an individual who has been educated, trained and licensed to practice medicine as a medical doctor (M.D.) or doctor of osteopathy (D.O.).
  - c. Exams, tests and demonstrations performed, witnessed, or reviewed by chiropractors, naturopathic doctors, or holders of foreign medical licenses are not accepted under current regulations.
3. All applicants who require a general medical exam must be physically examined. Examinations based solely on documentary review and/or patient history review are unacceptable (*See* Table 1 to 46 CFR 10.302(a) and 46 CFR 10.304).
  4. In accordance with 46 CFR 10.304(d), reports of medical and physical exams, demonstrations, and tests must be submitted within 12 months from the date signed by the licensed medical professional. When submitted as part of an MMC application, these reports remain valid for 12 months from the date the Coast Guard accepts a complete application.
  5. Applicants and their medical providers should be aware that medical conditions may require further review if there is concern that the condition might render the applicant incapable of performing the duties of the credential. Chapters 8 through 25 of this Manual provide guidance on medical conditions that may be subject to further review, in accordance with Chapter 3 of this Manual. The list of conditions is not all-inclusive; other conditions may be subject to further review if they are likely to pose risk of sudden incapacitation or debilitating complication.
  6. Medical practitioners who are evaluating mariner applicants for the medical certificate should provide their professional assessment and recommendation with regard to the applicant's risk for sudden incapacitation **and** the applicant's ability to safely perform the duties of their credential without risk to themselves or others.
    - a. To that end, medical practitioners should familiarize themselves with the duties and responsibilities of the mariner's requested credential, to include emergency response.
    - b. Medical practitioners should also submit the evaluation data used to support their overall assessment of the applicant's risk. This may include medical test results,

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- medical records review, consultation reports, or other evaluation data that the medical practitioner has considered.
- c. Additional information on recommended evaluation data is contained in Chapters 8 through 25 of this Manual.
  7. In cases where the applicant does not meet the standards specified in references (a) through (d), as supplemented by the guidance contained herein, the Coast Guard may consider issuing a medical certificate with waivers, limitations, and/or restrictions if it finds that there are extenuating circumstances that warrant special consideration.
    - a. In general, waivers may be considered when objective medical evidence indicates that the medical condition is sufficiently controlled and the effects of medication pose no significant risk to maritime and public safety. (See also 46 CFR 10.303 and Paragraphs F, G, and H of Chapter 3 of this Manual).
    - b. The final determination regarding issuance of the medical certificate lies with the Coast Guard.
  8. Individuals who submit false information to the Coast Guard may be subject to criminal prosecution under 18 U.S.C. 1001.

**F. Medical Certificate Application Requirements for Specific Endorsements.**

1. Entry-level national endorsement or a staff officer national endorsement only.

For mariners applying for an MMC with an entry-level national endorsement or a staff officer national endorsement only (See 46 CFR part 11, subpart H):

- a. No medical certificate or medical certificate application is required.
- b. Applicants additionally **seeking to serve as food handler** are required to obtain a medical certificate. These applicants must:
  - (1) Submit the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E ; and
  - (2) Provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, or on letterhead from the medical practitioner.

2. Endorsement as Tankerman Person in Charge (PIC) Restricted to Fuel Transfers on Towing Vessels.

For mariners applying for an MMC with only an endorsement as Tankerman PIC Restricted to Fuel Transfers on Towing Vessels, no medical certificate application is required (See CG-MMC Policy Letter 01-17 which can be found at [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc\\_policy\\_letter\\_01-17\\_final\\_3\\_9\\_17-date.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc_policy_letter_01-17_final_3_9_17-date.pdf) ).

3. Entry-level or staff officer endorsement only, seeking an STCW or MLC-compliant medical certificate.

Mariners applying for or holding an MMC with an entry-level or a staff officer endorsement only, who seek a medical certificate that complies with STCW or MLC requirements, and who **will not stand navigational watches**, should apply using an Application for Medical Certificate, Short Form CG-719K/E.

- a. Qualified mariners will be issued a medical certificate.
  - b. The blocks listed in [Paragraph D.6 through 11](#) of this Chapter, will be marked “N” on the certificate. **No lookout duties will be authorized.**
  - c. The medical certificate will be restricted to entry-level only or staff officer endorsements, as appropriate.
  - d. Mariners **seeking to serve as food handlers** should provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, or on letterhead from the medical practitioner.
4. Entry-level only, serving on a vessel not subject to STCW, seeking an MLC-compliant medical certificate with qualification for lookout duties.

Mariners applying for or holding an MMC with an entry-level endorsement only, serving on a vessel not subject to STCW, who seek a medical certificate that satisfies the MLC and who **want to be qualified for lookout duties**, should submit an Application for Medical Certificate, Form CG-719K. Sections III (Medical Conditions), IV (Medications) and V (Physical Exam) **do not** have to be completed.

- a. Mariners will be evaluated on hearing and vision requirements and, if found qualified, will be issued a medical certificate with the appropriate blocks marked “Y.” “Fit for lookout duties” will be annotated on the medical certificate.
- b. The medical certificate will be **restricted to entry-level**.

The Medical Certificate

- c. Mariners **seeking to serve as food handlers** should provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, or on letterhead from the medical practitioner.

5. Officer Endorsement, Qualified Rating Endorsement or STCW Endorsement.

Mariners applying for an officer endorsement (other than a staff officer endorsement), a qualified rating endorsement, or an STCW endorsement, should either hold a valid U.S.-issued medical certificate or submit an Application for Medical Certificate, Form CG-719K.

6. Additional Endorsements.

Mariner applicants holding an MMC and a valid medical certificate who seek a raise of grade or new endorsement are not required to submit a new medical examination if their existing medical certification meets all the requirements for the endorsement sought (See 46 CFR 10.301(b)(4)).

7. Food Handler Endorsement.

Most entry level mariners will be issued an MMC endorsed as Stewards Department (F.H.).

- a. In order to serve as food handler, a mariner must have the Stewards Department (F.H.) endorsement on the MMC **and** a medical certificate that does not exclude food handling.
- b. All medical certificates will contain a limitation stating “No food handling,” unless a statement is provided from a licensed physician, physician assistant, or nurse practitioner attesting that the applicant is free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, or on letterhead from the medical practitioner.

**G. Submission Procedures.**

1. Mariners seeking a medical certificate as part of an original MMC should submit the application through their local Regional Exam Center (REC). Mariners seeking a medical certificate only, or as part of an MMC application other than original, may submit the medical certificate application directly to the National Maritime Center (NMC).



2. Before submitting the application, mariner applicants should ensure that all supporting documentation is included, and that all necessary signatures have been provided.
3. Applicants should be aware that submission of applications that are incomplete, or that are missing signatures, may result in processing delays.
4. Applicants may consult the NMC website, [https://www.dco.uscg.mil/national\\_maritime\\_center/](https://www.dco.uscg.mil/national_maritime_center/) for information on application processing time. Additionally, mariners with medical conditions should submit their applications early to allow adequate processing time.
5. Additional information on the application and submission process for medical certificates and mariner credentials can be found on the NMC website, [https://www.dco.uscg.mil/national\\_maritime\\_center/](https://www.dco.uscg.mil/national_maritime_center/).

#### H. Sample Medical Certificate.

Figures 2-1 and 2-2 provide a sample of the merchant mariner medical certificate.

**Figure 2-1: Medical Certificate – Front**

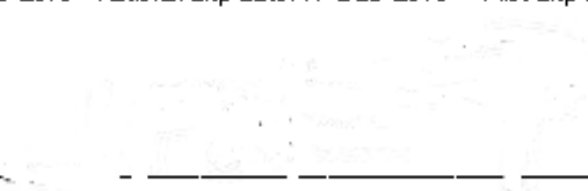
<b>United States Coast Guard</b> Medical Certificate		
Seafarer Name: <b>MERCHANTMARINER, KIMBERLY S</b>		
Gender:	Nationality: <b>US</b>	DOB: <b>16-APR-1966</b>
STCW Exp Date: 17-DEC-2015	National Exp Date: 17-DEC-2018	Pilot Exp Date: 17-DEC-2015
		
OFFICER IN CHARGE, MARINE INSPECTION		
SAMPLE		
SEAFARER SIG NATURE		
CN 00051849	v DO NOT DETACH v	Ref Num: 3530363

Figure 2-2: Medical Certificate – Back

^ DO NOT DETACH ^	
* Mariner is free from any medical condition likely to be aggravated by service at sea or to render the seafarer unfit for such service or to endanger the health of other persons on board.	
* Date of Examination:	17-DEC-2013
* Last Color Vision Test Date:	--
* Hearing IAW STCW A-I/9:	Y
* Visual Acuity IAW STCW A-I/9:	Y
* Color Vision IAW STCW A-I/9:	Y
* Fit for Look-out duties:	Y
* Unaided Hearing Satisfactory:	Y
* Identification Checked at Examination:	Y
* No Limitations/Restrictions: Y	SAMPLE
CN 00051849	CG-4610A (Rev. 05/12)
Ref Num: 3530363	

## CHAPTER 3. MEDICAL CERTIFICATE PROCESSING

### A. Introduction.

1. This chapter provides guidance on the issuance of medical certificates under the regulations in Title 46 CFR, part 10, subpart C—Medical Certification (Reference (c)), and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) (Reference (b)). It describes the medical review process, to include waivers, limitations and other conditions of issuance that may be placed on the medical certificate or credential.
2. No fees will be charged for medical certificates.
3. The Coast Guard will issue a medical certificate to each qualified mariner when processing an application for a medical certificate. Once issued, a valid medical certificate must be carried by all mariners who are required to meet the medical or physical standards for certification when serving under the authority of a merchant mariner credential (MMC) (*See* 46 CFR 15.401(d)).
4. As discussed in [Paragraph E](#) of this Chapter and Paragraph D.1 of Chapter 1 of this Manual, mariners who are not required to undergo a general medical exam or a demonstration of physical ability under 46 CFR 10.302 are not required to hold a medical certificate (*See* lines 19 and 21 of Table 1-1 of this Manual,).
5. Title 46 CFR part 10, subpart C contains the physical ability and medical examination requirements for credentialed mariners. Specifically, Table 1 to 46 CFR 10.302(a) and Table 1-1 of this Manual list various credentials and reference the vision, hearing, general medical examination and demonstration of physical ability requirements that must be met prior to receiving a medical certificate. Guidance on these standards can be found in the following Chapters of this Manual: Chapter 4 (The Merchant Mariner Medical Examination), Chapter 5 (Vision and Hearing Standards), and Chapter 6 (Physical Ability Guidelines).
6. Waivers, restrictions and limitations will be applied in accordance with [Paragraph F](#) (Medical Waivers), [Paragraph G](#) (Operational Limitations), and [Paragraph H](#) (Restrictions) of this Chapter.
7. Mariners who have been determined medically disqualified will be processed in accordance with [Paragraph K](#) of this Chapter.
8. Details concerning the format and contents of medical certificates are found in Chapter 2 of this Manual. Key terms related to medical certificates are also defined in Chapter 2.

### B. Medical Certificate Requirements.

1. Under 46 CFR 15.401(c), all mariners who are required to meet the medical and physical standards for merchant mariners are required to hold a valid medical certificate in order

to serve on a vessel under the authority of their credential. Mariners operating under the authority of an STCW endorsement are required to maintain a valid medical certificate, regardless of when the STCW endorsement was issued.

2. In accordance with Paragraph D.1 of Chapter 1 of this Manual, and [Paragraph E.1](#) of this Chapter, mariners with only a national endorsement for staff officer or entry-level do not require a medical certificate. Additionally, mariners with only an endorsement as Tankerman Person in Charge (PIC) Restricted to Fuel Transfers on Towing Vessels do not require a medical certificate (See CG-MMC Policy Letter 01-17 which can be found at [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc\\_policy\\_letter\\_01-17\\_final\\_3\\_9\\_17-date.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc_policy_letter_01-17_final_3_9_17-date.pdf) ).

### **C. The Medical Review Process.**

1. When individuals submit an application for a medical certificate, the Coast Guard will review the application to determine whether the applicant meets the medical and physical standards for merchant mariner medical certification (*See* 46 CFR 10.301(a)). The Coast Guard will advise the applicant if there are any discrepancies or if any additional information is needed.
2. The National Maritime Center (NMC) will review all information provided and will make one of the determinations below, as indicated in 46 CFR 10.301(a):
  - a. The applicant is physically and medically qualified for the medical certificate without any limitations, waivers and/or other conditions;
  - b. The applicant is physically and medically qualified for issuance of the medical certificate with appropriate waivers, limitations and/or other conditions as specified by the Coast Guard;
  - c. Additional information is necessary to determine if the applicant is physically and/or medically qualified for the medical certificate; or
  - d. The applicant is not physically and/or medically qualified for the medical certificate.
3. The Coast Guard will inform the applicant of the results of the review, and:
  - a. If the mariner is found qualified, the Coast Guard will issue a medical certificate with or without waivers, limitations, restrictions, and/or other conditions, as appropriate.
  - b. If additional information is necessary, the Coast Guard will request the information from the applicant. The Coast Guard may hold the application and temporarily delay final determination pending receipt of the requested information.
  - c. If the Coast Guard determines that the applicant is not physically and/or medically qualified, the application for medical certificate will be denied. The applicant will be informed in writing of the cause and be advised that:

- (1) Under 46 CFR 1.03-15 and 1.03-40, the applicant may seek reconsideration of the denial of medical certification within 30 days of the date of the denial; and
- (2) The applicant may subsequently appeal the reconsideration decision within 30 days of the date of the decision. The Coast Guard may extend the 30-day time limit to file an appeal upon a showing of good cause. See [Paragraph N](#) of this Chapter.

**D. NMC Medical Evaluation Procedures by Type of Application.**

1. Application for a Medical Certificate Only.

- a. Requirements for medical certification are found in 46 CFR, part 10, subpart C (Sections 10.301-10.306). Guidance on certification standards are found in Chapter 1 of this Manual.
  - (1) The complete application package includes, but is not limited to, the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E.
    - (a) Mariner applicants who are required to submit a general medical exam (*See* Table 1 to 46 CFR 10.302(a) and Table 1-1 of this Manual) must provide evidence of meeting the medical and physical standards on the Application for Medical Certificate, Form CG-719K.
    - (b) Mariner applicants who are not required to submit a general medical exam (*See* Table 1 to 46CFR 10.302(a) and Table 1-1 of this Manual), may apply using the Application for Medical Certificate, Short Form CG-719K/E.
  - (2) The Application for Merchant Mariner Credential, Form CG-719B, is not required.
  - (3) The application will be reviewed in accordance with the guidance in this Manual.
- b. If the applicant is found to have a potentially disqualifying condition, the NMC will conduct an individualized assessment and consider issuance of a waiver in accordance with 46 CFR 10.303 and [Paragraph F](#) of this Chapter.
- c. If the applicant is found not qualified, the NMC will process in accordance with [Paragraph K](#) of this Chapter.
- d. If the applicant is found qualified, the NMC will issue a medical certificate. Medical certificates may be time-limited, in accordance with 46 CFR 10.303 and [Paragraph H.1](#) of this Chapter.

2. Application for Removal of a Medical Restriction or Medical Operational Limitation.

- a. The Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, plus supporting documentation as described in Chapters 8 through 25 of this Manual, is required.

(1) Mariner applicants who are required to submit a general medical exam (See Table 1 to 46 CFR 10.302(a) and Table 1-1 of this Manual) must provide evidence of meeting the medical and physical standards on the Application for Medical Certificate, Form CG-719K.

(2) Mariner applicants who are not required to submit a general medical exam (See Table 1 to 46CFR 10.302(a) and Table 1-1 of this Manual), may apply using the Application for Medical Certificate, Short Form CG-719K/E.

- b. The NMC will review all information provided and will make a determination in accordance with 46 CFR 10.301(a) and Paragraphs C, F, G and H of this Chapter.

**E. Special NMC Medical Evaluation Procedures for Entry Level Mariners, Staff Officers, and Individuals Endorsed as Tankerman PIC Restricted to Fuel Transfers on Towing Vessels.**

1. Mariners with only a national endorsement for staff officer or entry level do not require a medical certificate. Additionally, mariners with only an endorsement as Tankerman PIC Restricted to Fuel Transfers on Towing Vessels do not require a medical certificate, as indicated in CG-MMC Policy Letter 01-17, which can be found at [https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc\\_policy\\_letter\\_01-17\\_final\\_3\\_9\\_17-date.pdf](https://www.dco.uscg.mil/Portals/9/NMC/pdfs/announcements/2017/cg-mmc_policy_letter_01-17_final_3_9_17-date.pdf).

2. Mariners applying for or holding an MMC with only an entry-level national endorsement or a staff officer endorsement, who require a medical certificate that complies with STCW or MLC requirements and **will not stand navigational watches**:

- a. The appropriate application is the Application for Medical Certificate, Short Form CG-719K/E.

- b. Qualified mariners will be issued a medical certificate.

- c. The information blocks on the medical certificate related to hearing, visual acuity, color vision, unaided hearing and fitness for lookout duties (*See* Paragraph D of Chapter 2 of this Manual) will be marked either “N/A” or “N”, as appropriate.

- d. The medical certificate will be **restricted to entry-level only** and **will not** certify the applicant as “fit for look-out duties.”

- e. Unless a statement regarding communicable diseases is provided, in accordance with 46 CFR 10.304(b), the medical certificate will contain a limitation stating “No food handling”.

- (1) Mariners **seeking to serve as food handlers** must provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b).
  - (2) The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.
  - (3) The Medical Practitioner need not perform any additional testing unless it is deemed clinically necessary. Applicants and currently employed food workers should report information about their health as it relates to diseases that are transmissible through food. Circumstances that the medical practitioner should consider when certifying an applicant include, but are not limited to, the following:
    - i. Whether the applicant reports that they have been diagnosed with, or exposed to an illness due to organisms including, but not limited to, Salmonella Typhi, Shigella species, Shiga-toxin producing Escherichia coli, or Hepatitis A virus within the past month;
    - ii. Whether the applicant reports that they have at least one symptom caused by illness, infection, or other source that is associated with an acute gastrointestinal illness such as diarrhea, fever, vomiting, jaundice, or sore throat with fever; or
    - iii. Whether the applicant reports that they have a lesion containing pus, such as a boil or infected wound, which is open or draining and is on the hands, wrists, or exposed portions of the arms.
3. Mariners applying for or holding an MMC with an entry-level national endorsement only, **seeking to be qualified for lookout duties**:
- a. The appropriate medical certificate application includes the Application for Medical Certificate, Form CG-719K. Sections III (Medical Conditions), IV (Medications) and V (Physical Examination) **DO NOT** have to be completed.
  - b. If the applicant is found qualified as to the hearing and vision requirements, then the medical certificate will be issued with the information blocks for hearing, visual acuity, color vision, and unaided hearing marked “Y.”
  - c. Medical certificates will be **restricted to entry-level only** and will certify the applicant as “fit for lookout duties.”
  - d. Unless a statement regarding communicable diseases is provided, in accordance with 46 CFR 10.304(b), the medical certificate will contain a limitation stating “No food handling.”

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Medical Certificate Processing

- (1) Mariners **seeking to serve as food handlers** must provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b).
- (2) The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.
- (3) The Medical Practitioner need not perform any additional testing unless it is deemed clinically necessary. Applicants and currently employed food workers should report information about their health as it relates to diseases that are transmissible through food. Circumstances that the medical practitioner should consider when certifying an applicant include, but are not limited to, the following:
  - i. Whether the applicant reports that they have been diagnosed with, or exposed to an illness due to organisms including, but not limited to, Salmonella Typhi, Shigella species, Shiga-toxin producing Escherichia coli, or Hepatitis A virus within the past month;
  - ii. Whether the applicant reports that they have at least one symptom caused by illness, infection, or other source that is associated with an acute gastrointestinal illness such as diarrhea, fever, vomiting, jaundice, or sore throat with fever; or
  - iii. Whether the applicant reports that they have a lesion containing pus, such as a boil or infected wound, which is open or draining and is on the hands, wrists, or exposed portions of the arms.

**F. NMC Medical Evaluation Procedures for the Issuance of Medical Waivers.**

1. The Coast Guard may grant a waiver if an applicant does not possess the vision, hearing, or general physical condition necessary and extenuating circumstances warrant special consideration (*See* 46 CFR 10.303(a)). Chapters 8 through 25 of this Manual contain guidance on specific medical conditions and factors to consider in determining whether a waiver is warranted.
2. An applicant may submit additional correspondence, records, and reports to the Coast Guard in support of a waiver. In this regard, recommendations made on behalf of their employees from agencies of the Federal Government operating government vessels, as well as owners and operators of private vessels will be given full consideration (*See* 46 CFR 10.303(a)).
3. In general, the Coast Guard will not approve medical waivers when an applicant does not meet the applicable medical standards, unless objective medical evidence indicates that the condition is sufficiently controlled and the effects of medication pose no significant



risk to maritime and public safety. The Coast Guard retains final administrative authority for the issuance of medical waivers (*See* 46 CFR 10.303(b)).

4. The Coast Guard may grant medical waivers with specific restrictions or limitations to which the applicant must adhere. This may include constraints such as more frequent monitoring of the mariner's medical conditions, submission of medical exams and/or tests at varying intervals to track the ongoing status of the medical condition, or operational limitations (*See* 46 CFR 10.303(c), (d) and (e)). The restrictions and limitations on the medical certificate may differ from those on the MMC. The mariner must operate within the most restrictive of the limitations.
5. Failure to comply with the terms and conditions of a medical waiver, including any follow-up reporting requirements, restrictions, or adherence to operational limitation(s), may result in loss of medical certification. Additionally, appropriate administrative action, up to and including suspension or revocation of the mariner's credential(s), in accordance with 46 CFR part 5, may result.
6. For medical certificate purposes, the Coast Guard considers the terms "restriction" and "limitation" to be synonymous. Both terms are considered constraints on the authority granted by a medical certificate. The granting of a medical waiver is conditioned upon compliance with the limitation or restriction. Within 46 CFR subpart C, it is relatively common practice to use the term "operational limitation" on a constraint that limits the actual operating authority of a credential (e.g., daylight hours only) while "restriction" is used to describe a more general constraint such as annual reporting requirements or specialized testing.

#### **G. NMC Medical Evaluation Procedures for the Issuance of Operational Limitations.**

1. The Coast Guard may place an operational limitation on the mariner's medical certificate (*See* 46 CFR 10.303(d)).
2. An operational limitation is a specific constraint placed upon the medical certificate that reduces the mariner's ability to serve under the full authority of his or her credential. Examples of common operational limitations include, but are not limited to:
  - a. Daylight operations only: May be applied to deck department mariners unable to pass the color vision standards in 46 CFR 10.305(a).
  - b. Limitations requiring the use of corrective lenses: May be applied to mariners with vision deficiencies (*See* 46 CFR 10.305(d)).
  - c. Restrictions regarding impaired hearing, requiring the use of hearing aids with spare batteries kept onboard at all times: Will be applied in accordance with the hearing standards outlined in Chapter 5 of this Manual (*See* 46 CFR 10.306(e)).
  - d. No Food Handling: May be applied to mariners who have not been certified as free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace. (*See* 46 CFR 10.304(b)).

3. The Coast Guard may impose other limitations, as appropriate, depending on the specific medical condition and its impact on the mariner's ability to perform routine and emergency duties. Additional considerations include, but are not limited to, the recommendations of the treating and/or examining medical practitioner.

#### **H. NMC Medical Evaluation Procedures for the Issuance of Restrictions.**

##### **1. Time Restrictions.**

- a. Medical certificates may include time constraints that cause the certificate to expire earlier than the full certification period. The full certification period is 2 years for first class pilots, 2 years for STCW holders, and 5 years for national endorsements. The full certification period for mariners who are under 18 years of age and seeking an STCW endorsement is 1 year (*See* 46 CFR 10.301(b)(1)).
- b. Time-restricted medical certificates will expire either 1 year or 2 years from the date of examination, depending on the medical condition, condition status, and the need for periodic medical evaluations. This 1- or 2-year expiration date will apply to all medical certificate categories (i.e., STCW endorsements, national endorsements, and First Class Pilots).

##### **2. Geographical Restrictions.**

- a. Medical certificates may include geographical restrictions that reduce the waters upon which a mariner may operate a vessel. These restrictions may include "Near Coastal Waters only," "Inland Waters only," or other appropriate route restrictions depending on the medical condition and condition status.
- b. Other geographical restrictions, such as "25 nautical miles from Harbor of Safe Refuge," etc., may be applied as appropriate, depending on the medical condition and the need for surveillance and/or availability to obtain medical assistance. Additional considerations include, but are not limited to, the recommendations of the treating and/or examining medical practitioner.

##### **3. Medical Restrictions.**

- a. Medical restrictions may be applied, as appropriate, depending on the specific medical condition and its impact on the mariner's ability to perform routine and emergency duties. Considerations include, but are not limited to, the recommendations of the treating and/or examining medical practitioner.
- b. For mariners with obstructive sleep apnea (OSA) requiring the use of positive airway pressure devices or oral/nasal appliances, the following restriction will be applied: "Special equipment required while sleeping."
- c. For mariners with conditions requiring medications to ensure safe functioning and provide for any emergency needs, the following restriction will be applied: "Must carry self-administered medications."

**I. NMC Medical Evaluation Procedures for Mariners with Existing Waivers.**

1. If a mariner has a waiver previously granted by the Coast Guard, the prior waiver should be honored and the conditions retained in the new waiver unless one of the following conditions exist:
  - a. Failure to comply with the terms of the prior waiver; including any requirements for providing additional medical information;
  - b. Material change in the mariner's condition (See [Paragraph I.2](#) of this Chapter);
  - c. A bona fide change in duly promulgated policy or regulations; or
  - d. The prior waiver was issued in clear error, contrary to duly promulgated policy in effect at the time of issuance (See [Paragraph I.3](#) of this Chapter).
2. A 'material change in the mariner's condition' is a change that is so significant that, if it had been present at the time of prior review, it would have resulted in denial of the medical certificate or placement of more restrictive conditions.
  - a. Examples include, but are not limited to:
    - (1) A mariner who was previously granted a waiver for heart disease, whose condition subsequently changes because of a heart attack, need for heart surgery, new test results, or because the treating physician's assessment indicates an increase in risk;
    - (2) A mariner who was previously granted a waiver for diabetes, who develops complications from diabetes, and who has not been compliant with the treating physician's treatment plan, or whose laboratory work indicates poor diabetic control; or
    - (3) A mariner who was previously granted a waiver for occasional use of an impairing medication, whose records now indicate or suggest use of additional impairing medication, chronic daily use of impairing medication, or use of impairing medication while working under the authority of a credential.
  - b. While not possible to delineate every material change in condition that may occur, a material change generally includes conditions or situations that increase the risk of sudden incapacitation or debilitating complication, or that involve the use of medication that can impair cognitive ability, judgment or reaction time. This does not include minor medication adjustments, minor fluctuations in lab results, or the development of conditions that are not associated with an increased risk of sudden incapacitation, debilitating complication, or the use of medications that do not pose a risk of impairment.
3. Clear error is not a difference of opinion between different reviews. It is when a waiver is granted and the policy in effect at the time clearly prohibited the waiver that was

granted. While mariners are entitled to rely on decisions made by the Coast Guard, the government is not bound to honor a waiver that was issued in error, especially in a situation where public safety is at issue.

4. These provisions do not prohibit the issuance of a time-restricted medical certificate, in accordance with [Paragraph H.1](#) of this Chapter, where the prior waiver had recurring reporting requirements.

#### **J. NMC Medical Evaluation Procedures for Mariners with Short-Term Conditions.**

Short-term conditions may render a mariner not physically or medically competent at the time of application, even though the condition is being appropriately treated and will be of relatively short duration. An example of this might be a broken arm that impairs the applicant's ability to meet the physical ability guidelines, in accordance with 46 CFR 10.304(c). In some cases, if requested, the NMC may hold the medical certificate application open for no more than 90 days to allow the short-term condition to resolve itself. If, after 90 days, the impairing condition still persists, the application will be denied, and the applicant will be required to resubmit an application.

#### **K. NMC Medical Evaluation Procedures for Mariners Who Do Not Meet the Medical Qualification Standards.**

For mariners who do not meet the medical qualification standards in 46 CFR part 10, subpart C, the NMC will provide an individual assessment regarding eligibility for a waiver. If a waiver is not granted, or the mariner is no longer compliant with an existing waiver, the NMC will process the mariner in accordance with the following directions:

1. Mariners who are noncompliant with existing medical waivers, limitations, restrictions and/or other conditions of issuance.
  - a. Advise the mariner of the deficiency and warn the mariner that failure to comply with waiver requirements may result in loss of medical certification. The warning should provide detailed guidance on what reports, testing, or examinations the mariner should submit in accordance with the terms of the original waiver. Provide a deadline by which time the mariner must comply with the terms of the waiver. Note: the warning and opportunity to comply is not required in cases of willfulness or cases in which there is an imminent threat to public safety.
  - b. If the mariner cures the deficiency, warn the mariner that further failure to comply with waiver requirements may result in denial of future waivers or loss of medical certification.
  - c. If the mariner does not cure the deficiency within the time allotted, the NMC will cancel the medical certificate, as indicated in [Paragraph L](#) of this Chapter.
2. Medically Disqualified Mariners.

The guidance in this Section (Paragraphs K.2.a-c) assumes that the mariner was

considered for a waiver under 46 CFR 10.303 and Chapters 8 through 25 of this Manual, as applicable, but the waiver was not issued. In the case of medically disqualified mariners who held a prior waiver, consider the specific instructions found in [Paragraph I](#) of this Chapter.

- a. If the mariner is applying for a medical certificate, then the NMC will:
  - (1) Deny the medical certificate and provide a written statement as required by 46 CFR 10.237(a). If the mariner holds a valid medical certificate, the NMC will follow the cancellation process outlined in [Paragraph L](#) of this Chapter.
  - (2) If the mariner holds a valid MMC, the NMC will warn the mariner that operating under the authority of a credential without a valid medical certificate is a violation of 46 CFR 15.401 and may subject the mariner to suspension and revocation action under 46 CFR part 5.
  - (3) The NMC will advise the mariner of the right to reconsideration and appeal under 46 CFR 1.03-15.
- b. If the mariner is seeking continuation of a waiver or submitting information as required by a waiver.
  - (1) The NMC will deny the waiver continuance.
  - (2) The NMC will advise the mariner of the right to reconsideration and appeal under 46 CFR 1.03-15.
  - (3) If the mariner holds a valid medical certificate, the NMC will follow the cancellation process outlined in [Paragraph L](#) of this Chapter.
- c. If the National Maritime Center (NMC) receives credible information that leads to the conclusion that the mariner is unfit.
  - (1) The NMC will inform the mariner of the situation and provide the mariner an opportunity to respond to the information provided. The NMC will provide guidance on the type of information, reports, examinations or tests that would be required to demonstrate continued medical competence.
    - (a) The NMC will establish a reasonable deadline, by which time mariner must comply with the request for more information.
    - (b) If circumstances require additional investigation, the NMC may refer the case to the local Officer in Charge, Marine Inspection, in accordance with 46 CFR 1.01-15(b).
  - (2) The NMC will review all information provided and make a determination in accordance with 46 CFR 10.301(a).

- (3) If the mariner is then determined to be unfit:
  - (a) The NMC will conduct an individualized assessment of the mariner's condition and determine whether a waiver may be granted in accordance with 46 CFR 10.303 and [Paragraph F](#) of this Chapter.
  - (b) The NMC will advise the mariner of the right to reconsideration and appeal under 46 CFR 1.03-15.
  - (c) If the mariner holds a valid medical certificate, the NMC will follow the cancellation process outlined in [Paragraph L](#) of this Chapter.

**L. NMC Medical Evaluation Procedures for Cancellation of a Medical Certificate.**

This Section outlines the procedures to be followed if the NMC Medical Evaluation Procedures for Medically Disqualified Mariners, as described in Paragraph K, above, lead to a determination that the medical certificate should be cancelled.

1. A medical certificate may be cancelled by the NMC if:
  - a. A mariner develops a new medical condition or a change in a medical condition that would be disqualifying under 46 CFR part 10, subpart C, as implemented by this Manual;
  - b. A mariner is non-compliant with the conditions, limitations, and/or restrictions placed on their medical certificate; or
  - c. A mariner has submitted a fraudulent medical application or false information; or has withheld or otherwise failed to disclose medical information in support of a medical certificate application.
2. If the NMC receives credible information indicating that one or more of the circumstances described in Paragraph L.1. a. - c. above is present or has occurred, the NMC will:
  - a. Inform the mariner of the situation and provide the mariner an opportunity to respond to the information provided. The NMC will provide guidance on the type of information, reports, examinations or tests that would be required to demonstrate continued medical competence or compliance.
    - (1) The NMC will establish a reasonable deadline, but not less than thirty (30) days from the time the mariner is informed of the situation, by which time the mariner must comply with the request for more information.
    - (2) If circumstances require additional investigation, the NMC may refer the case to the local Officer in Charge, Marine Inspection, in accordance with 46 CFR 1.01-15(b).

- b. Review all information provided and make a determination in accordance with 46 CFR 10.301(a).
3. If, after following the procedures outlined in Paragraph L.2. above, the NMC determines that the cancellation of a medical certificate is warranted, the NMC will:
  - c. Provide the mariner with written notification of the cancellation by mail. In addition to written notification, the NMC will also attempt to inform the mariner of the cancellation by telephone, by e-mail, and/or both, if relevant contact information has been provided to the NMC;
  - d. Provide the mariner with information concerning the grounds for the cancellation; and
  - e. Advise the mariner in writing that he or she may request reconsideration of any decision that cancels a medical certificate, as allowed for in 46 CFR 1.03-15 and, if necessary and after requesting reconsideration, appeal any decision that cancels a medical certificate, as allowed for in 46 CFR 1.03-15 and 1.03-40.

**M. Automatic Stay of Decision to Cancel a Medical Certificate.**

1. The procedures in 46 CFR 1.03-15 are applicable except that, notwithstanding 46 CFR 1.03-15(f), the decision to cancel a medical certificate is automatically stayed pending final agency action on the matter, unless the Commanding Officer, NMC, after consulting with the Chief of the NMC Medical Evaluation Division and assigned legal counsel, finds that:
  - a. There is evidence of a compelling and substantial risk of imminent harm if the mariner is allowed to continue to operate under the authority of his or her credential; and,
  - b. The continuation of the automatic stay presents a substantial risk to maritime safety.
2. In cases where the Commanding Officer, NMC, lifts the automatic stay, the processing of the request for reconsideration and, if necessary, appeal will take priority, subject to the mariner's right to respond. These appeals will normally process within 21 business days, once the mariner has submitted a complete appeal package, in accordance with 46 CFR 1.03-15(c).
3. Until final agency action cancels the medical certificate, or the automatic stay is lifted under [Paragraph M.1](#) above, the medical certificate is valid until expiration, and may be used to operate under the authority of the MMC.

**N. Mariner Reconsiderations and Appeals.**

In accordance with 46 CFR 1.03-40, any person directly affected by a decision or action of an officer or employee of the National Maritime Center (NMC) involving any of the marine safety functions listed in 46 CFR 1.01-15(c) may, after requesting reconsideration of the decision or action by the NMC, make a formal appeal of that decision or action to the

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Director of Commercial Regulations and Standards (CG-5PS), in accordance with the procedures contained in 46 CFR 1.03-15.

1. Reconsiderations (*See* 46 CFR 1.03-15).
  - a. Should be received within 30 days of the action or decision by the NMC.
  - b. Have no requirement to be in writing.
  - c. Have no requirement that new information or specific errors be alleged.
  - d. Have no specific format requirements.
  - e. Although it is not required, it is recommended that applicants submit their reconsideration requests in writing, and consult Chapters 8 through 25 of this Manual to determine suggested testing and reports for the condition at issue.
  - f. The NMC's determination becomes final agency action if no request for reconsideration is received with 30 days of action or decision by the NMC.
2. Appeals (*See* 46 CFR 1.03-15 and 1.03-40).
  - a. Appeals on reconsideration must be received within 30 days of action or decision by the NMC.
  - b. An extension may be requested in writing, and will be granted for good cause.
  - c. Appeals must be submitted in writing to the Commandant (CG-5PS) (*See* 46 CFR 1.03-15(c)).

**O. Authority to Work Pending Final Agency Action.**

1. Cancellation of a Medical Certificate.
  - a. Until final agency action cancels the medical certificate, or the automatic stay is lifted under [Paragraph M.1](#) above, the medical certificate is valid until expiration and may be used to operate under the authority of an MMC.
  - b. The NMC's initial determination becomes final agency action if no request for reconsideration is received with 30 days of action or decision by the NMC (*See* 46 CFR 1.03-40).
  - c. The NMC's decision on reconsideration becomes final agency action if no appeal is submitted, in accordance with 46 CFR 1.03-15, within 30 days of the NMC decision (*See* 46 CFR 1.03-15(i)).



2. Medical Certificate Expiration.

- a. Until the medical certificate expires, or is cancelled in accordance with [Paragraph L](#) of this Chapter, the medical certificate is valid and may be used to operate under the authority of an MMC during the reconsideration and appeal process.
- b. A mariner whose pilot or STCW medical certificate expiration date has passed may not serve under the authority of any STCW or pilot endorsement. The mariner may serve under the authority of his or her national endorsement if the expiration date has not passed.

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## CHAPTER 4. THE MERCHANT MARINER MEDICAL EXAMINATION

### A. The Merchant Mariner General Medical Examination.

This Chapter provides guidance on the conduct of the merchant mariner general medical examination, in accordance with 46 CFR 10.304(a). The guidance was developed based on recommendations from the Merchant Mariner Medical Advisory Committee (MEDMAC).

1. The public safety risks associated with the medical and physical condition of mariners is an important consideration in the safe operation of vessels. An illness, condition, or medication that has the potential to cause sudden incapacitation, altered sensorium, or loss of awareness could render the mariner unable to perform his or her duties or respond appropriately in an emergency situation. Such an occurrence places the vessel at risk of an accident and poses a danger to the mariner, other crewmembers, the public, and maritime safety. Additionally, in the event that a mariner experiences a medical emergency, immediate medical response may be limited to the vessel's crew, and outside help may be delayed.
2. Because of these safety concerns, 46 CFR part 10, subpart C requires that mariner applicants undergo a general medical examination that is "documented and of such scope to ensure that there are no conditions that pose significant risk of sudden incapacitation or debilitating complication" (*See* 46 CFR 10.304(a)). The regulation additionally requires that the medical examination "document any condition requiring medication that impairs cognitive ability, judgment or reaction time" (*See* 46 CFR 10.304(a)).
3. In accordance with 46 CFR 10.302(b), all exams, tests, and demonstrations must be performed, witnessed, or reviewed by a licensed medical doctor, licensed physician assistant, licensed nurse practitioner, or a designated medical examiner (DME). All licensed medical practitioners must hold a valid license issued in the United States (U.S.), a U.S. possession, or a U.S. territory. Examinations for Great Lakes Registered Pilots must be conducted by a licensed medical doctor in accordance with the physical exam requirements in 46 CFR 402.210 (*See* Paragraph D.4 of Chapter 1 of this Manual).
  - a. A DME means a licensed physician, licensed physician assistant, or licensed nurse practitioner who has been trained and approved to conduct medical and physical examinations of merchant mariners on behalf of the Coast Guard and may be delegated limited authority to grant waivers and approve physical/medical suitability for service (*See* 46 CFR 10.107).
  - b. The terms *medical doctor* and *physician* mean an individual who has been educated, trained and licensed to practice medicine as a medical doctor (M.D.) or doctor of osteopathy (D.O.).
  - c. Exams, tests and demonstrations performed, witnessed, or reviewed by holders of foreign medical licenses or by chiropractors or naturopathic doctors are not accepted under current regulations.

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- d. All applicants who require a general medical exam must be physically examined. Examinations based solely on documentary review, and/or patient history review, are unacceptable (*See* Table 1 to 46 CFR 10.302(a) and 46 CFR 10.304).
  - e. Individuals who submit false information to the Coast Guard may be subject to criminal prosecution under 18 U.S.C. 1001.
4. Consistent with generally accepted medical practice, an examination of sufficient scope:
- a. Includes an evaluation of the mariner applicant's hearing, vision, and physical abilities, in accordance with Chapters 5 and 6 of this Manual;
  - b. Includes an assessment of the mariner applicant's medication use, to include over-the-counter preparations and supplements, in accordance with Chapter 7 of this Manual;
  - c. Includes a comprehensive medical exam that assesses for the presence or absence of disease by considering the mariner applicant's medical history, risk factors for disease, review of systems, and physical examination findings;
  - d. May include basic screening for conditions that:
    - (1) Are common in the general population;
    - (2) Pose a significant risk of sudden incapacitation or debilitating complication when not adequately treated; and
    - (3) Are not always apparent on limited physical examination. Such conditions may include, but are not limited to, obstructive sleep apnea (OSA), diabetes mellitus, and coronary artery disease;
  - e. May benefit from review of documentation from the applicant's treating provider(s) on active medical conditions, and on any prior screening for conditions that pose a significant risk of sudden incapacitation or debilitating complication; and
  - f. Should document whether and to what extent the examining medical practitioner has screened and assessed the applicant for conditions that pose a significant risk of sudden incapacitation or debilitating complication.

**B. Benefits of Screening for Significant Medical Conditions.**

1. Provides mariners the opportunity for appropriate referral and treatment.

Mariner applicants who have significant medical conditions that are left undiagnosed, untreated, or both, are at risk for developing disease complications that may threaten their health and eventually lead to loss of medical certification. Accordingly, it is recommended that the examining medical practitioner take appropriate steps to identify and refer mariner applicants for further evaluation, as appropriate, if they are determined

to be at high risk for conditions that pose a significant risk of sudden incapacitation or debilitating complication.

2. Provides mariners the opportunity for timely health education.

The examining medical practitioner should provide education to applicants about their health conditions and risk factors for disease, and discuss how those conditions and risk factors might affect, or be affected by, work in the maritime environment.

3. Does not generally bar medical certification.

The guidance in this Chapter does not preclude the issuance of a medical certificate to those applicants whose screening indicates that they may be at risk for a medical condition, unless there is indication that the applicant may be at high risk for sudden incapacitation or debilitating complication. Examples of screening outcomes that may preclude certification include, but are not limited to:

- a. The examiner/evaluator determines that the applicant is at significant risk for obstructive sleep apnea that is severe, symptomatic, **and** inadequately treated; OR
- b. The examiner/evaluator determines that the applicant is at significant risk for diabetes mellitus that is associated with episodes of severe hypoglycemia, symptomatic hyperglycemia, or metabolic derangement; OR
- c. The examiner/evaluator determines that the applicant is at significant risk for coronary artery disease that is symptomatic, uncontrolled, or unstable.

4. Basic screening may be accomplished with office-based screening tools.

The Coast Guard consulted with MEDMAC to provide recommendations on screening for medical conditions that pose significant risk of sudden incapacitation, and are common in the general population. MEDMAC's recommendations focused on the conditions of obstructive sleep apnea, diabetes mellitus and coronary artery disease because these conditions affect many mariners, are not generally apparent on cursory examination, and are amenable to office-based screening. Their recommendations for basic screening follow below.

- a. Recommendations on screening for obstructive sleep apnea (OSA).
  - (1) The examining medical practitioner should assess the mariner applicant's risk factors for OSA and then determine whether further evaluation is indicated. Risk factors for OSA may include, but are not limited to:
    - (a) Medical history of hypertension, diabetes, elevated blood sugars, elevated cholesterol, coronary artery disease, atrial fibrillation or stroke.
    - (b) Personal history of smoking.

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- (c) Personal history of obesity, and /or neck circumference greater than 17 inches (male) or 16 inches (female).
    - (d) Personal history of sedentary lifestyle.
    - (e) Personal history of snoring, or observed apnea.
    - (f) Personal history of accident(s) related to falling asleep while working, driving or operating a vessel.
    - (g) Symptoms of non-restful sleep, fatigue, or day-time sleepiness.
  - (2) Examples of screening tools for OSA may include validated office-based screening tools such as the STOP-Bang questionnaire.
  - (3) If the examining medical practitioner determines that the mariner applicant is at significant risk for OSA, the examiner should provide the applicant with education on OSA and refer for appropriate evaluation and testing.
    - (a) Further evaluation may include referral to a primary care provider, internist, or sleep specialist, as appropriate.
    - (b) When medically indicated, diagnostic testing may include a home sleep study that measures a minimum of three channels to include air flow, respiratory effort, and pulse oximetry; or attended polysomnogram.
  - (4) If the examining medical practitioner determines that the applicant needs further evaluation for OSA, but assesses that the applicant is NOT at immediate risk of sudden incapacitation, then the applicant may be considered for a time-limited medical certificate to allow time to complete the evaluation.
- b. Recommendations on screening for diabetes mellitus.
- (1) The examining medical practitioner should assess the mariner applicant's risk factors for diabetes and then determine whether further evaluation is indicated. Risk factors for diabetes mellitus include, but are not limited to:
    - (a) Medical history of hypertension, abnormal cholesterol, or elevated blood sugar levels.
    - (b) Family history of diabetes.
    - (c) Personal history of obesity, sleep apnea or sedentary lifestyle.
  - (2) If the examining medical practitioner determines that the mariner applicant is at significant risk for diabetes, the examiner should provide the applicant with education on diabetes mellitus and refer for appropriate evaluation and testing.

- (a) Further evaluation may include referral to primary care provider, internist or endocrinologist, as appropriate.
  - (b) When medically indicated, office testing may include fingerstick glucose or urinalysis.
  - (c) When medically indicated, diagnostic testing may include a fasting glucose level, a glycated hemoglobin level (HbA1c), or a glucose tolerance test.
- (3) If the examining medical practitioner determines that the applicant needs further evaluation for diabetes mellitus, but assesses that the applicant is NOT at significant risk for diabetes mellitus that is associated with episodes of severe hypoglycemia, symptomatic hyperglycemia, or metabolic derangement, then the applicant may be considered for a time-limited medical certificate to allow time to complete the evaluation.
- c. Recommendations on screening for coronary artery disease.
- (1) The examining medical practitioner should consider the mariner applicant's risk factors for coronary artery disease and determine whether further evaluation is indicated. Risk factors for coronary artery disease include, but are not limited to:
    - (a) Medical history of hypertension, abnormal blood sugar, diabetes, high cholesterol, sleep apnea, stroke or other vascular disease.
    - (b) Family history of premature cardiovascular disease.
    - (c) Personal history of smoking, obesity or sedentary lifestyle.
  - (2) If the examining medical practitioner determines that the mariner applicant is at significant risk for coronary artery disease, the examiner should provide the applicant with education on coronary artery disease and refer for appropriate evaluation and testing.
    - (a) Further evaluation may include referral to a primary care provider, internist, or cardiologist, as appropriate.
    - (b) When medically indicated, office testing may include resting electrocardiogram.
    - (c) When medically indicated, diagnostic testing may include exercise (treadmill) stress testing, myocardial perfusion stress testing, and coronary angiography.
  - (3) If the examining medical practitioner determines that the applicant needs further evaluation for coronary artery disease, but assesses that the applicant is NOT at significant risk for coronary artery disease that is symptomatic, uncontrolled, or unstable, then the applicant may be considered for a time-limited medical certificate to allow time to complete the evaluation.

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## CHAPTER 5. VISION AND HEARING STANDARDS

### A. Vision Requirements.

The vision requirements for merchant mariner medical certification are contained in 46 CFR 10.305.

#### 1. Credentialed Deck Personnel Vision Standards.

- a. In accordance with 46 CFR 10.305(a)(1), applicants for any national endorsement or qualified deck rating must have vision in at least one eye that is correctable to 20/40 or better. Uncorrected vision in the same eye must not be worse than 20/200.
- b. The horizontal field of vision should not be less than 100 degrees in each eye.
- c. Applicants for an STCW endorsement must have vision in both eyes that is correctable to 20/40 or better in each eye. Uncorrected vision in each eye must not be worse than 20/200. The following exceptions apply:
  - (1) A mariner who loses vision in one eye, after meeting the requirements and receiving a merchant mariner credential (MMC), may be granted a medical waiver, and/or may have operational limitations placed upon the medical certificate, in accordance with [Paragraph A.3](#) of this Chapter and 46 CFR 10.305(c), (d), and (e), as applicable.
  - (2) A mariner holding an MMC prior to January 1, 2017, need only meet the vision requirements of 46 CFR 10.305(a)(1) in one eye (*See* [Paragraph A.1](#) and [Paragraph A.1.d](#) of this Chapter). The mariner may be granted a medical waiver, and/or may have operational limitations placed upon the medical certificate, in accordance with [Paragraph A.3](#) of this Chapter and 46 CFR 10.305(c), (d), and (e), as applicable.
- d. Applicants must also demonstrate satisfactory color sense when tested by one of the screening methods listed below (*See* 46 CFR 10.305(a)(1)), or by an alternative test acceptable to the Coast Guard. This requirement must be met without the use of lenses that enhance color perception.
  - (1) Color vision testing methods.
    - (a) Pseudoisochromatic Plates (Dvorine, 2nd Edition; AOC; revised edition or AOC-HRR; Ishihara 14-, 24-, or 38-plate editions).
    - (b) Farnsworth Lantern.
    - (c) Titmus Vision Tester/OPTEC 2000.
    - (d) Optec 900.

- (e) Richmond Test, 2nd and 4th edition.
- (2) Alternative Testing Methodologies. Applicants seeking to demonstrate satisfactory color vision sense through the use of an alternative test should consider the information that follows and contact the NMC for further guidance.
  - (a) The test submission should include a full description of the test in addition to a discussion of test results.
  - (b) An acceptable alternative color vision test may include a formal color vision evaluation conducted by an ophthalmologist or qualified optometrist. The evaluation should include assessment and discussion of any functional limitations. Further guidance on this can be obtained from the NMC.
  - (c) The Coast Guard retains final authority for determining whether the alternative testing is sufficient for issuance of the medical certificate. Normally, the Coast Guard's approval of an alternative test (such as a Farnsworth D-15, or any other test not listed in [Paragraph A.1.d\(1\)](#) of this Chapter) will be contingent on the test results being accompanied by a formal color vision evaluation from an ophthalmologist or optometrist.
- 2. Credentialed Engineering Personnel, Qualified Engineering Rating, Tankermen, Offshore Installation Managers, Barge Supervisors, Ballast Control Officers, and Radio Officers Vision Standards.
  - a. In accordance with 46 CFR 10.305(b), applicants must have vision in at least one eye that is correctable to 20/50 or better. Uncorrected vision in the same eye must not be worse than 20/200.
  - b. The horizontal field of vision should not be less than 100 degrees in each eye.
  - c. Applicants must also demonstrate satisfactory color sense when tested by one of the screening methods listed below (*See* 46 CFR 10.305(a)(1)), or by an alternative test acceptable to the Coast Guard. Applicants need only the ability to distinguish the colors red, green, blue, and yellow. This requirement must be met without the use of lenses that enhance color perception.
    - (1) Color vision testing methods.
      - (a) Pseudoisochromatic Plates (Dvorine, 2nd Edition; AOC; revised edition or AOC-HRR; Ishihara 14-, 24-, or 38-plate editions).
      - (b) Farnsworth Lantern.
      - (c) Titmus Vision Tester/OPTEC 2000.
      - (d) Optec 900.

(e) Richmond Test, 2nd and 4th edition.

(2) Alternative Testing Methodologies. Applicants seeking to demonstrate satisfactory color vision sense through the use of an alternative test should consider the information that follows and contact the NMC for further guidance.

(a) The test submission should include a full description of the test in addition to a discussion of test results.

(b) An acceptable alternative color vision test may include a formal color vision evaluation conducted by an ophthalmologist or qualified optometrist. The evaluation should include assessment and discussion of any functional limitations. Further guidance on this can be obtained from the NMC.

(c) The Coast Guard retains final authority for determining whether the alternative testing is sufficient for issuance of the medical certificate. Normally, the Coast Guard's approval of an alternative test (such as a Farnsworth D-15, or any other test not listed in [Paragraph A.1.d\(1\)](#) of this Chapter) will be contingent on the test results being accompanied by a formal color vision evaluation from an ophthalmologist or optometrist.

### 3. Vision Waivers and Limitations.

#### a. Visual Acuity Waivers and Operational Limitations.

(1) In accordance with 46 CFR 10.305(c), an applicant whose uncorrected vision is worse than 20/200, but correctable to the standards listed in 46 CFR 10.305 (a) and (b), may be considered for a medical waiver.

(a) If a waiver is granted, a limitation will be placed on the medical certificate indicating that the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard the vessel.

(b) Waivers are not generally granted to applicants whose uncorrected vision is worse than 20/800.

(2) Waivers are not generally granted to applicants whose corrected vision in the better eye is not at least 20/40, for deck officers, or 20/50, for engineer officers, in accordance with 46 CFR 10.305(c).

(3) If corrective lenses are required in order to meet the vision standards set forth in 46 CFR 10.305 (a)(2), the mariner may not serve under the authority of the endorsement unless corrective lenses are worn and spare lenses are carried onboard the vessel. This operational limitation will be placed on the medical certificate.

b. Monocular Vision Waivers.

- (1) An individual with monocular vision may be granted a medical waiver, with or without an operational limitation placed upon the medical certificate, provided that he or she meets the applicable vision standards for the credential sought, and that evidence is provided of the ability to compensate for the lack of stereo vision through a report from an ophthalmologist and through attestations from employers or co-workers.
- (2) Generally, waivers for monocular vision are not granted until the applicant has been subject to monocular vision for at least 180 days.
- (3) Waivers for monocular vision will not be granted to applicants for an STCW deck endorsement who did not hold an MMC prior to January 1, 2017.

c. Color Vision Waivers and Operational Limitations.

- (1) Waivers will not generally be granted for applicants who cannot demonstrate satisfactory color vision without the use of lenses that enhance color perception.
- (2) Applicants for able seaman (AB) endorsement, ratings forming part of a navigational watch (RFPNW) endorsements, or deck officer credentials who cannot demonstrate satisfactory color vision may be issued a medical certificate with the following limitations: No watchstanding or navigating at night or during periods of low/limited visibility.
- (3) Renewal applicants who previously passed color vision screening and operated without the need of a credential limitation, but who are currently unable to pass one of the listed color vision screening tests, should submit a formal color vision evaluation from an ophthalmologist.
  - (a) If the formal ophthalmology evaluation supports a finding of mild color vision deficiency without significant functional impairment, and if extenuating circumstances support the absence of significant color vision-related functional impairment, then the applicant may be considered for a waiver, with or without limitations, as deemed appropriate by the Coast Guard.
  - (b) In some cases, the renewal applicant seeking to demonstrate the absence of significant color-vision-related functional impairment may be required to undergo a practical demonstration of color-vision-critical tasks prior to consideration for a waiver. An applicant who passes the demonstration to the satisfaction of the Coast Guard may be considered for a medical certificate limited to the vessel and route tested.

d. Waivers for Other Vision Disorders.

Waivers are not normally granted for conditions that accelerate the normal decline in vision from aging. Such conditions include, but are not limited to, macular

degeneration that is unstable or uncontrolled.

4. Great Lakes Pilotage (United States Registered Pilots) Vision Standards.
  - a. Registered pilots and applicants for original registration must meet the vision standards set forth in 46 CFR 402.210(c).
  - b. An applicant for original registration must have a visual acuity either with or without corrective lenses of at least 20/20 vision in one eye and at least 20/40 in the other. An applicant who wears corrective lenses must also pass a test without corrective lenses of at least 20/40 in one eye and at least 20/70 in the other.
  - c. Registered pilots must have visual acuity either with or without corrective lenses of at least 20/30 in one eye and at least 20/50 in the other. A registered pilot who wears corrective lenses must also pass a test without corrective lenses of at least 20/50 in one eye and at least 20/100 in the other.
  - d. The color sense of original applicants and registered pilots must be tested by a pseudoisochromatic plate test or equivalent. Passing the Williams lantern test or its equivalent is an acceptable substitute for a pseudoisochromatic plate test (*See* 46 CFR 402.210(c)).

## **B. Hearing Requirements.**

1. Applicants for a medical certificate must meet the hearing standards as set forth in 46 CFR 10.306.
2. If the medical practitioner conducting the general medical exam has concerns that an applicant's ability to hear may impact maritime safety, the examining medical practitioner must refer the applicant to an audiologist or other hearing specialist to conduct an audiometer test and/or a speech discrimination test, as appropriate (*See* 46 CFR 10.306(a)).
  - a. When such testing is indicated, the audiometer test must include testing at the following thresholds: 500 hertz (Hz); 1,000 Hz; 2,000 Hz; and 3,000 Hz. The frequency responses for each ear must be averaged to determine the measure of an applicant's hearing ability. Applicants must demonstrate an unaided threshold of 30 decibels (dB) or less in at least one ear (*See* 46 CFR 10.306(b)).
  - b. When functional speech testing is indicated, the test must be carried out at a level of 65 dB (*See* 46 CFR 10.306(c)).
    - (1) For issuance of an original MMC or endorsement, the applicant must demonstrate functional speech discrimination of at least 90 percent.
    - (2) For renewal or raise of grade, the applicant must demonstrate functional speech discrimination of at least 80 percent.

3. Hearing Waivers and Operational Limitations.
  - a. An applicant who is unable to meet the hearing standards of the audiometer test, but who can pass the functional speech discrimination test; or who requires hearing aids to meet the hearing standards, may be eligible for a medical waiver in accordance with 46 CFR 10.303.
  - b. If hearing aids are required in order to meet the hearing standards listed above, a mariner may not serve under the authority of his or her endorsement unless hearing aids are worn in the operational mode, and spare batteries are carried onboard the vessel. This operational limitation will be placed on the medical certificate.

## CHAPTER 6. PHYSICAL ABILITY GUIDELINES

### A. Introduction.

1. Mariner applicants should be physically able to perform their assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response. An *emergency response*, in this context, refers to emergency evolutions such as “abandon ship” and “firefighting,” and the basic procedures to be followed by each mariner. Basic mariner functions and their associated physical requirements are listed in [Table 6-1](#) of this Chapter.
2. For the purposes of this Manual, a medical condition is considered to cause *significant functional impairment* if it impairs the applicant’s ability to fully perform the physical abilities listed in [Table 6-1](#), or if it interferes with the applicant’s ability to fully perform the duties and responsibilities of the requested credential.
3. In some cases, applicants who are unable to meet the physical ability guidelines may be issued a credential with appropriate limitations, if the Coast Guard finds that their physical limitations will not pose a significant risk to safety.

### B. The Demonstration of Physical Ability.

1. The examining medical practitioner may assess the applicant’s ability to meet the physical ability guidelines by general observation during the course of the general medical exam, or by having the applicant provide a *demonstration of physical ability*, where the applicant performs or simulates the activities listed in [Table 6-1](#) of this Chapter, under the observation of the medical practitioner.
2. In general, applicants who are required to have a general medical exam, in accordance with Table 1 to 46 CFR 10.302(a), do not have to undergo a demonstration of physical ability, except as discussed in [Paragraph B.3.b](#) of this Chapter. However, the medical practitioner conducting the general medical exam must sufficiently assess and document the applicant’s ability to meet the physical ability guidelines.
3. Applicants are required to undergo a demonstration of physical ability if:
  - a. Table 1 to 46 CFR 10.302(a) requires a demonstration of physical ability for the credential sought, but does not require a general medical exam; or
  - b. The medical practitioner conducting the general medical exam is concerned that the applicant’s physical ability may impact maritime safety (*See* 46 CFR 10.304(c)(i)). Examples of conditions that may cause concern include, but are not limited to, conditions that limit exercise capacity, range of motion, or mobility; body mass index of 40 or greater, and conditions that restrict movement in and out of tight spaces.

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Physical Ability Guidelines

**TABLE 6-1: Physical Ability Guidelines**

SHIPBOARD TASK, FUNCTION, EVENT, OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
Routine movement on slippery, uneven and unstable surfaces.	Maintain balance (equilibrium) and move with agility.	Has no disturbance in sense of balance.  Has no impairment or disease that prevents or limits any of the movements and physical activities listed in this table.
Routine access between levels.	Climb up and down vertical ladders and stairways.	Is able to climb up and down vertical ladders and stairways, without assistance.
Routine movement between spaces and compartments.	Step over high door sills and coamings.  Work in constricted spaces and move through restricted openings.	Is able to perform the following, without assistance: <ul style="list-style-type: none"> <li>• step over a door sill or coaming 24 inches (61 centimeters) in height; <b>and</b></li> <li>• move through a rigid, restricted opening of 24 inches by 24 inches (61 by 61 centimeters).</li> </ul>
Open and close watertight doors, hand-cranking systems, and valve wheels.	Strength, dexterity and stamina to manipulate mechanical devices.  Move hands/arms to open and close valve wheels in vertical and horizontal directions.  Open and close watertight doors that may weigh up to 55 pounds (25 kilograms), without assistance.	Is able to perform the following, without assistance: <ul style="list-style-type: none"> <li>• manipulate door closing systems</li> <li>• extend both shoulders in forward direction;</li> <li>• rotate both shoulders;</li> <li>• rotate wrists to turn handles; <b>and</b></li> <li>• reach above shoulder height.</li> </ul>
Handle ship's stores.	Lift, pull, push and carry a load.	Is able, without assistance, to lift a 40-pound (18.1 kilogram) load off the ground, and carry, push or pull the same load.
General vessel maintenance.	Crouch (lowering height by bending knees); kneel (placing knees on ground); and stoop (lowering height by bending at the waist).  Use hand tools such as spanners, valve wrenches, hammers, screwdrivers, pliers.  Reach upwards	Is able to perform the following, without assistance: <ul style="list-style-type: none"> <li>• crouch, kneel, crawl, stoop, and squat;</li> <li>• grasp, pinch, and demonstrate rapid alternating finger movements;</li> <li>• grip, lift and manipulate common tools; and</li> <li>• work with arms raised overhead.</li> </ul>
Emergency response procedures including escape from smoke-filled spaces.	Crawl (the ability to move the body with hands and knees) and feel (the ability to handle or touch to examine or determine differences in texture and temperature).  Escape from smoke-filled spaces.	Is able to perform the following, without assistance: <ul style="list-style-type: none"> <li>• crouch, kneel and crawl; <b>and</b></li> <li>• distinguish differences in texture and temperature by feel.</li> </ul>
Stand a routine watch.	Stand a routine watch.  Stand, walk and remain alert for extended periods of time.	Is able to perform the following, without assistance: <ul style="list-style-type: none"> <li>• intermittently stand on feet and/or walk for up to 4 hours with minimal rest periods; <b>and</b></li> <li>• remain awake and mentally alert for a 4 – 6 hour shift.</li> </ul>
React and respond to visual alarms, warnings, and instructions; emergency response procedures.	Visually distinguish objects, shapes and signals at a certain distance.	Fulfills the eyesight standards for the merchant mariner credential(s) applied for. <i>See the <b>NOTE</b> to this table and Chapter 5 of this Manual.</i>



SHIPBOARD TASK, FUNCTION, EVENT, OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
React to audible alarms, warnings, and instructions; emergency response procedures.	Hear and distinguish warnings and alarms.  Hear and understand warnings and instructions.	Fulfills the hearing standards for the merchant mariner credential(s) applied for. <i>See the NOTE to this table and Chapter 5 of this Manual.</i>
Make verbal reports or call attention to suspicious or emergency conditions.	Describe immediate surroundings and activities, and pronounce words clearly.	Is capable of normal conversation.
Participate in firefighting activities.	Carry and handle fire hoses and fire extinguishers: Pull an uncharged 1.5-inch diameter, 50-foot fire hose with nozzle to full extension, and to lift a charged 1.5-inch diameter fire hose to fire-fighting position.  Use a breathing apparatus	Is able to lift, drag and pull 40 pounds without assistance.  Has no condition that is likely to impair their ability to safely tolerate wearing a respirator/breathing apparatus or other firefighting protective equipment.
Abandon ship.	Take part in emergency vessel evacuation procedures.  Don a lifejacket or immersion suit.	Has the agility, strength and range of motion to put on a personal flotation device (PFD) or immersion suit, without assistance.  Has full upper extremity range of motion and trunk rotation, and the ability to reach feet with both hands.

NOTE to [Table 6-1](#): The vision and hearing standards listed in Chapter 5 of this Manual are not applicable to entry level ratings, nor to cadet, student observer, apprentice engineer or apprentice mate ratings. As discussed in Chapter 2 of this Manual, examining medical practitioners should use the Application for Medical Certificate, Short Form CG-719K/E, to document their examination of applicants for these ratings. Examining medical practitioners should note any concerns with the eyesight and/or hearing capacity of applicants for these ratings so that the Coast Guard can make an appropriate determination as to the fitness of the individual for the rating(s). Examining medical practitioners may attach additional sheets to the Application for Medical Certificate, Short Form CG-719K/E, for this purpose.

- Mariner applicants who are only required to pass a demonstration of physical ability may submit the physical ability evaluation on either the Application for Medical Certificate, Short Form CG-719K/E or the Application for Medical Certificate, Form CG-719K. Mariner applicants who are required to pass a general medical examination must utilize the Application for Medical Certificate, Form CG-719K. Chapter 2 of this Manual provides additional detail on application requirements, and Chapter 1 of this Manual details the relevant standards applicable to each type of credential.
- For an applicant to pass a demonstration of physical ability, the examiner must be satisfied that the applicant is able perform the activities described in [Table 6-1](#) of this Chapter. The examining medical practitioner may test the listed skills directly, or may utilize alternative measures to satisfy him- or herself that the applicant possesses the

ability to meet the Physical Ability Guidelines listed in [Table 6-1](#) of this Chapter.

- a. For example, instead of having the applicant actually don an exposure suit or pull an uncharged 1.5-inch diameter 50-foot fire hose with nozzle to full extension, or lift a charged 1.5-inch diameter fire hose to fighting position, the medical practitioner may have the applicant demonstrate other physical activities that simulate activities from Table 6-1 of this Chapter.
  - b. A description of the methods utilized by the medical practitioner should be reported on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, as appropriate.
  - c. All demonstrations of physical ability should be performed by the applicant, without assistance.
  - d. Any prosthesis normally worn by the applicant, and other aid devices (such as prescription glasses), may be used by the applicant during the demonstration of physical ability, except when the use of such would prevent the proper wearing of mandated personal protective equipment (PPE). The medical practitioner should document any prosthesis or aid device used by the applicant on the Application for Medical Certificate, Form CG-719K, or Application for Medical Certificate, Short Form CG-719K/E, as appropriate.
6. The Coast Guard recognizes that not all medical practitioners will have the equipment or means necessary to test all of the tasks listed in [Table 6-1](#) of this Chapter. If the applicant requires a demonstration of physical ability, in accordance with [Paragraph B.3](#) of this Chapter, and the examining medical practitioner is unable to conduct the evaluation, the applicant should be referred to a competent evaluator of physical ability.
  - a. Equivalent alternate testing methodologies may be used.
  - b. The results of such evaluation should accompany the completed medical certificate application.
7. The Coast Guard recognizes that the guidelines contained in [Table 6-1](#) of this Chapter refer to shipboard conditions and tasks that may not be applicable to all vessels. Generally, however, credentials issued by the Coast Guard provide authority to work on different types and sizes of vessels, with each vessel having its own equipment and operating conditions.
  - a. An applicant who is unable to meet the guidelines contained within Table 6-1 may (along with his or her employer, as appropriate) propose alternatives that reflect the conditions applicable to his or her operating environment.
  - b. Such proposals should be made in writing to the National Maritime Center (NMC) ([iasknmc@uscg.mil](mailto:iasknmc@uscg.mil)), which will give full consideration to each proposal on an individual, case-by-case basis.

8. If an applicant is unable to meet all of the guidelines contained in [Table 6-1](#) of this Chapter, the examining medical practitioner should provide detailed information on the applicant's abilities and the degree or severity of the applicant's inability to meet the guidelines. This information will be reviewed to determine whether the applicant is suitable for medical certification or whether further evaluation is needed, up to and including a **practical evaluation of physical ability** conducted by Coast Guard personnel (See [Paragraph C](#) of this Chapter).

### C. The Practical Evaluation of Physical Ability.

1. For applicants with physical disabilities likely to pose significant functional impairment, the Coast Guard may offer or request that the applicant undergo a *practical evaluation of physical ability*.
  - a. Practical evaluations of physical ability are conducted by Coast Guard personnel in a shipboard setting, providing applicants an opportunity to demonstrate their ability to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response.
  - b. The purpose of the evaluation is to determine, to the satisfaction of the Coast Guard, whether an applicant can safely carry out all duties entrusted to him or her by virtue of holding an MMC.
  - c. A general list of the tasks assessed during a practical evaluation of physical ability can be found in [Paragraph E](#) of this Chapter.
2. Examples of circumstances that might prompt a request for a practical evaluation of physical ability include, but are not limited to, applicants who:
  - a. Have physical impairments or medical conditions that could prevent normal movement and physical activity;
  - b. Have loss of limb(s) and/or restricted motion of limb(s);
  - c. Require use of an assistive device in order to meet the physical ability requirements;  
or
  - d. Require modifications to the vessel in order to safely operate.

### D. Guidance on the Practical Evaluation of Physical Ability.

1. The practical evaluation of physical ability is performed by Coast Guard personnel within the Officer in Charge, Marine Inspection (OCMI) zone where the applicant seeks to operate. If the Coast Guard determines that a practical evaluation of physical ability is necessary and appropriate, the applicant will be notified and directed to contact the local OCMI to arrange for the evaluation.

2. The local OCMI will determine the tasks to be evaluated, and whether the examination will be conducted shore-side or with the vessel underway. The tasks to be evaluated may differ from those listed in [Paragraph E](#) of this Chapter, and may differ between OCMI zones based upon differences in operating requirements for particular zones.
3. The Coast Guard will provide the applicant with notice of the specific areas that will be evaluated in advance of the scheduled demonstration. Once this notice is provided, the applicant will have 30 days to contact the OCMI and complete the practical evaluation of physical ability.
4. If the applicant has made modifications to the vessel in order to operate, then the practical evaluation of physical ability should be conducted aboard the vessel on which the mariner seeks to operate.
5. Following completion of the practical evaluation of physical ability, the local Coast Guard OCMI will provide written recommendation to the Office of Merchant Mariner Credentialing regarding the applicant's performance. The Coast Guard will review the recommendation to determine whether the applicant may be approved for issuance of a medical certificate with appropriate waivers and/or limitations.

**E. Components of the Practical Evaluation of Physical Ability, by Endorsement Sought or Held**

In addition to the tasks listed in the [Table 6-1](#) of this Chapter, the Table of Physical Abilities, the practical evaluation of physical ability may include, but is not limited to, the following elements:

1. For Endorsement as Master or Mate of Vessels Less Than 200 Gross Tons (including Operator of Uninspected Passenger Vessels, OUPV).
  - a. Handling of mooring lines;
  - b. Ascending and descending the vessel's ladder;
  - c. Reaching, handling, grasping, and lifting lifesaving and firefighting equipment required by the vessel's certificate of inspection (COI), or applicable regulations;
  - d. Donning and properly wearing a personal flotation device (PFD); assisting passengers in donning PFDs; casting ring buoys;
  - e. Properly operating firefighting equipment;
  - f. Recovering a person who has fallen overboard;
  - g. Rendering first aid to a person who may be unconscious or otherwise incapacitated;
  - h. Using shipboard tools to repair a mechanical breakdown; and

- i. Properly using navigation/communication equipment, if applicable.
- 2. For other Officer and Rating Endorsements.
  - a. Ascending and descending the ship's ladder;
  - b. Ascending and descending a Jacob's ladder;
  - c. Opening and closing watertight doors;
  - e. Exiting the vessel via emergency routes;
  - f. Rowing a lifeboat;
  - g. Wearing an emergency breathing apparatus;
  - h. Reaching, handling, grasping, and lifting lifesaving and firefighting equipment required by the vessel's certificate of inspection (COI);
  - i. Donning and properly wearing a personal flotation device (PFD) and casting ring buoys;
  - j. Properly using navigation/communication equipment if applicable;
  - k. Members of the deck department must handle mooring lines and operate winch controls; and
  - l. Members of the engineering department must operate valves and related machinery control equipment.

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## CHAPTER 7. MEDICATIONS SUBJECT TO FURTHER REVIEW

### A. Definitions.

1. *Acting under the authority of a credential.*
  - a. The definition of “acting under the authority of a credential” is found in 46 CFR 5.57 and states, in part, that:

A person employed in the service of a vessel is considered to be acting under the authority of a credential or endorsement when the holding of such credential or endorsement is:

    - (1) Required by law or regulation; or
    - (2) Required by an employer as a condition for employment.
  - b. For the purposes of this Chapter, the definition of “acting under the authority of a credential” will be limited to indicating those times when the mariner is on the vessel, even when off-watch or while asleep; or is otherwise subject to recall for duty or emergency response.
2. *Alcohol* means any form or derivative of ethyl alcohol (ethanol) (*See* 33 CFR 95.010).
3. *Controlled substance* has the same meaning assigned by 21 U.S.C. 802 and includes all substances listed on Schedules I through V, as they may be revised from time to time (*See* 21 CFR part 1308 and 33 CFR 95.010).
4. *Drug* means any substance (other than alcohol) that has known mind- or function-altering effects on a person, specifically including any psychoactive substance, and including, but not limited to, controlled substances (*See* 33 CFR 95.010).
5. *Intoxicant* means any form of alcohol, drug, or combination thereof (*See* 33 CFR 95.010).

### B. Prohibitions.

1. **Illegal Substances.**

Use of illegal or illegally obtained substances, including all illegal or illegally obtained dangerous drugs (as defined in 46 CFR 16.105), is incompatible with maritime service and will not be waived under any circumstances.
2. **Intoxicants.**

Operation of vessels while under the influence of drugs or alcohol is regulated under 33 CFR part 95. Issuance of a credential does not authorize a mariner to operate a vessel contrary to the provisions in 33 CFR part 95 (*See also* 46 USC 2302).

### **C. Important Safety Warnings.**

1. Certain medications, whether prescription or over-the-counter (OTC), have known impairing effects, and their labels warn about the risk of drowsiness and caution against use while driving or operating hazardous machinery.
2. The nature of shipboard life and shipboard operations is such that mariners may be subject to unexpected or emergency response duties associated with vessel, crew, or passenger safety, prevention of pollution, and maritime security at any time while aboard a vessel.
3. In the interest of safety of life and property at sea, the Coast Guard views shipboard life, and the attendant shipboard duties that can arise without warning, as safety-sensitive duties that are analogous to operating hazardous machinery. As such:
  - a. Mariners are advised to discuss all medication use with their treating providers and to inform them of the safety-sensitive nature of their credential; and
  - b. Mariners are cautioned against acting under the authority of a credential while under the influence of medications that:
    - (1) Can cause drowsiness;
    - (2) Can impair cognitive ability, judgment or reaction time; or
    - (3) Carry warnings that caution against driving or operating heavy machinery.
  - c. Mariners are advised that they are considered to be acting under the authority of a credential, for the purposes of this Chapter, any time they are aboard a vessel in a situation to which 46 CFR 5.57(a) applies, even when off-watch or while asleep, or any time they are subject to recall for duty or emergency response.
4. Mariners should also be aware that some over-the-counter medications and preparations may contain intoxicants or other dangerous drugs prohibited by Department of Transportation regulations. These may include substances that are ingested, inhaled, smoked or applied topically (such as a lotion, ointment or cream that is rubbed on the skin). As an example, some commercially available cannabidiol (CBD) preparations and hemp preparations may contain enough tetrahydrocannabinol (THC, the psychoactive drug in marijuana) to result in a positive drug test.
  - a. A mariner is “presumed to be a user of dangerous drugs” if he/she fails a chemical test for drugs under 46 CFR 16.201(b).
  - b. Failing a chemical test for drugs under 46 CFR 16.201(b) may result in enforcement action, up to and including suspension and revocation action against the merchant mariner credential.



- c. For these reasons, use of medications or topical preparations containing marijuana, THC, CBD or hemp will not be waived under any circumstances.

**D. Disclosure of Prescription and Over-the-Counter (OTC) Medications.**

1. Applicants who are required to complete a general medical exam should disclose on the Application for Medical Certificate, Form CG-719K, all prescription medications filled or taken within 30 days prior to the date that the applicant signs the application to the Coast Guard (*See* 46 CFR 10.302(a) and 10.304(a)).
2. In addition, applicants who are required to complete a general medical exam should disclose on the Application for Medical Certificate, Form CG-719K, all prescription medications and OTC medications, including dietary supplements and vitamins, that were used for a period of 30 days or more within the 90 days prior to the date the applicant signs the application to the Coast Guard (*See* 46 CFR 10.302(a) and 10.304(a)). Applicants need not report OTC medications, dietary supplements and vitamins that were used for periods of less than 30 days within the 90 day period prior to the date the applicant signs the application to the Coast Guard.

**E. Recommended Evaluation Data for Medications.**

1. Applicants seeking medical certification should provide amplifying information for all medications disclosed, as directed in Paragraphs D.1 and 2, above, on the Application for Medical Certificate, Form CG-719K, to the Coast Guard.
2. The amplifying information should include, at a minimum:
  - a. The medical condition that is being treated by the medication;
  - b. The dose of the medication (the amount of medication taken and how often the medication is taken); and
  - c. For prescription medications, documentation from the treating provider on the medication dose and frequency, the status and stability of the underlying condition, and any precautions provided to the mariner regarding the medication or the condition.
3. The amplifying information will be reviewed to determine whether the medication and/or underlying condition—
  - a. Is approved for use without a waiver;
  - b. Is approved for issuance of a waiver; or
  - c. Poses such a risk that the mariner will not be approved for medical certification.
4. See Chapter 3 of this Manual for additional information on the medical review process.

**F. Medication Waivers—General Information.**

1. Mariners using certain medications will require a waiver if the medication, or the manner in which the medication is used, has the potential to pose significant risk of impairment or other safety concerns.
2. In general, medication waivers are likely to be approved when circumstances indicate that there is no significant risk to maritime and public safety. For instance, if a mariner regularly uses a medication that causes drowsiness, but objective documentation supports that the mariner does not work while using the medication and will not be under the influence of the medication while working, then the mariner's use of the medication may be considered favorably for a waiver.
3. Medication waivers may be granted with specific conditions to which the applicant must adhere, such as more frequent monitoring of the medication/associated medical condition(s), submission of medical exams and/or tests at varying intervals to track the ongoing status of the medical condition, or operational limitations or restrictions in the manner the mariner may serve under the MMC.
4. Any operational limitations or restrictions will be reflected on the medical certificate, and may include restriction of route or trade.
5. Medication waivers are generally not approved for use of legally prescribed controlled substances while acting under the authority of a credential. Legally prescribed controlled substances include, but are not limited to, opioid/opiate medications, benzodiazepine medications, non-benzodiazepine sedative hypnotic medications, and barbiturate medications. Further guidance on these medications is provided in [Paragraph I](#) (Medication Waivers Requiring Special Consideration) and [Paragraph J](#) (Recommended Evaluation Data for Medication Waivers Requiring Special Consideration) of this Chapter.
6. The Coast Guard retains final authority for the issuance of medical waivers.

**G. Medications Subject to Further Review due to Risk of Impaired Cognitive Ability, Judgment, or Reaction Time.**

1. Medications that may impair cognitive ability, judgment, or reaction time may be considered disqualifying for issuance of a medical certificate (*See* 46 CFR 10.304(a)). Additionally, the underlying condition requiring use of the potentially impairing medication and/or the possible side effects of these medications may result in denial of an application. Mariners and applicants who require the use of potentially impairing medications may seek consideration for a waiver in accordance with 46 CFR 10.303.
2. The following is a non-exhaustive list of medications that may be deemed disqualifying due to risk of impaired cognitive ability, judgment or reaction time. Mariners who use these medications are subject to further medical review to determine whether their use of the medication is likely to impair their ability to operate safely. If the mariner's medication use is deemed disqualifying by the Coast Guard, then the Coast Guard will

determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Please refer to [Paragraph E](#) (Recommended Evaluation Data for Medications) and [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

a. Antidepressants (Medicines for Treatment of Depression).

Examples include, but are not limited to, citalopram (Celexa), duloxetine (Cymbalta), paroxetine (Paxil), trazodone (Desyrel), amitriptyline (Elavil) and venlafaxine (Effexor). In many cases, use of antidepressant medications may be approved without need for a waiver. The medication and the underlying condition will be reviewed to determine whether the mariner applicant requires and/or qualifies for a waiver under 46 CFR 10.303.

b. Anti-Motion Sickness Agents (Medicines for Treatment of Motion Sickness).

Intermittent use of these medications does not require a waiver; however, mariners are cautioned against acting under the authority of a credential while under the influence of anti-motion sickness agents that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.

c. Antipsychotics.

Examples include, but are not limited to, aripiprazole (Abilify), olanzapine (Zyprexa), quetiapine (Seroquel), lurasidone (Latuda), and risperidone (Risperdal). The medication and the underlying condition will be reviewed to determine whether the mariner qualifies for a waiver under 46 CFR 10.303.

d. Anti-Convulsives, Anti Epileptic Drugs (Medications for Treatment of Seizures).

The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303. See Paragraph E of Chapter 19 of this Manual, Seizure or Convulsive Disorders, for guidance on evaluating waivers for conditions that result in use of anti-convulsive or anti-epileptic medications.

e. Antihistamines, Allergy Medications:

(1) Non-sedating medications (medications without significant risk of drowsiness).

Examples include loratadine (Claritin), fexofenadine (Allegra) and desloratadine (Clarinex). Use of non-sedating antihistamines does not require a waiver.

(2) Sedating medications (medications with significant risk of drowsiness, sleepiness). Examples include, but are not limited to diphenhydramine (Benadryl, ClearQuil Nighttime Allergy Relief), cetirizine (Zyrtec), and doxylamine (Aldex AN, Clearquil Nighttime Sinus and Congestion Relief). For chronic or regular use, the medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303.

Intermittent use of these medications does not require a waiver; however,

mariners are cautioned against acting under the authority of a credential while under the influence of antihistamines (allergy medications) that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.

f. Barbiturate Medications.

Examples include, but are not limited to butalbital (Fiorinal or Fioricet) and phenobarbital. Due to the risk of impaired cognitive ability, judgment, and reaction time, use of barbiturate medications is disqualifying. The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303. Waivers for use within 48 hours prior to, or while acting under the authority of a credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

g. Benzodiazepine Medications.

Examples include, but are not limited to, alprazolam (Xanax), lorazepam (Ativan), clonazepam (Klonopin) and diazepam (Valium). Due to the risk of impaired cognitive ability, judgment, and reaction time, use of benzodiazepine medications is disqualifying. The medication and the underlying condition will be reviewed to determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Waivers for use within 48 hours prior to, or while acting under the authority of a credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

h. Cough and Cold Medicines.

- (1) A number of OTC cough and cold preparations contain sedating antihistamines or other medicines that can cause drowsiness. Intermittent use of these medications does not require a waiver; however mariners are cautioned against acting under the authority of a credential while under the influence of cough or cold medications that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.
- (2) For prescription medications containing opioid or opiate ingredients (such as cough syrups containing codeine or hydrocodone) see [Paragraph G.2.k](#) (Legally Prescribed Controlled Substances) of this Chapter.

i. Stimulant Medications.

Examples include, but are not limited to, modafinil, methylphenidate, and amphetamine. The medication and the underlying condition will be reviewed to determine whether the mariner qualifies for a waiver under 46 CFR 10.303.

j. Sleep Aids (Medications to help people fall asleep):

- (1) Over-the-counter (OTC) medications to help with sleep include, but are not limited to diphenhydramine (Benadryl, Sominex, Tylenol PM, Compoz Nighttime Sleep Aid, ZZZQuil) and doxylamine (Unisom). Mariners are cautioned against acting under the authority of a credential while under the influence of sleep medications that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.
- (2) Prescription sleep medications and non-benzodiazepine sedative hypnotic medications. Examples include, but are not limited to zolpidem (Ambien, Intermezzo, Zolpimist), eszopiclone (Lunesta), and zaleplon (Sonata). Due to the risk of impaired cognitive ability, judgment, and reaction time, use of non-benzodiazepine sedative hypnotic medications is disqualifying. The medication and the underlying condition will be reviewed to determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while acting under the authority of a credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

k. Legally Prescribed Controlled Substances.

Examples include, but are not limited to, opiate and opioid pain medication such as Tylenol with codeine, oxycodone (Percocet), hydrocodone (Vicodin), hydromorphone (Dilaudid), tramadol (Ultram), methadone, and buprenorphine (Suboxone). Due to the risk of impaired cognitive ability, judgment, and reaction time, use of legally prescribed controlled substances is disqualifying. The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while acting under the authority of a credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

l. Medical Use of Hallucinogens.

Examples include, but are not limited to, medical marijuana (use of the marijuana plant), nabilol, nabiximols (Sativex), tetrahydrocannabinol, dronabinol (Marinol), Epidiolex, peyote, ecstasy, and topical marijuana or cannabinoid preparations. Even if legalized by a state, use of these substances is disqualifying and will **not** be waived under any circumstances.

m. Muscle Relaxants.

Examples include, but are not limited to carisoprodol (Soma), cyclobenzaprine (Flexeril), and methocarbamol (Robaxin). The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a

waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while acting under the authority of a credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See [Paragraph I](#) (Medication Waivers Requiring Special Consideration) of this Chapter.

#### **H. Medications Subject to Further Review due to Risk of Other Impairment and Safety Concerns.**

While many medications can be an important factor in enabling mariners to continue to work at sea, some have side effects that can affect safe and effective performance of routine and emergency duties and some have other complications that will increase the likelihood of illness at sea.

1. Medications that may impair a mariner's ability to perform routine and emergency duties.
  - a. Central nervous system depressants, hallucinogens, and/or stimulants.
  - b. Agents that increase the likelihood of sudden incapacitation.
  - c. Medications that impair vision.
2. Medications that may have serious adverse consequences for the user while underway, and may require limitations.
  - a. Medications that can cause prolonged bleeding, either spontaneous or traumatic. Individual risk assessment of bleeding likelihood may be needed.
  - b. Dangers from cessation of medication use.
  - c. Long-term or periodic need for antibiotics and other anti-infection agents.
  - d. Anti-metabolites and cancer treatments.
  - e. Medications supplied for use at individual discretion.
3. Medications that may require periodic medical monitoring.

#### **I. Medication Waivers Requiring Special Consideration.**

1. As stated previously, **medications that may impair cognitive ability, judgment or reaction time are considered disqualifying for issuance of credentials.** The underlying condition, as well as the effects of the medications, may lead to denial of a medical certificate or may result in issuance of a waiver.
2. Due to the documented risks of impaired cognition, judgment and reaction time associated with the use of legally prescribed controlled substances, including, but not limited to, opioid/opiate medications, benzodiazepine medications, non-benzodiazepine sedative hypnotic medications, and barbiturate medications, the Coast Guard has

determined that **use of these medications while acting under the authority of a credential generally will not be waived**. However, waivers may be considered, on a case-by-case basis, if the Coast Guard determines that there are **exceptional** circumstances that warrant consideration for a waiver.

3. **Exceptional Circumstances.** The criteria for waiver consideration for applicants seeking to use, or be under the influence of medications that may impair cognitive ability, judgment, or reaction time while acting under the authority of a credential are listed below. Applicants unable to meet all of the criteria will be considered for a waiver only under **extraordinary** circumstances if the Coast Guard deems the risk of impairment to be sufficiently low.
  - a. The mariner was previously granted a waiver allowing use of the same medication while working under the authority of a credential, where the credential was of the same scope of authority;
  - b. The mariner demonstrated compliance with all terms of the prior waiver;
  - c. There were no accidents or other safety concerns related to medication, judgment, cognitive ability or reaction time, during the course of the prior waiver period(s);
  - d. The mariner has been on a stable medication regimen for a minimum of 2 years, as documented by the treating physician and pharmacy records;
    - (1) Mariners who have required periodic increases in medication dosing during the preceding 2-year period would not meet this criterion;
    - (2) Mariners who have consistently or periodically supplemented their medication regimen with other disqualifying medications during the 2-year period are not likely to be considered as meeting this criterion. For example, an individual who has been on a stable dose of one opioid pain medication for 2 years, but has also periodically taken or filled prescriptions for an opioid cough medication during that same time period, would not be considered as being on a stable dose of medicine;
    - (3) Mariners whose medication dose has been decreased or tapered off, without subsequent dose increase, may be considered as meeting this criterion;
  - e. The mariner is not seeking to use, or be under the influence of, more than one medication with risk for impairment while working under the authority of a credential;
  - f. The mariner's treating physician provides written assessment that adequately addresses all information requested in [Paragraph J](#) of this Chapter (Recommended Evaluation Data for Medication Waivers Requiring Special Consideration) and that supports a determination that the mariner is at low risk for medication impairment based upon objective testing and standard evaluation tools;



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- g. When requested, formal neuropsychological/neurocognitive testing, performed as outlined in [Paragraph J.2](#) of this Chapter, documents the absence of significant medication impairment; and
  - h. The mariner does not use any other medications or have any other medical conditions which may, alone or in combination, adversely affect the mariner's fitness.
- 4. The risk presented by the mariner's position may be considered in determining whether to grant a waiver. Because of the wide range of operational conditions, it is impossible to set out in advance which positions may be suitable for a waiver.
  - 5. The Coast Guard retains final authority for the issuance of waivers.
  - 6. Waivers may include restrictions and/or operational limitations on the credential.
  - 7. The use of methadone may not be waived under any circumstances.

**J. Recommended Evaluation Data for Medication Waivers That Require Special Consideration.**

Applicants seeking consideration for a medication waiver for the use of medications that may impair cognitive ability, judgment, or reaction time while acting under the authority of a credential should submit the additional information detailed below, for each medication:

- 1. A letter from the prescribing and/or treating physician that includes the following:
  - a. Whether the physician has familiarized him- or herself with the detailed guidelines on medical conditions and medications contained in this Manual;
  - b. Whether the physician understands the safety-sensitive nature of the credential and the specialized shipboard environment;
  - c. A detailed discussion of the condition that requires the use of the potentially impairing medication;
  - d. A description of any known complications experienced by the mariner from the use of a particular medication, level of current stability and prognosis of the underlying condition. The physician should also provide his or her professional opinion on whether the condition is suitable for safety-sensitive work;
  - e. A description of the dosage and frequency of use of the medication (this description should be very specific; "as needed" is not sufficient information). The description should also reflect that the physician has reviewed the mariner's pharmacy records for documentation of the number of pills dispensed for use each month and documentation of the length of time that mariner has been on the medication;
  - f. A detailed statement about whether the mariner is taking the medication as directed, and if there are any concerns of misuse or overuse of the medication;



- g. A statement about whether the mariner is compliant with therapy and follow-up appointments;
  - h. A statement about whether the mariner requires use of this medication while at work, or while aboard the vessel. If the mariner requires use of the potentially impairing medication while at work or while aboard the vessel, the physician should provide a detailed explanation and rationale for the use;
  - i. A statement about whether the physician has advised the mariner of the risks of impairment related to the medication. The physician should also discuss any risks advised, as well as any instructions discussed with the mariner for mitigating risk;
  - j. A statement about whether the mariner's other medications, medical conditions, and work/sleep conditions might compound the impairing effects of this medication. This discussion should reflect that the physician has knowledge of the specifics of the mariner's medications, medical conditions and work/sleep schedule;
  - k. A statement about whether the physician has formally evaluated the mariner for the presence of any impairing medication effects. This discussion should include a description of the method of evaluation utilized, as well as the findings;
  - l. A medical opinion of whether the mariner has experienced any medication effects that would impede safe operation of a vessel or interfere with work in a safety sensitive position. This discussion should include the rationale for the physician's opinion; and
  - m. A statement whether the physician has advised the mariner that it is safe to operate a vessel, operate hazardous machinery, and perform safety sensitive functions while under the influence of this medication.
2. When specifically requested by the reviewing authority, additional amplifying information, to include **formal neuropsychological/neurocognitive evaluation**.
- a. In particular, mariners seeking waivers to use or be under the influence of potentially impairing opioid/opiate, benzodiazepine, sedative hypnotic, and/or barbiturate medications, while acting under the authority of a credential, may be asked to submit the results of a formal neuropsychological/neurocognitive evaluation.
  - b. The Coast Guard will not normally request neuropsychological/neurocognitive testing unless the applicant meets all other requirements for waiver consideration. This is to prevent mariners from undergoing costly testing when issuance of a waiver is unlikely.
  - c. Mariners are advised that submission of neuropsychological/neurocognitive testing results does not guarantee issuance of a waiver.

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- d. When formal neuropsychological/neurocognitive evaluation is requested, the assessment should include objective evaluation of the following functions, at a minimum<sup>1</sup>:
  - (1) Alertness, arousal, and vigilance;
  - (2) Attention (focused, shifting and divided), processing speed, and working memory;
  - (3) Reaction time (choice and complex), psychomotor function, upper motor speed, and coordination;
  - (4) Sensory perceptual function;
  - (5) Executive function: mental flexibility, adaptive problem solving, abstract reasoning, impulse control, risk taking/risk assessment, organizational ability (including visual spatial organization), and planning;
  - (6) Memory; and
  - (7) Communication skills.
- e. When formal neuropsychological/neurocognitive evaluation is requested, the evaluation and narrative interpretation must be provided by a neuropsychologist who is board-certified and licensed in the United States.
- f. The report of formal neuropsychological/neurocognitive evaluation should also include:
  - (1) Documentation of witnessed administration of the medication in question by a licensed medical provider.
  - (2) Documentation of the time interval between ingestion of the medication and administration of the neuropsychological/neurocognitive testing battery.

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<sup>1</sup> Kay, GG and Logan BK, (2001). Drugged Driving Expert Panel report: A consensus protocol for assessing the potential of drugs to impair driving. (DOT HS 811 438). Washington, DC: National Highway Traffic Safety Administration.

## **CHAPTER 8. MEDICAL CONDITIONS SUBJECT TO FURTHER REVIEW**

### **A. Medical Conditions Subject to Further Review.**

Medical conditions that pose significant risk of sudden incapacitation or debilitating complication, or that are associated with significant functional impairment are subject to further review. Additionally, medical conditions requiring medication that impairs cognitive ability, judgment, or reaction time are subject to further review. Conditions that may be subject to further review include, but are not limited to, the following:

1. Allergic Conditions
2. Blood or Hematologic Conditions
3. Cancer or Malignant Conditions
4. Cardiovascular Conditions
5. Ear, Nose, and Throat Conditions
6. Endocrine Conditions
7. Gastrointestinal Conditions
8. Genitourinary Conditions
9. Infectious Conditions
10. Musculoskeletal Conditions
11. Neurologic Conditions
12. Ophthalmologic Conditions
13. Organ Transplant
14. Pregnancy
15. Psychiatric Conditions
16. Pulmonary Conditions
17. Skin Conditions

### **B. Medications, Vitamins and Dietary Supplements.**

1. Mariners should not perform a safety sensitive function on any vessel while under the influence of any substance that may negatively impact their performance. To that end,

mariners are strongly warned that some prescription medications, over-the-counter medications, vitamins, and dietary supplements, alone or in combination with other substances, may adversely affect an individual's ability to perform critical functions and place the individual at risk of sudden incapacitation. Mariners are strongly advised to seek the advice of a physician before taking any medications, vitamins, or dietary supplements.

2. Mariners should read and follow the manufacturer's warnings and directions, and the warnings and directions of their own physicians, in order to minimize the risk of adverse affects. Notwithstanding, little is known about the effects of some supplements and their interaction with other substances. Therefore, the risks associated with their use cannot be determined. *See* Chapter 7 of this Manual, Guidance on Medications.

### **C. Reports of Medical and Physical Exams, Demonstrations, and Tests.**

In accordance with 46 CFR 10.304(d), reports of medical and physical exams, demonstrations and tests:

1. Must be submitted within 12 months from the date signed by the licensed medical professional.
2. When submitted with a complete application package, these reports remain valid for 12 months from the date the Coast Guard accepts a complete application.

### **D. Recommended Evaluation Data.**

Chapters 9-25 of this Manual contain detailed information and recommend supplemental evaluation data that should be submitted along with the application for a medical certificate, as appropriate. The list is non-exhaustive.

1. At the time of publication of this Manual, the evaluation data listed in this Chapter is what the Coast Guard recommends should be submitted for each condition. Submission of other than the recommended evaluation data may result in processing delay.
2. The Coast Guard will consider alternative approaches proposed by applicants regarding substitution of evaluation data for the recommended evaluation data listed in these chapters, if the alternative approach satisfies the requirements of the applicable statutes and regulations.
3. Applicants wishing to discuss alternative approaches may contact the NMC Medical Evaluations Branch at the following e-mail address: [iasknmc@uscg.mil](mailto:iasknmc@uscg.mil). The NMC may also be contacted by telephone at 1-888-I-ASK-NMC.
4. For status reports, evaluation reports, and consultations, all timeframes specified with respect to the evaluation data listed in Chapters 9-25 of this Manual are measured from the date that the application is received by the Coast Guard. For example, if the guidance calls for a medical test that is no more than 90 days old, the test should have been

completed no more than 90 days before the date that the Application for Medical Certificate, Form CG-719K is received by the Coast Guard.

**E. Medical Conditions Previously Reported to the Coast Guard.**

1. Applicants with medical conditions that were previously reported to the Coast Guard are not required to re-submit historical medical data or testing that was previously provided to the Coast Guard.
2. Mariners who have previously reported their medical condition to the Coast Guard may work with their medical providers to document the following on the Application for Medical Certificate, Form CG-719K:
  - a. The specific condition that was previously reported;
  - b. The type of historical information or testing that was previously provided; and
  - c. The interval history (since last reported to the Coast Guard) and current status of the condition, as well as any appropriate recommended evaluation data.

**F. Waivers.**

Not every condition that is listed requires a waiver. Applicants with these medical conditions may be issued a medical certificate with or without limitations, waivers, or restrictions, as specified by the Coast Guard. Limitations, waivers, and restrictions are discussed in further detail in Chapter 1 of this Manual.

**G. Terms.**

Terms used in Chapters 9-25 of this Manual are clarified below:

1. Active Condition.  
For purposes of this Manual, “active” means that the applicant is currently under treatment for the condition, or that the applicant is currently under observation for possible worsening or recurrence of the condition, or that the condition is currently present. For all active conditions (as defined in this Paragraph), the status report, evaluation report or consultation should have been completed no more than one year prior to the date the application is received by the Coast Guard. The appropriate timeframe depends on what is medically relevant given the individual circumstances of the applicant’s condition. Medical providers should contact the NMC if they have any questions about how recent a status report, evaluation report or consultation should be.
2. History Of.  
As used in this Manual, the term “history of” means a previous diagnosis or treatment of a medical condition by a healthcare provider, even once in the applicant’s life, unless otherwise specified in this Chapter. It includes all active and present medical conditions.

3. Significant Functional Impairment.

For the purposes of this Manual, a medical condition is considered to cause significant functional impairment if it impairs the applicant's ability to fully perform the physical abilities listed in Table 6-1 of this Manual, or if it interferes with the applicant's ability to fully perform the duties and responsibilities of the requested credential.

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## CHAPTER 9. ALLERGIC CONDITIONS

### A. Conditions of Concern.

Allergic conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, anaphylaxis, angioedema, and conditions resulting in the use of controlled substances or impairing medications.

### B. Guidance to Mariner Applicants.

1. In some cases, allergic conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Allergic conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with allergic conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety-sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

(1) The **Treating Provider's Assessment**; and

(2) **Recommended Evaluation Data**.

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support the assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an allergist, for example.

2. Recommended Evaluation Data.

- a. Objective testing results and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.



## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or the medical certificate, on a case-by-case basis.

### **3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and

- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 10. BLOOD OR HEMATOLOGIC CONDITIONS

### A. Conditions of Concern.

Blood or hematologic conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, anemia, thrombocytopenia, hypercoagulable states that are symptomatic or unstable, and conditions resulting in the use of controlled substances or impairing medications.

### B. Guidance to Mariner Applicants.

1. In some cases, blood or hematologic conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Blood or hematologic conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with blood or hematologic conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (1) The **Treating Provider's Assessment**; and

**(2) Recommended Evaluation Data.**

**C. Guidance to Treating Providers.**

**1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support the assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a hematologist, for example.

**2. Recommended Evaluation Data.**

- a. Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition.

Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.

- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;
  - (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and

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- (5) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

### **3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;

- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.



## **CHAPTER 11. CANCER OR MALIGNANT CONDITIONS**

### **A. Conditions of Concern.**

Cancer or malignant conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to cancer that is not in remission, or cancer associated with impairing complications, or conditions resulting in the use of controlled substances or impairing medications.

### **B. Guidance to Mariner Applicants.**

1. In some cases, cancer or malignant conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Cancer or malignant conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with cancer or malignant conditions should:
  - a. Discuss the following with their treating provider and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and
- (2) **Recommended Evaluation Data**.

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an oncologist, for example.

2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) The cancer or malignant condition has been in remission for five years;
  - (2) Favorable recommendation from the treating provider;
  - (3) The condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;

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- (4) The condition is not being treated with controlled substances or impairing medications;
    - (5) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (6) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) The cancer or malignant condition has not been in remission for at least five years;
    - (2) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (3) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (4) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (5) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication; or
    - (6) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicants on how their condition may affect, or be affected by service at sea.

**E. Medical Certification Evaluation.**

1. Certification Determinations.

Certification determinations will be made on a case-by case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;

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- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 12. CARDIOVASCULAR CONDITIONS

### A. Introduction.

1. Cardiovascular Conditions of Concern.
  - a. Cardiovascular conditions known to be accompanied by sudden death, syncope, dyspnea (difficult or labored breathing), collapse, or congestive heart failure are subject to further review, and may be determined disqualifying. Examples include, but are not limited to: ischemic heart disease or angina, myocardial infarction, cardiomyopathy, history/risk of arrhythmia, heart failure, uncontrolled hypertension, valvular disease, conduction disturbance, heart transplant, and cardiac tumors and conditions resulting in treatment with a pacemaker.
  - b. Conditions resulting in treatment with an implantable cardioverter defibrillator are disqualifying and generally will not be approved for issuance of a waiver. See [Paragraph G](#) of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration.
  - c. Conditions resulting in heart transplantation are disqualifying and generally will not be approved for issuance of a waiver. See [Paragraph G](#) of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration.
  - d. General classes of cardiovascular conditions that are subject to further review are discussed in [Paragraphs B](#) through [F](#) of this Chapter. These conditions include, but are not limited to:
    - (1) Coronary artery disease and cardiomyopathy;
    - (2) Cardiac arrhythmias;
    - (3) Valvular disease;
    - (4) Vascular disease; and
    - (5) Cerebrovascular disease.
2. General Guidance to Mariner Applicants
  - a. Some heart and vascular conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.

- b. Heart and vascular conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
  - c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
  - d. Mariner applicants with cardiovascular conditions should:
    - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
      - (a) Their medical condition and the limitations of medical care aboard the vessel;
      - (b) The safety-sensitive nature of their merchant mariner credential;
      - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel; and
      - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
    - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
      - (a) The **Treating Provider's Assessment**; and
      - (b) **Recommended Evaluation Data**.
3. Guidance to Treating Providers.
- a. Treating Provider's Assessment.
- The treating provider's assessment should detail a full evaluation of the condition, as follows:
- (1) Pertinent medical examination and physical evaluation data;
  - (2) The history of the condition (unless previously reported to the Coast Guard);
  - (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has



required emergency treatment, intervention or hospitalization within the past 6 years;

- (4) Treatment compliance and efficacy;
- (5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications ;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist, an electrophysiologist, or a cardiothoracic surgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing results and supporting documentation are requested to better assess the severity of the condition, the presence of adequate cardiac capacity; and the presence or absence of ischemia with exercise, or other impairment. This information assists the evaluators in determining whether the mariner applicant is able to perform routine and emergency duties without risk of sudden incapacitation.
- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If objective testing was performed within 5 years of the current medical certificate application, and the treating specialist finds that there are no indications for obtaining further study, then the provider should include discussion and documentation to that effect in the assessment, along with the results of previously performed testing.

- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for cardiovascular conditions include, but are not limited to:
    - (a) Echocardiogram with Doppler flow studies;
    - (b) Cardiac catheterization studies;
    - (c) Holter monitoring; and
    - (d) Graded exercise stress testing (treadmill stress testing), with or without perfusion scanning, as indicated.
- [1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METS) of work, and 85% of maximum predicted heart rate.
- [2] If pharmacological stress testing is submitted in lieu of treadmill testing, then the cardiologist's assessment should discuss the rationale. Additionally, the cardiologist's assessment should provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.
- [3] If medical conditions exist that prevent the mariner from exercising, these conditions may be disqualifying in their own right and will require further evaluation.

**B. Coronary Artery Disease and Cardiomyopathy.**

1. Guidance to Mariner Applicants.

- a. In some cases, the conditions of coronary artery disease and cardiomyopathy may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
- b. Coronary artery disease and cardiomyopathy conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with coronary artery disease and/or cardiomyopathy should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety-sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment compliance and efficacy;
- (5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support their assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist, an electrophysiologist, or a cardiothoracic surgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of ischemia with exercise, or other impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) Examples of recommended evaluation data for coronary artery disease and cardiomyopathies include, but are not limited to:
    - (a) Echocardiogram with Doppler flow study;
    - (b) Cardiac catheterization reports, when applicable; and
    - (c) Treadmill stress testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
      - [1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METS) of work, and 85% of maximum predicted heart rate.
      - [2] If pharmacological stress testing is submitted in lieu of exercise testing, then the cardiologist's assessment should discuss the rationale. Additionally, the cardiologist's assessment should provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.
      - [3] If medical conditions exist that prevent the mariner from exercising, these conditions may be disqualifying in their own right and will require further evaluation.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification

Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.

- (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:

- (a) An evaluation from the treating provider and/or specialist; and
- (b) Any appropriate recommended evaluation data.

b. Certification Recommendation: Certification Recommended.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event;
  - (d) The condition is not being treated with controlled substances or impairing medications; and
  - (e) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

c. Certification Recommendation: Certification Not Recommended or Needs Further Review.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
  - (a) Unfavorable recommendation or insufficient documentation from the treating provider;

- (b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
  - (c) The applicant's left ventricular ejection fraction is less than 40%;
  - (d) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
  - (e) The applicant's condition is treated with controlled substances or impairing medications;
  - (f) The applicant has undergone placement, or been advised to undergo placement of a pacemaker, ICD; or other cardiac implantable device; or
  - (g) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse or sudden death.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how their condition may affect, or be affected by service at sea.

#### 4. Medical Certification Evaluation.

##### a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;

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- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with reversible cardiac ischemia, syncope; heart failure, angina or other active cardiac symptoms may be found unqualified;
- (2) Mariner applicants with evidence of, or at significant risk for symptomatic or malignant arrhythmias may be found unqualified; and
- (3) Mariner applicants with conditions requiring treatment with an implantable cardioverter defibrillator (ICD) may be found unqualified. Conditions requiring treatment with an ICD are generally considered unsuitable for a medical waiver. See [Paragraph G](#) of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration, for further guidance on waiver criteria for applicants with an ICD
- (4) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
- (5) Mariner applicants with other findings that indicate a significant risk of an adverse cardiac event, syncope, collapse, or sudden death may be found unqualified;
- (6) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and



- (7) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

### C. Cardiac Arrhythmias.

#### 1. Guidance to Mariner Applicants.

- a. In some cases, cardiac arrhythmia conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
- b. Cardiac arrhythmia conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with cardiac arrhythmias should:
  - (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety-sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist, an electrophysiologist, or a cardiothoracic surgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of ischemia with exercise, or other impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

Cardiac Arrhythmias

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) Examples of recommended evaluation data for cardiac arrhythmias include, but are not limited to:
  - (a) Echocardiogram with Doppler flow study;
  - (b) 24-Hour Holter Monitoring; and
  - (c) Treadmill testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
    - [1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METs) of work, and 85% of maximum predicted heart rate.
    - [2] If pharmacological stress testing is submitted in lieu of exercise testing, then the cardiologist's assessment should discuss the rationale. Additionally, the cardiologist's assessment should provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.
    - [3] If medical conditions exist that prevent the mariner from exercising, these conditions may be disqualifying in their own right and will require further evaluation.
  - (d) Post-intervention evaluation for cardiac arrhythmia should include a graded exercise stress test with perfusion scanning as clinically indicated and 24-hour Holter monitor. Treadmill testing is preferably performed by standard Bruce protocol to at least 7.5 minutes, 8 METs and 85% maximum predicted heart rate.

- (e) Some arrhythmia conditions may require submission of electrophysiology (EP) studies.
  - (f) Applicants with conditions requiring placement of a pacemaker should also submit an evaluation of pacemaker function to include full description of device type and documentation of underlying rate and rhythm with the pacer disabled or at its lowest setting, programmed pacemaker parameters, surveillance record, and elective replacement indicator/end of life (ERI/EOL).
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if the evaluation finds that the applicant meets all of the following:
      - (a) Favorable recommendation from the treating provider;
      - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
      - (c) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse cardiac event;
      - (d) The condition is not being treated with controlled substances or impairing medications; and

Cardiac Arrhythmias

- (e) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
  - (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
    - (c) The applicant has signs or symptoms of syncope, heart failure, or other active cardiac symptoms;
    - (d) The applicant's left ventricular ejection fraction is less than 40%;
    - (e) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (f) The applicant's condition is treated with controlled substances or impairing medications;
    - (g) The applicant has undergone placement, or been advised to undergo placement of a pacemaker, ICD; or other cardiac implantable device; or
    - (h) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse, or sudden death.
  - (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, CG-719K.

d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how their condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing conditions;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with reversible cardiac ischemia, syncope; heart failure, angina or other active cardiac symptoms may be found unqualified;
- (2) Mariner applicants with evidence of symptomatic or malignant arrhythmias may be found unqualified;
- (3) Mariners with conditions requiring treatment with an implantable cardioverter defibrillator (ICD) may be found unqualified. Conditions requiring treatment with an ICD are generally considered unsuitable for a medical waiver. See [Paragraph G](#) of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration, for further guidance on waiver criteria for applicants with an ICD;
- (4) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
- (5) Mariner applicants with other findings that indicate a significant risk of an adverse cardiac event, syncope, collapse, or sudden death may be found unqualified;
- (6) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified;
- (7) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review; and
- (8) Mariners with pacemakers near end of life functioning may be subject to temporary disqualification or further limitations on their medical certificate, to be determined on a case-by-case basis.



**D. Valvular Disease.****1. Guidance to Mariner Applicants.**

- a. In some cases, valvular disease (heart valve disorders) may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
- b. Valvular disorders that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with valvular disease should:
  - (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety-sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist or cardiothoracic surgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of ischemia with exercise, or other impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) Examples of recommended evaluation data for valvular disease include, but are not limited to:
  - (a) Echocardiogram with Doppler flow study; and
  - (b) Treadmill testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
    - [1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METS) of work, and 85% of maximum predicted heart rate.
    - [2] If pharmacological stress testing is submitted in lieu of exercise testing, then the cardiologist's assessment should discuss the rationale. Additionally, the cardiologist's assessment should provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.
    - [3] If medical conditions exist that prevent the mariner from exercising, these conditions may be disqualifying in their own right and will require further evaluation.
  - (c) Post intervention evaluation for valvular disorders should include a graded exercise stress test with perfusion scanning as clinically indicated and an echocardiogram with Doppler flow study. Treadmill testing is preferably performed by standard Bruce protocol to at least 7.5 minutes, 8 METS and 85% maximum predicted heart rate.

3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
  - a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if the evaluation finds that the applicant meets all of the following:
      - (a) Favorable recommendation from the treating provider;
      - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
      - (c) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse cardiac event;
      - (d) The condition is not being treated with controlled substances or impairing medications; and
      - (e) Documentation that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
    - (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
- (a) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
  - (c) The applicant has signs or symptoms of syncope; heart failure, or other active cardiac symptoms;
  - (d) The applicant's left ventricular ejection fraction is less than 40%;
  - (e) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
  - (f) The applicant's condition is treated with controlled substances or impairing medications;
  - (g) The applicant has undergone placement, or been advised to undergo placement of a pacemaker, ICD; or other cardiac implantable device; or
  - (h) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse, or sudden death.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how their condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with reversible cardiac ischemia, syncope; heart failure, angina or other active cardiac symptoms may be found unqualified;
- (2) Mariner applicants with evidence of, or at significant risk for symptomatic or malignant arrhythmias may be found unqualified;

- (3) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
- (4) Mariner applicants with other findings that indicate a significant risk of an adverse cardiac event, syncope, collapse, or sudden death may be found unqualified;
- (5) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- (6) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

**E. Vascular Disease.**

## 1. Guidance to Mariner Applicants.

- a. In some cases, vascular disease may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential. Examples of vascular conditions that are subject to further review include, but are not limited to, peripheral vascular disease, deep vein thrombosis, carotid artery disease, aortic aneurysms, and symptomatic thrombophlebitis.
- b. Vascular disorders that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with vascular disease should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety-sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.



## 2. Guidance to Treating Providers.

### a. The Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse vascular events, adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist or vascular surgeon, for example.

### b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of ischemia with exercise, or other impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) Examples of recommended evaluation data for vascular disease include, but are not limited to:
  - (a) Echocardiogram with Doppler flow study;
  - (b) Vascular ultrasound studies;
  - (c) Arteriogram reports (if obtained); and
  - (d) Treadmill stress testing (graded exercise stress testing), with or without perfusion scanning, as indicated.

[1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METS) of work, and 85% of maximum predicted heart rate.

[2] If pharmacological stress testing is submitted in lieu of exercise testing, then the cardiologist's assessment should discuss the rationale. Additionally, the cardiologist's assessment should provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.

[3] If medical conditions exist that prevent the mariner from exercising, these conditions may be disqualifying in their own right and will require further evaluation.

3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
  - a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
      - (a) Favorable recommendation from the treating provider;
      - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
      - (c) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event;
      - (d) The condition is not being treated with controlled substances or impairing medications; and
      - (e) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
    - (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant is symptomatic or the assessment indicates significant risk for an adverse vascular event;
    - (c) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (d) The applicant's condition is treated with controlled substances or impairing medications; or
    - (e) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse or sudden death.
  - (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, CG-719K.

d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how their condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;

- (4) The need for access to medical care;
  - (5) The applicant's ability to perform routine and emergency duties;
  - (6) The risk for sudden incapacitation or debilitating complication;
  - (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
  - (8) The written assessment of the treating provider; and
  - (9) The results of objective testing and standard evaluation data.
- b. Medical Waivers.
- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
  - (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
  - (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
- c. Disqualification.
- (1) Mariner applicants with unstable or symptomatic vascular conditions may be found unqualified;
  - (2) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
  - (3) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## **F. Cerebrovascular Disease.**

### **1. Guidance to Mariner Applicants.**

- a. In some cases, cerebrovascular disease may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential. Examples of cerebrovascular conditions that are subject to further review include, but are not limited to, stroke and transient ischemic attacks.
- b. Cerebrovascular disease conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with cerebrovascular disease should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety-sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for cerebrovascular events, malignant arrhythmia, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support their assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a cardiologist, neurologist or vascular surgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) Examples of recommended evaluation data for cerebrovascular disease include, but are not limited to:
    - (a) Carotid ultrasound study; and
    - (b) Echocardiogram.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
  - a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
      - (a) Favorable recommendation from the treating provider;



- (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event;
  - (d) The condition is not being treated with controlled substances or impairing medications; and
  - (e) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (c) The applicant's condition is treated with controlled substances or impairing medications; or
    - (d) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse, or sudden death.
  - (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant,

as appropriate, on how their condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with symptomatic or unstable disease may be found unqualified;

- (2) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- (3) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

**G. Waivers for Cardiovascular Conditions That Require Special Consideration.****1. Cardiomyopathy.**

- a. Applicants with this condition may be denied medical certification unless they meet criteria for waiver consideration. The Coast Guard recognizes that there is significant clinical variation within the population of individuals with cardiomyopathy, and that not all individuals with cardiomyopathy carry the same risks of sudden incapacitation or sudden death. These criteria seek to discern those individuals with cardiomyopathy who have factors that mitigate their risk, and who have prognostic indicators suggestive of a low risk of sudden incapacitation or adverse cardiac event.
- b. Criteria for consideration for a waiver for cardiomyopathy include:
  - (1) A left ventricular ejection fraction of greater than or equal to 35% with a stable or improving trend;
  - (1) The absence of symptomatic or clinically significant heart failure in the past two years (must be New York Heart Association Class I);
  - (2) The absence of significant ischemia on cardiac stress testing;
  - (3) The applicant demonstrates an exercise capacity of greater than or equal to 8 metabolic equivalents (METs) on cardiac stress testing;
  - (4) The applicant has no history of syncope in the past 3 years;
  - (5) The applicant has no history of ventricular arrhythmia in the past 3 years; and
  - (6) The written opinion of the treating cardiologist or electrophysiologist supports low risk for sudden death, ventricular arrhythmia, adverse cardiac event and sudden incapacitation based upon objective testing and standard evaluation tools.
  - (7) Individuals with cardiomyopathy who have had an implantable cardioverter defibrillator (ICD) placed will be evaluated under the criteria for ICDs as discussed in [Paragraph G.2](#) of this Chapter, Anti-tachycardia Devices or Implantable Defibrillators (ICDs).
  - (8) Individuals with cardiomyopathy who have been advised to undergo placement of an ICD by their cardiologist, but have failed to comply, do not meet the low risk criteria for consideration for a medical waiver. These individuals may be denied medical certification.

## Waivers for Cardiovascular Conditions That Require Special Consideration

2. Anti-tachycardia Devices or Implantable Cardioverter Defibrillators (ICDs).
  - a. Mariner applicants with anti-tachycardia devices or implantable cardioverter defibrillators (ICDs) are generally not qualified for issuance of a medical certificate. For applicants with these devices, the underlying condition usually poses an inordinate risk of sudden incapacitation. In some very exceptional circumstances, when the underlying condition has improved and stabilized sufficiently, a waiver may be issued. The criteria listed below are to be used in assessing whether an applicant's underlying condition has improved sufficiently to warrant granting a waiver.
  - b. A mariner applicant who meets all of the below criteria will normally be considered for a waiver without operational limitations on their credential. Mariners who meet most, but not all of the criteria may be granted a waiver if the risk of sudden incapacitation is deemed sufficiently low. The risk presented by the mariner's position may be considered in determining whether to grant a waiver. Because of the wide range of operational conditions, it is impossible to set out in advance which positions may be suitable for a waiver.
  - c. In cases of applicants with multiple conditions, care must be taken to consider the impact the applicant's other medical conditions have on the suitability for a waiver for ICDs or anti-tachycardia devices.
  - d. Criteria for consideration for a waiver for an ICD include:
    - (1) The applicant does not have a diagnosis of a cardiac channelopathy affecting the electrical conduction of the heart (to include Brugada syndrome, Long QT syndrome, etc.);
    - (2) The applicant does not have a prior history of ventricular fibrillation or episodes of sustained ventricular tachycardia within the last 3 years;
    - (3) The ICD or anti-tachycardia device was implanted more than 3 years ago;
    - (4) The ICD has not fired nor has the applicant required anti-tachycardia pacing therapy within the last 3 years;
    - (5) There are no additional risk factors for inappropriate shock such as uncontrolled atrial fibrillation;
    - (6) The applicant's left ventricular ejection fraction is greater than 35% with a steady or improving trend;
    - (7) There is no history of any symptomatic or clinically significant heart failure in the past 2 years;

Waivers for Cardiovascular Conditions That Require Special Consideration

- (8) There is no evidence of significant reversible ischemia on myocardial perfusion imaging exercise stress testing;
- (9) The applicant's exercise capacity on formal stress testing (using standard Bruce Protocol) is greater than or equal to 8 metabolic equivalents (METS);
- (10) The applicant's treating cardiologist or electrophysiologist provides a written assessment that supports a determination that the mariner applicant is at low risk for future arrhythmia, adverse cardiac event, or sudden incapacitation based upon objective testing and standard evaluation tools; and
- (11) The applicant does not have any other medical conditions which may, alone or in combination with an ICD or anti-tachycardia device, affect his or her fitness.

3. Heart Transplant.

- a. Applicants who have had a heart transplant may be denied medical certification unless they meet criteria for waiver consideration. These criteria seek to discern individuals who have undergone a heart transplant who have factors that mitigate their risk, and who have prognostic indicators suggestive of a low risk of sudden incapacitation or adverse cardiac event.
- b. Criteria for consideration for a waiver for heart transplant include:
  - (1) The heart transplant was performed more than 2 years ago.
  - (2) The applicant's left ventricular ejection fraction is greater than or equal to 35%, with a stable or improving trend;
  - (3) The applicant has not had symptomatic or clinically significant heart failure in the past 2 years (must be New York Heart Association Class I);
  - (4) The applicant has no signs, symptoms or laboratory findings that indicate rejection, allograft vasculopathy, or significant transplant coronary artery disease;
  - (5) The applicant demonstrates an exercise capacity of greater than or equal to 8 metabolic equivalents (METs) on cardiac stress testing;
  - (6) The applicant has no history of ventricular arrhythmia in the past 3 years; and

Waivers for Cardiovascular Conditions That Require Special Consideration

- (7) The written opinion of the treating cardiologist or transplant surgeon supports low risk for rejection, sudden death, arrhythmia, adverse cardiac event, or sudden incapacitation, based upon objective testing and standard evaluation tools.

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## **CHAPTER 13. EAR, NOSE, AND THROAT CONDITIONS**

### **A. Conditions of Concern.**

Ear, nose and throat conditions that impair the applicant's ability to meet the hearing standards, impair balance, or cause disequilibrium are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, labyrinthitis, mastoiditis, acoustic neuroma, and conditions resulting in the use of controlled substances or impairing medications.

### **B. Guidance to Mariner Applicants.**

1. In some cases, ear, nose and throat conditions may be deemed too high-risk for medical certification. This would include conditions that impair hearing or balance, cause disequilibrium, or impair the ability to detect, discern and respond to auditory cues or alarms as necessary for the safety of ship, crew, passengers and the environment. This also includes conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Ear, nose and throat conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with ear, nose, and throat conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and
- (2) **Recommended Evaluation Data**.

### **C. Guidance to Treating Providers.**

#### **1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support the assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an otolaryngologist, for example.

#### **2. Recommended Evaluation Data.**

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Documentation supports that the applicant meets the merchant mariner hearing standards, as specified in 46 CFR 10.306;
  - (2) Favorable recommendation from the treating provider;
  - (3) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;

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- (4) The condition is not being treated with controlled substances or impairing medications;
    - (5) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
    - (6) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) The applicant does not meet the merchant mariner hearing standards as specified in 46 CFR 10.306;
    - (2) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (3) The applicant has evidence of instability, impairing symptoms, or impairing complications;
    - (4) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (5) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication; or
    - (6) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

**E. Medical Certification Evaluation.**

Detailed information on the merchant mariner hearing standards and policy are contained in 46 CFR 10.306 and in Chapter 5 of this Manual.

1. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition, to include the degree of auditory impairment, disequilibrium and /or impaired balance;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

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- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
- 3. Disqualification.
  - a. Mariner applicants who do not meet the hearing standards may be found unqualified;
  - b. Mariner applicants with impaired balance, or impaired ability to detect, discern and respond to auditory cues or alarms as necessary for the safety of ship, crew, passengers and the environment may be found unqualified;
  - c. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
  - d. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
  - e. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
  - f. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 14. ENDOCRINE CONDITIONS

### A. Conditions of Concern.

Endocrine disorders that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review and may be determined disqualifying. Examples of conditions that are subject to further review include, but are not limited to, diabetes, thyroid disease, hypoglycemia, Cushing's disease, and Addison's disease, as well as conditions resulting in the use of controlled substances or impairing medications.

### B. Guidance to Mariner Applicants.

1. In some cases, endocrine disorders may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Endocrine conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with endocrine conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

(1) The **Treating Provider's Assessment**; and

(2) **Recommended Evaluation Data**.

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an endocrinologist or ophthalmologist, for example.

2. Recommended Evaluation Data:

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.



- b. The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- e. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- f. Examples of recommended evaluation data for endocrinology disorders include, but are not limited to, glycated hemoglobin (HbA1c) levels.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if the evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;

- (3) The condition is not being treated with controlled substances or impairing medications;
    - (4) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
    - (6) For applicants with diabetes whose treating provider documents:
      - (a) Not treated with insulin;
      - (b) Good treatment compliance;
      - (c) HbA1c level of less than 8%;
      - (d) Absence of diabetic complications; and
      - (e) No episodes of symptomatic hypoglycemia.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.

- (6) For applicants with diabetes who are treated with insulin, have a HbA1c level greater than or equal to 8%, have diabetic complications, or have had episodes of symptomatic hypoglycemia.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how their condition may affect, or be affected by service at sea.

## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.

- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
  - c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
  - d. Waivers for diabetes mellitus are discussed in [Paragraph F](#) of this Chapter, Waivers for Endocrine Conditions that Require Special Consideration.
3. Disqualification.
- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
  - b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
  - c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
  - d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.
  - e. Mariner applicants with diabetes who do not meet the criteria for issuance of a medical waiver may be found unqualified. See [Paragraph F](#) of this Chapter, Waivers for Endocrine Conditions that Require Special Consideration.

**F. Waivers for Endocrine Conditions That Require Special Consideration.**

1. Diabetes mellitus treated with insulin or with history of diabetic ketoacidosis.
- a. Applicants with this condition may be denied medical certification unless they demonstrate that the condition is sufficiently controlled to warrant consideration for a medical waiver, according to the following:
    - (1) Applicants seeking medical certification should submit an evaluation from the treating physician documenting interval history and a current HbA1c level that is no more than 90 days old.
    - (2) The evaluation from the treating physician should discuss the applicant's treatment compliance, blood glucose log findings, whether the applicant has had any hypoglycemic episodes, and whether the applicant has any diabetic complications. The discussion should also provide explanation of any HbA1c levels of 8% or above, if present.

- b. If the evaluation of the treating physician supports good compliance with the treatment regimen, the absence of recent, severe hypoglycemic episodes<sup>1</sup>, and the absence of impairing diabetic complications, applicants with a consistent pattern of HbA1c levels of less than 8% may be considered for a waiver.
- c. Applicants whose HbA1c levels are greater than or equal to 8% but less than 10% may be considered for a medical waiver with a time-limited medical certificate, if the evaluation of the treating physician and objective documentation support extenuating circumstances that indicate low risk for sudden incapacitation or debilitating complication.
- d. Applicants with HbA1c levels greater than 10% are generally not considered for a waiver unless extenuating circumstances confirm temporary irregularity due to acute illness, medication interaction, or other short-term occurrence that is not likely to recur. If issued, the medical certificate would be time-limited.

## 2. Diabetes Treated with Oral Medication.

- a. Applicants with this condition may be denied medical certification unless they demonstrate that their condition is sufficiently controlled according to the following:
  - (1) Applicants seeking medical certification should submit an evaluation from the treating physician documenting interval history and a current HbA1c level that is no more than 90 days old.
  - (2) The evaluation from the treating physician should discuss the applicant's treatment compliance, whether the applicant has had any hypoglycemic episodes, and whether the applicant has any diabetic complications. The discussion should also provide explanation of any HbA1c levels of 8% or greater, if present.
- b. If the evaluation of the treating physician supports good compliance with the treatment regimen, the absence of recent, severe hypoglycemic episodes, and the absence of impairing diabetic complications, applicants with a consistent pattern of HbA1c levels of less than 8% may be considered for a full-term medical certificate.
- c. Applicants whose HbA1c levels are greater than or equal to 8%, but less than 10%, may be considered for a medical waiver if the evaluation of the treating physician and objective documentation support extenuating circumstances that indicate low risk for sudden incapacitation or debilitating complication.
- d. Applicants with HbA1c levels of greater than 10% are generally not considered for a waiver unless extenuating circumstances confirm temporary irregularity due to acute illness, medication interaction, or other short-term occurrence that is not likely to recur. If issued, the medical certificate would be time-limited.

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<sup>1</sup>A recent, severe hypoglycemic episode, as defined here, is as an episode of hypoglycemia within the prior 12 months, resulting in seizure, loss of consciousness, or altered consciousness, or requiring assistance from another person for treatment.

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## CHAPTER 15. GASTROINTESTINAL CONDITIONS

### A. Conditions of Concern.

Gastrointestinal conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples of conditions that are subject to further review include, but are not limited to, peptic ulcer disease, symptomatic or clinically significant hernia, inflammatory bowel disease, gastrointestinal bleeding, gastrointestinal malignancies, hepatitis, cirrhosis, esophageal varices, ascites, and liver transplant, as well as conditions resulting in the use of controlled substances or impairing medications.

### B. Guidance to Mariner Applicants.

1. In some cases, gastrointestinal conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Gastrointestinal conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with gastrointestinal conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

(1) The **Treating Provider's Assessment**; and

(2) **Recommended Evaluation Data.**

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as hepatologist, for example.

2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.



- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

### **3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and

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- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## **CHAPTER 16. GENITOURINARY CONDITIONS**

### **A. Conditions of Concern.**

1. Genitourinary conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, kidney (renal) failure, and conditions resulting in the use of controlled substances or impairing medications.
2. Kidney (renal) failure requiring renal replacement therapy (dialysis) is disqualifying and generally will not be approved for issuance of a waiver.

### **B. Guidance to Mariner Applicants.**

1. In some cases, genitourinary conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Genitourinary conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with genitourinary conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and
- (2) **Recommended Evaluation Data**.

### **C. Guidance to Treating Providers.**

#### **1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a nephrologist, for example.

#### **2. Recommended Evaluation Data.**

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

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- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication;
    - (5) The applicant's condition is treated with controlled substances or impairing medications; or
    - (6) The applicant requires dialysis.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.



## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

### **3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;

- c. Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified;
- d. Mariner applicants who require dialysis treatment may be found unqualified; and
- e. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## **CHAPTER 17. INFECTIOUS CONDITIONS**

### **A. Conditions of Concern.**

Infectious conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, hepatitis, tuberculosis, sexually transmitted diseases, gastrointestinal infections, and human immunodeficiency virus infections, as well as conditions resulting in the use of controlled substances or impairing medications.

### **B. Guidance to Mariner Applicants.**

1. In some cases, infectious conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Infectious conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with infectious conditions should:
  - a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

(1) The **Treating Provider's Assessment**; and

(2) **Recommended Evaluation Data**.

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an infectious disease specialist, for example.

2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

3. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

4. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 5. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication;
    - (5) The applicant's condition is treated with controlled substances or impairing medications; or
    - (6) The applicant requires dialysis.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 6. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

## **E. Medical Certification Evaluation.**

### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### **2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

### **3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and

- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.



## **CHAPTER 18. MUSCULOSKELETAL CONDITIONS**

### **A. Conditions of Concern.**

1. Musculoskeletal conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, chronic musculoskeletal pain, paraplegia, amputation, and restricted motions of limb, as well as conditions resulting in the use of controlled substances or impairing medications.

### **B. Guidance to Mariner Applicants.**

1. In some cases, musculoskeletal conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Musculoskeletal conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with musculoskeletal conditions should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and
- (2) **Recommended Evaluation Data**.

### **C. Guidance to Treating Providers.**

#### **1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an orthopedic surgeon, physical medicine specialist, or physical therapist, for example.

#### **2. Recommended Evaluation Data.**

- a. Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.
- e. Examples of recommended evaluation data for musculoskeletal disorders include, but are not limited to:
  - (1) Demonstration of physical abilities;
  - (2) Practical evaluation of physical ability—If requested by the Coast Guard, for applicants with severely restricted motion of limb, loss of limb, or loss of use of limb due to conditions such as amputation or paralysis, for example; and
  - (3) Neuropsychological/neurocognitive testing—If requested by the Coast Guard, for conditions resulting in the use of controlled substances or impairing medications.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

3. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

4. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

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- (1) Favorable recommendation from the treating provider;
    - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
    - (3) The condition is not being treated with controlled substances or impairing medications;
    - (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
5. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

6. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

7. Referral.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should refer the mariner applicant, as appropriate, for follow-up of any abnormalities discovered during the examination.

**E. Medical Certification Evaluation.**

1. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.

- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
- 3. Disqualification.
  - a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
  - b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
  - c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
  - d. Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 19. NEUROLOGIC CONDITIONS

### A. Introduction.

1. Neurologic Conditions of Concern.
  - a. Neurologic conditions associated with impaired function, cognitive ability, judgment, or reaction time; or associated with disturbance of consciousness or altered sensorium are subject to further review and may be determined disqualifying. Examples include, but are not limited to, stroke, transient ischemic attack, tumor, dementia, disorders of disequilibrium, migraine headaches, migraine visual aura, and transient loss of control of nervous system function, as well as conditions resulting in the use of controlled substances or impairing medications.
  - b. The conditions of epilepsy, seizures, and convulsive disorders are disqualifying and generally will not be approved for issuance of a waiver. *See Paragraph G* of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
  - c. Sleep disorders, including but not limited to obstructive sleep apnea, central hypersomnias, and insomnia, are subject to further review and may be determined disqualifying. The conditions of narcolepsy and idiopathic hypersomnia are disqualifying and generally will not be approved for issuance of a waiver. *See Paragraph G* of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
  - d. General classes of neurologic conditions that are subject to further review include, but are not limited to:
    - (1) Chronic, progressive conditions;
    - (2) Non-progressive conditions;
    - (3) Intracranial surgery, brain injury, brain tumors, or central nervous system infection;
    - (4) Seizure disorders; and
    - (5) Sleep disorders.
2. General Guidance to Mariner Applicants.
  - a. Some neurologic conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at

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high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.

- b. Neurologic conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require a waiver or limitation.
  - c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
  - d. Mariner applicants with neurologic conditions should:
    - (1) Discuss the following with their treating provider and with the provider performing the medical certificate examination:
      - (a) Their medical condition and the limitations of medical care aboard the vessel;
      - (b) The safety sensitive nature of their merchant mariner credential;
      - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel; and
      - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
    - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
      - (a) The **Treating Provider's Assessment**; and
      - (b) **Recommended Evaluation Data**.
3. Guidance to the Treating Providers.
- a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);



- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment compliance and efficacy;
- (5) An assessment of the applicant's risk for future adverse neurologic events, syncope, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of any objective testing and standard evaluation tools that were performed to aid in their assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a neurologist, sleep specialist or neurosurgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing results and supporting documentation are requested to better assess the severity of the condition, the presence of adequate functional capacity; and the presence or absence of impairment. This information assists the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- (2) The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If objective testing was performed within 5 years of the current medical certificate application, and the treating specialist finds that there are no indications for obtaining further study, then they should provide discussion and documentation to that effect in their assessment, along with the results of previously performed testing.

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- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) Examples of recommended evaluation data for neurologic conditions include, but are not limited to:
  - (a) Electroencephalogram;
  - (b) Polysomnogram;
  - (c) Positive airway pressure therapy logs; and
  - (d) Neuropsychological/neurocognitive testing.

**B. Chronic, Progressive Conditions.**

1. Guidance to Mariner Applicants.
  - a. In some cases, chronic, progressive neurologic conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential. Examples include, but are not limited to multiple sclerosis, dementia (including Alzheimer's disease), and Parkinson's disease.
  - b. Chronic, progressive conditions that are determined to pose a low risk of sudden incapacitation, or debilitating complication and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
  - c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
  - d. Mariner applicants with chronic, progressive conditions should:
    - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
      - (a) Their medical condition and the limitations of medical care aboard the vessel;
      - (b) The safety sensitive nature of their merchant mariner credential;
      - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
      - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
    - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
      - (a) The **Treating Provider's Assessment**; and
      - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment compliance and efficacy;
- (5) An assessment of the applicant's risk for future adverse neurologic events, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support their assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a neurologist or neurosurgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.
  - (4) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (5) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (6) Examples of recommended evaluation data for chronic, progressive neurologic conditions include, but are not limited to neuropsychological/neurocognitive testing.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

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- (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition is not being treated with controlled substances, or impairing medications;
  - (d) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse neurologic event;
  - (e) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
  - (f) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant has required emergency treatment or hospitalization in the past 6 years;
    - (c) The applicant's condition is being treated with controlled substances or impairing medications;
    - (d) The applicant's condition is symptomatic, unstable, or suggestive of high risk for syncope, collapse, exacerbation, or other adverse neurologic event;

- (e) The applicant has significant risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; or
  - (f) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants whose conditions are unstable or at risk for rapid deterioration may be found unqualified;
- (2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
- (3) Mariner applicants with impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (4) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
- (5) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified; and
- (6) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified.



### C. Non-progressive Conditions.

#### 1. Guidance to Mariner Applicants.

- a. In some cases, non-progressive neurologic conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing conditions, as well as conditions that put the individual at high risk of becoming impaired, distracted, incapacitated, or otherwise unsafe to operate under the authority of a credential. Examples of conditions that are subject to further review include, but are not limited to, chronic or recurrent headache disorders, syncope that occurred within the past 5 years, vertigo, and conditions resulting in the use of controlled substances or impairing medications.
- b. Non-progressive conditions that are determined to pose a low risk of sudden incapacitation or debilitating complication and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, whether the condition results in the use of controlled substances or impairing medications, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with non- progressive neurologic conditions should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and

**(b) Recommended Evaluation Data.**

**2. Guidance to Treating Providers.**

**a. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse neurologic events, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a neurologist or neurosurgeon, for example.

**b. Recommended Evaluation Data.**

- (1) Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for non-progressive neurologic conditions include, but are not limited to neuropsychological/ neurocognitive testing.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

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- (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition is not being treated with controlled substances, or impairing medications;
  - (d) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse neurologic event;
  - (e) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
  - (f) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant has required emergency treatment or hospitalization in the past 6 years;
    - (c) The applicant's condition is being treated with controlled substances or impairing medications;
    - (d) The applicant's condition is symptomatic, unstable, or suggestive of high risk for syncope, collapse, exacerbation, or other adverse neurologic event;

- (e) The applicant has significant risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; or
  - (f) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing conditions;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
- (2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
- (3) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
- (4) Mariner applicants with impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (5) Mariner applicants who do not have the functional capacity and/or physical ability to perform routine and/or emergency duties may be found unqualified; and
- (6) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## Intracranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System Infection

**D. Intracranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System Infection.**

## 1. Guidance to Mariner Applicants.

- a. In some cases, conditions involving intracranial surgery, brain injury, brain tumors, or central nervous system (CNS) infection may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
- b. Intracranial surgery, brain injury, brain tumors, or CNS infections that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with a history of intracranial surgery, brain injury, brain tumors, or CNS infection should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse neurologic events, syncope, impairment, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a neurologist or neurosurgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.



## Intracranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System Infection

- (2) The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) Examples of recommended evaluation data for applicants with a history of intracranial surgery, brain injury, brain tumors, or CNS infection include, but are not limited to, neuropsychological/neurocognitive testing.
  - (6) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
  - a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

- (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition is not being treated with controlled substances, or impairing medications;
  - (d) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse neurologic event;
  - (e) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
  - (f) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
- (a) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (b) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (c) The applicant's condition is being treated with controlled substances or impairing medications;
  - (d) The applicant's condition is symptomatic, unstable, or suggestive of high risk for syncope, collapse, exacerbation, or other adverse neurologic event;

## Intracranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System Infection

- (e) The applicant has significant risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; or
  - (f) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing conditions;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
- (2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
- (3) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
- (4) Mariner applicants with impaired cognitive ability, judgment or reaction time may be found unqualified;
- (5) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- (6) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

**E. Seizure or Convulsive Disorders.**

**4. Guidance to Mariner Applicants.**

- a. The conditions of epilepsy, seizures, and convulsive disorders are disqualifying and generally will not be approved for issuance of a waiver. *See [Paragraph G](#)* of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration. Seizure conditions and convulsive disorders are generally deemed too high-risk for medical certification because they pose significant risk of the applicant becoming impaired, distracted, incapacitated, or otherwise unsafe to operate under the authority of a credential. Examples include, but are not limited to, any history of unprovoked seizures, epilepsy, convulsions, provoked seizures, and single-seizure events.
- b. Childhood febrile seizures that occurred before the age of 5, and did not persist or recur after age 5, are not subject to further review.
- c. Seizure conditions that are determined to pose a low risk of sudden incapacitation or debilitating complication and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver.
- d. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- e. Mariner applicants with a history of seizure(s) or convulsive disorders should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.

- (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (a) The **Treating Provider's Assessment**; and

- (b) **Recommended Evaluation Data.**

5. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, approximate date of last seizure, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's risk for future adverse neurologic events, syncope, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a neurologist or neurosurgeon, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) Examples of recommended evaluation data for seizure or convulsive disorder include, but are not limited to, electroencephalogram (EEG) report and/or neuroimaging studies, in certain cases.
- (6) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.

6. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.

a. Documentation.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (a) An evaluation from the treating provider and/or specialist; and

(b) Any appropriate recommended evaluation data.

b. Certification Recommendation: Certification Recommended.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition is not being treated with controlled substances, or impairing medications;
  - (d) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse neurologic event;
  - (e) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
  - (f) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties; and
  - (g) The applicant's condition meets the criteria for consideration for a medical waiver for seizures or convulsive disorder as provided in [Paragraph G.1](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

c. Certification Recommendation: Certification Not Recommended or Needs Further Review.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:



- (a) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (b) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (c) The applicant's condition is being treated with controlled substances or impairing medications;
  - (d) The applicant's condition is symptomatic, unstable, or suggestive of high risk for syncope, collapse, exacerbation, or other adverse neurologic event;
  - (e) The applicant has significant risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
  - (f) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
  - (g) The applicant's condition does not meet the criteria for consideration for a medical waiver for seizures or convulsive disorder as provided in [Paragraph G.1](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

## 7. Medical Certification Evaluation.

### a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;

- (2) The presence of symptoms or impairing conditions;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The criteria for consideration for a medical waiver for seizures or convulsive disorder are contained in [Paragraph G.1](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
- (3) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (4) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants whose condition does not meet the criteria for issuance of a medical waiver may be found unqualified;
- (2) Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
- (3) Mariner applicants whose conditions pose a risk of recurrent seizure or sudden incapacitation may be found unqualified;
- (4) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;

- (5) Mariner applicants who do not have the functional capacity and/or physical ability to perform routine and/or emergency duties may be found unqualified; and
- (6) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## **F. Sleep Disorders.**

### **8. Guidance to Mariner Applicants.**

- a. In some cases, sleep disorders may be deemed too high-risk for medical certification. This would include conditions such as narcolepsy and idiopathic hypersomnia, which are disqualifying and generally will not be approved for issuance of a waiver. Examples of sleep disorders that are subject to further review include, but are not limited to, obstructive sleep apnea (OSA), central hypersomnias, insomnia, narcolepsy, and idiopathic hypersomnia.
- b. Sleep disorders that are determined to pose a low risk of impairment, sudden incapacitation, or debilitating complication and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or impairment, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with sleep disorders should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their medical condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data.**

9. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- (1) Pertinent medical examination and physical evaluation data;
- (2) The history of the condition (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's prognosis and risk for impairment or future adverse neurologic events;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support their assessment; and
- (9) The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a sleep specialist or neurologist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairment. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

Sleep Disorders

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- (6) Examples of recommended evaluation data for sleep disorder conditions may include, but are not limited to:
  - (a) Diagnostic polysomnogram with titration study report; and
  - (b) Positive airway pressure therapy logs.

10. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.

a. Documentation.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (a) An evaluation from the treating provider and/or specialist; and
  - (b) Any appropriate recommended evaluation data.

b. Certification Recommendation: Certification Recommended.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
  - (c) The condition is not being treated with controlled substances, or impairing medications;
  - (d) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse neurologic event;
  - (e) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and,
  - (f) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - (g) Additionally, for applicants with OSA, the applicant's condition meets the criteria for issuance of a medical waiver for OSA as provided in [Paragraph G.2](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

c. Certification Recommendation: Certification Not Recommended or Needs Further Review.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:

Sleep Disorders

- (a) The applicant has a history of narcolepsy, idiopathic hypersomnia, central hypersomnia, or other condition that poses a significant risk of sudden incapacitation;
  - (b) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (c) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (d) The applicant's condition is being treated with controlled substances or impairing medications;
  - (e) The applicant's condition is symptomatic, unstable, or suggestive of high risk for syncope, collapse, exacerbation, or other adverse neurologic event;
  - (f) The applicant has significant risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
  - (g) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
  - (h) For applicants with OSA, the condition does not meet the criteria for issuance of a medical waiver, as outlined in [Paragraph G.2](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.



11. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing conditions;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) The applicant's ability to perform routine and emergency duties;
- (6) The risk for sudden incapacitation or debilitating complication;
- (7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (8) The written assessment of the treating provider; and
- (9) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver;
- (3) Obstructive Sleep Apnea (OSA). The criteria for issuance of a medical waiver for OSA are provided in [Paragraph G.2](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration; and
- (4) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants whose conditions are inadequately controlled, unstable, or pose a risk for impairment may be found unqualified;

Sleep Disorders

- (2) Mariner applicants with narcolepsy, idiopathic hypersomnia, central hypersomnia, or other conditions that pose a significant risk of sudden incapacitation may be found unqualified;
- (3) Mariner applicants with other findings that indicate a significant risk of excessive daytime/worktime sleepiness, impairment, or other adverse neurologic event may be found unqualified;
- (4) Mariner applicants with OSA who do not meet the criteria for issuance of a medical waiver, as outlined in [Paragraph G.2](#) of this Chapter, Waivers for Neurologic Conditions That Require Special Consideration, may be found unqualified;
- (5) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- (6) Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## Waivers for Neurologic Conditions that Require Special Consideration

**G. Waivers for Neurologic Conditions That Require Special Consideration.****1. Seizure Disorders.**

Under the regulations, seizures and convulsive disorders may be disqualifying because they pose significant risk of sudden incapacitation (*See* 46 CFR 10.304(a)). While seizures or convulsive disorders are generally disqualifying, the Coast Guard may consider granting waivers under 46 CFR 10.303 to mariner applicants with seizure disorders under the conditions delineated below.

**a. Unprovoked Seizures.**

Unprovoked seizures are those seizures not precipitated by an identifiable trigger. Mariners with a history of unprovoked seizure(s) may be considered for a waiver.

- (1) Mariners with a history of epilepsy or seizure disorder may be considered for a waiver if the mariner has been seizure-free for a minimum of 8 years (on or off anti-epileptic drugs (AEDs)); and
  - (a) If all AEDs have been stopped, the mariner must have been seizure-free for a minimum of 8 years since cessation of medication; or
  - (b) If still using AEDs, the mariner must have been on a stable medication regimen for a minimum of 2 years.
- (2) Mariners with a single unprovoked seizure may be considered for a waiver if the mariner has been seizure-free for a minimum of 4 years, off AEDs; and
  - (a) If all medication has been stopped, the mariner must have been seizure-free for a minimum of 4 years since cessation of medication; or
  - (b) If still requiring treatment with AEDs, the mariner's condition will be considered under the criteria for waivers for mariners with a history of epilepsy, as discussed in [Paragraph G.1.a.\(1\)](#), above: The mariner may be considered for a waiver after being seizure-free for a minimum of 8 years, and on a stable medication regimen for a minimum of 2 years.

**b. Provoked Seizures.**

Provoked seizures are those seizures precipitated by an identifiable trigger. Mariner applicants evaluated under the criteria for provoked seizures will be divided into those with low risk of recurrence and those with a higher risk of recurrence (e.g., those with seizures precipitated by a structural brain lesion).

## Waivers for Neurologic Conditions that Require Special Considerations

- (1) The criteria discussed under this section **do not apply** to the evaluation of mariner applicants with epileptic seizures or seizures provoked by triggers such as lack of sleep, stress, or photo-stimulation. Applicants with seizures of this nature will be evaluated under the criteria for unprovoked seizures, as discussed in [Paragraph G.1.a.](#) of this Chapter, Unprovoked Seizures.
- (2) If a mariner is determined to be low-risk for seizure recurrence, does not require AEDs, and the precipitating factor is unlikely to recur, a waiver may be considered when the mariner has been seizure-free and off medication for a minimum of 1 year.
- (3) Generally, mariners with one of the following precipitating factors will be considered low-risk for recurrence:
  - (a) Lidocaine-induced seizure during a dental appointment;
  - (b) Concussive seizure with loss of consciousness less than 30 minutes and no penetrating injury;
  - (c) Seizure due to syncope not likely to recur;
  - (d) Seizure from an acute metabolic derangement not likely to recur;
  - (e) Severe dehydration;
  - (f) Hyperthermia; or
  - (g) Drug reaction or withdrawal.
- (4) If a mariner is determined to be at higher risk for seizure recurrence, a waiver may be considered if the mariner has been seizure-free for a minimum of 8 years (on or off AEDs); and
  - (a) If all medication has been stopped, the mariner must have been seizure-free for a minimum of 8 years since cessation of medication; or
  - (b) If still using AEDs, the mariner must have been on a stable medication regimen for a minimum of 2 years.
- (5) Generally, mariners with a history of provoked seizures caused by a structural brain lesion (e.g., tumor, trauma, or infection) characterized by one of the following precipitating factors will be considered at higher risk for recurrence:
  - (a) Head injury with loss of consciousness or amnesia equal to or greater than 30 minutes;

## Waivers for Neurologic Conditions that Require Special Consideration

- (b) Penetrating head injury;
  - (c) Intracerebral hemorrhage of any etiology, including stroke and trauma;
  - (d) Brain infection, such as encephalitis, meningitis, abscess, or cysticercosis;
  - (e) Stroke;
  - (f) Intracranial hemorrhage;
  - (g) Post-operative brain surgery with significant brain hemorrhage; and
  - (h) Brain tumor.
- (6) Under exceptional circumstances, in which a mariner has had provoked seizures due to a benign brain lesion that has subsequently been removed, such individuals may be considered for a waiver once they have been seizure-free for a minimum of 4 years, provided that objective evidence supports extremely low risk of seizure recurrence.

## 2. Obstructive Sleep Apnea (OSA).

- a. Applicants should submit an evaluation from the treating sleep specialist that documents the history of the condition and the results of any pertinent diagnostic studies obtained; the recommended course of treatment; treatment efficacy, treatment compliance, and an assessment for symptoms of daytime sleepiness.
- b. The submission should include the treating provider's assessment of the diagnostic polysomnogram report, the titration study report, and/or other study reports as applicable, unless previously submitted to the Coast Guard; and other submission requirements as follows:
  - (1) If the treating physician has recommended treatment with a positive airway pressure device [such as continuous, or bi-level positive airway pressure (CPAP or BiPAP)], the applicant should submit an evaluation by the treating physician of compliance in using the device, covering the preceding 3-month period.
  - (2) For purposes of obtaining or maintaining a medical certificate, minimum CPAP/BiPAP compliance is defined as proper use of the CPAP/BiPAP device for at least 4 hours per night (or per major sleep period) on at least 70% of all nights (or major sleep periods).

Waivers for Neurologic Conditions that Require Special Considerations

- (3) If the condition has been surgically treated, the applicant should submit an evaluation by the treating physician of the post-operative polysomnogram results to document cure, unless previously submitted to the Coast Guard.
- (4) If the condition is being treated with an oral appliance, the applicant should submit documentation from the treating provider that specifies the type of appliance prescribed and provides objective documentation of treatment efficacy, such as a polysomnogram performed while utilizing the appliance, unless previously submitted to the Coast Guard.
- (5) Applicants who were diagnosed with OSA within 30 days of submitting their medical certificate application, and who have not yet accumulated sufficient documentation of treatment efficacy or compliance, should submit the information that they have available and contact the NMC for further guidance regarding consideration for issuance of a time-limited medical certificate.

## **CHAPTER 20. OPHTHALMOLOGIC CONDITIONS**

### **A. Conditions of Concern.**

Ophthalmologic conditions that impair the applicant's ability to meet the vision/color vision standards are subject to further review, and may be determined disqualifying. Examples of conditions that are subject to further review include, but are not limited to retinopathy, monocular vision, glaucoma, macular degeneration, and conditions resulting in the use of controlled substances or impairing medications.

### **B. Guidance to Mariner Applicants.**

1. In some cases, ophthalmologic conditions may be deemed too high risk for medical certification. This would include conditions that impair visual acuity and/or color vision, or that impair the ability to detect, discern and respond to visual clues or alarms as necessary for the safety of ship, crew, passengers and the environment. This also includes conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Ophthalmologic conditions that are determined to pose a low risk of impairment and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the degree of impairment, the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with ophthalmologic conditions should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.

- b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and

- (2) **Recommended Evaluation Data.**

### **C. Guidance to Treating Providers.**

#### **1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;
  - b. The history of the condition (unless previously reported to the Coast Guard);
  - c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
  - d. The extent to which the applicant has, or is at significant risk for visual impairment;
  - e. The degree to which the applicant is able to detect and discern colors, navigational lights, buoys and other objects at a distance, and under conditions of low light or poor visibility;
  - f. Treatment compliance and efficacy;
  - g. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
  - h. Whether the applicant's condition is being treated with controlled substances or impairing medications;
  - i. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
  - j. Reports of objective testing and standard evaluation data used to support the assessment; and
  - k. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- l. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an ophthalmologist, for example.



2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- b. The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

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Ophthalmologic Conditions

- (1) Documentation supports that applicant meets the merchant mariner vision standards, as specified in 46 CFR 10.305;
    - (2) Applicant demonstrates satisfactory color vision when tested by any of the means specified in 46 CFR 10.305;
    - (3) Favorable recommendation from the treating provider;
    - (4) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
    - (5) The condition is not being treated with controlled substances or impairing medications;
    - (6) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (7) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) The applicant does not meet the merchant mariner vision standards as specified in 46 CFR 10.305;
    - (2) The applicant has monocular vision;
    - (3) The applicant does not demonstrate satisfactory color vision when tested by any of the means specified in the 46 CFR 10.305;
    - (4) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (5) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (6) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;

- (7) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
  - (8) The applicant's condition is treated with controlled substances or impairing medications.
- b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

#### **E. Medical Certification Evaluation.**

Detailed information on the merchant mariner vision standards and policy are contained in 46 CFR 10.305 and in Chapter 5 of this Manual.

##### **1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition, to include degree of visual impairment;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or the medical certificate, on a case-by-case basis.

3. Disqualification.

- a. Mariner applicants who do not meet the mariner vision and/or color vision standards may be found unqualified;
- b. Mariner applicants with conditions that impair their ability to detect, discern and respond to visual clues or alarms as necessary for the safety of ship, crew, passengers and the environment may be found unqualified;
- c. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- d. Mariner applicants with other findings that indicate a significant risk of debilitating complication or impairment may be found unqualified;
- e. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and emergency duties may be found unqualified; and
- f. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 21. ORGAN TRANSPLANT

### A. Conditions of Concern.

Organ transplant conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, organ transplants associated with complications such as organ failure or rejection, and conditions resulting in the use of controlled substances or impairing medications.

### B. Guidance to Mariner Applicants.

1. In some cases, transplant conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Transplant conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with a history of organ transplant should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (1) The **Treating Provider's Assessment**; and

**(2) Recommended Evaluation Data.**

**C. Guidance to Treating Providers.**

**1. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support the assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a transplant specialist, for example.

**2. Recommended Evaluation Data.**

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition.

Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.

- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

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- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.



## E. Medical Certification Evaluation.

### 1. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

### 2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. Waivers for **cardiac transplant** are addressed in Paragraph G.3 of Chapter 12 of this Manual.
- d. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

### 3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;

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- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and
- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

## CHAPTER 22. PREGNANCY

### A. Conditions of Concern.

Uncomplicated pregnancy is **not** disqualifying or subject to further review. Pregnancy with complications that pose a risk of sudden incapacitation or debilitating complication is subject to further review, and may be determined disqualifying.

### B. Guidance to Mariner Applicants.

1. In some cases, pregnancy conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Mariner applicants who are pregnant should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (1) The **Treating Provider's Assessment**; and
    - (2) **Recommended Evaluation Data**.

### C. Guidance to Treating Providers.

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;

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- b. The history of the condition;
  - c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization during the current pregnancy;
  - d. Treatment compliance and efficacy;
  - e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
  - f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
  - g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
  - h. Reports of objective testing and standard evaluation data used to support the assessment; and
  - i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
  - j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as an obstetrician, for example.
2. Recommended Evaluation Data.
- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
  - b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.

- e. Examples of recommended evaluation data for pregnancy include, but are not limited to an obstetrician's assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:

(1) An evaluation from the treating provider and/or specialist; and

(2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;
  - (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
  - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

Pregnancy

3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

**E. Medical Certification Evaluation.**

5. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;

- d. The need for access to medical care;
  - e. The applicant's ability to perform routine and emergency duties;
  - f. The risk for sudden incapacitation or debilitating complication;
  - g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
  - h. The written assessment of the treating provider; and
  - i. The results of objective testing and standard evaluation data.
6. Medical Waivers.
- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
  - b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
  - c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
7. Disqualification.
- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
  - b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
  - c. Mariner applicants with inadequate exercise and/or functional capacity that impairs their ability to perform routine and/or emergency duties may be found unqualified; and
  - d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.

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## **CHAPTER 23. PSYCHIATRIC OR MENTAL HEALTH CONDITIONS**

### **A. Introduction.**

1. Psychiatric Conditions of Concern.
  - a. Psychiatric or mental health conditions that pose a risk of sudden incapacitation, debilitating complication or other impairment are subject to further review, and may be determined disqualifying. Examples include, but are not limited to: mental health disorders requiring treatment with controlled substances or impairing medication; alcohol use disorder; substance use disorder; and conditions with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
  - b. Psychotic disorders are disqualifying and generally will not be approved for issuance of a waiver.
  - c. A current clinical diagnosis of alcohol or substance abuse/dependence, which is not in remission, is disqualifying and generally will not be approved for issuance of a waiver.
  - d. General classes of psychiatric or mental health conditions that are subject to further review are discussed in Paragraphs B through F of this Chapter. These conditions include, but are not limited to:
    - (1) Mood disorders;
    - (2) Anxiety disorders;
    - (3) Attention deficit/hyperactivity disorder (ADD/ADHD);
    - (4) Alcohol Use Disorder and Substance Use Disorder; and
    - (5) Schizophrenia/psychotic disorders.
2. General Guidance to Mariner Applicants.
  - a. In some cases, psychiatric or mental health conditions may be deemed too high risk for medical certification. This would include conditions treated with controlled substances or impairing medications, conditions associated with impairing signs and symptoms, as well as conditions with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
  - b. Psychiatric or mental health conditions that are determined to pose a low risk of sudden incapacitation or impairment may be considered for a waiver, or may not require any waiver or limitation.

Psychiatric or Mental Health Conditions

- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
  - d. Mariner applicants with psychiatric or mental health conditions should:
    - (1) Discuss the following with their treating provider and with the provider performing the medical certificate examination:
      - (a) Their mental health condition and the limitations of medical care aboard the vessel;
      - (b) The safety sensitive nature of their merchant mariner credential;
      - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel;
      - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
    - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
      - (a) The **Treating Provider's Assessment**; and
      - (b) **Recommended Evaluation Data**.
3. Guidance to the Treating Providers.
- a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

    - (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
    - (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
    - (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
    - (4) Treatment compliance and efficacy;

- (5) An assessment of the applicant's prognosis, and risk for impairment, decompensation, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of any objective testing and standard evaluation tools that were performed to aid in their assessment; and
- (9) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist or addiction specialist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation may be requested to better assess the severity of the condition, and the presence or absence of impairing symptoms or complications. This information assists the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or other impairment.
- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.

- (6) Examples of recommended evaluation data that may be requested for select psychiatric or mental health conditions include, but are not limited to:
  - (a) Comprehensive evaluation from a psychiatrist;
  - (b) Comprehensive evaluation from substance abuse professional; and
  - (c) Neuropsychological/neurocognitive testing.

**B. Mood Conditions.****1. Guidance to Mariner Applicants.**

- a. In some cases, mood disorders may be deemed too high-risk for medical certification. This would include mood disorders treated with controlled substances or impairing medications, conditions associated with impairing signs and symptoms, as well as conditions with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. Mood disorders that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with mood disorders should:
  - (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (a) Their mental health condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
- (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- (4) Treatment compliance and efficacy;
- (5) An assessment of the applicant's prognosis, and risk for impairment, decompensation, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with anti-psychotic medications, controlled substances or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support their assessment; and
- (9) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing symptoms or complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or other impairment.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
    - (a) Full mental health evaluation from the treating provider/treating mental health specialist; and
    - (b) Applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be asked to submit the results of neuropsychological/neurocognitive testing (*See* Chapter 7 of this Manual for guidance on medications subject to further review).
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.

- b. Certification Recommendation: Certification Recommended.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
    - (a) Favorable recommendation from the treating provider;
    - (b) The condition is asymptomatic and without recent need for major intervention, hospitalization, or surgery;
    - (c) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation or impairing complication;
    - (d) The condition is not being treated with anti-psychotic medications, controlled substances, or impairing medications;
    - (e) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
    - (f) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
    - (g) Documentation supports the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant has evidence of instability, or impairing symptoms and/or complications;
    - (c) The applicant has other symptoms or findings that suggest a significant risk of sudden incapacitation or debilitating complication;



- (d) The applicant has a history of, or is at risk for psychosis, suicidal ideation, or homicidal ideation;
  - (e) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
  - (g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; or
  - (h) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

#### 4. Medical Certification Evaluation.

##### a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms or impairing complications;
- (3) The stability of the condition;
- (4) Whether there is a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
- (5) The need for access to medical care;
- (6) The applicant's ability to perform routine and emergency duties;
- (7) The risk for sudden incapacitation or debilitating complication;

Mood Conditions

- (8) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (9) The written assessment of the treating provider; and
- (10) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with unstable conditions or impairing symptoms and/or complications may be found unqualified;
- (2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
- (3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
- (4) Mariner applicants with a risk of impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified (*See Chapter 7 of this Manual for guidance on medications that are subject to further review*); and
- (6) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified.

### C. Anxiety Conditions.

#### 1. Guidance to Mariner Applicants.

- a. In some cases, anxiety disorders may be deemed too high-risk for medical certification. This would include anxiety disorders that are treated with controlled substances or impairing medications, associated with impairing signs and symptoms, or associated with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. Anxiety disorders that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with anxiety disorders should:
  - (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (a) Their mental health condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
- (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's prognosis, and risk for impairment, decompensation, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with anti-psychotic medications, controlled substances, or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions and meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, and the presence or absence of impairing symptoms or complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or other impairment.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
    - (a) Full mental health evaluation from the treating provider/treating mental health specialist; and
    - (b) Applicants whose conditions are treated with controlled substances, impairing medications or anti-psychotic medications may be asked to submit the results of neuropsychological/neurocognitive testing. See Chapter 7 of this Manual for guidance on medications subject to further review.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.

- b. Certification Recommendation: Certification Recommended.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
    - (a) Favorable recommendation from the treating provider;
    - (b) The condition is asymptomatic and without recent need for major intervention, hospitalization, or surgery;
    - (c) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation or impairing complication;
    - (d) The condition is not being treated with anti-psychotic medications, controlled substances, or impairing medications;
    - (e) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
    - (f) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
    - (g) Documentation supports the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant has evidence of instability, or impairing symptoms and/or complications;
    - (c) The applicant has other symptoms or findings that suggest a significant risk of sudden incapacitation or debilitating complication;

- (d) The applicant has a history of, or is at risk for psychosis, suicidal ideation, or homicidal ideation;
  - (e) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
  - (g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; or
  - (h) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

- a. Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- (1) The severity of the condition;
  - (2) The presence of symptoms;
  - (3) The stability of the condition;
  - (4) Whether there is a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
  - (5) The need for access to medical care;
  - (6) The applicant's ability to perform routine and emergency duties;
  - (7) The risk for sudden incapacitation or debilitating complication;

Anxiety Conditions

- (8) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (9) The written assessment of the treating provider; and
- (10) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with unstable conditions or impairing symptoms/ complications may be found unqualified;
- (2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
- (3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
- (4) Mariner applicants with risk of impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified (*See Chapter 7 of this Manual for guidance on medications that are subject to further review*); and
- (6) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified.



**D. Attention-Deficit/Hyperactivity Disorders (ADD/ADHD).**

1. Guidance to Mariner Applicants.

- a. In some cases, Attention-Deficit/Hyperactivity Disorders (ADD/ADHD) may be deemed too high-risk for medical certification. This would include ADD/ADHD conditions that are treated with controlled substances or impairing medications, associated with impairing signs and symptoms, or associated with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. ADD/ADHD conditions that are determined to pose a low risk of sudden incapacitation or impairment may be considered for a waiver, or may not require any waiver or restriction.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with ADD/ADHD conditions should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their mental health condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

2. Guidance to Treating Providers.

a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
- (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's prognosis, and risk for impairment, decompensation, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with anti-psychotic medications, controlled substances, or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions and meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, and the presence or absence of impairing symptoms or complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or other impairment.

- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
  - (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
    - (a) Full mental health evaluation from the treating provider/treating mental health specialist; and
    - (b) Applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be asked to submit the results of neuropsychological/neurocognitive testing. See Chapter 7 of this Manual for guidance on medications subject to further review.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.

b. Certification Recommendation: Certification Recommended.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for major intervention, hospitalization, or surgery;
  - (c) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation or impairing complication;
  - (d) The condition is not being treated with anti-psychotic medications, controlled substances, or impairing medications;
  - (e) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
  - (f) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
  - (g) Documentation supports the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

c. Certification Recommendation: Certification Not Recommended or Needs Further Review.

- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
  - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (b) The applicant has evidence of instability, or impairing symptoms and/or complications;
  - (c) The applicant has other symptoms or findings that suggest a significant risk of sudden incapacitation or debilitating complication;

- (d) The applicant has a history of, or is at risk for psychosis, suicidal ideation, or homicidal ideation;
  - (e) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
  - (g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; or
  - (h) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

#### 4. Medical Certification Evaluation.

##### a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms;
- (3) The stability of the condition;
- (4) The need for access to medical care;
- (5) Whether there is a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
- (6) The applicant's ability to perform routine and emergency duties;
- (7) The risk for sudden incapacitation or debilitating complication;

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- (8) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (9) The written assessment of the treating provider; and
- (10) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with unstable conditions or impairing symptoms/ complications may be found unqualified;
- (2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
- (3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
- (4) Mariner applicants with risk of impaired cognitive ability, judgment or reaction time may be found unqualified;
- (5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified; and
- (6) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and emergency duties may be found unqualified.

**E. Alcohol Use Disorder and Substance Use Disorder.**

1. Guidance to Mariner Applicants.

- a. In some cases, alcohol use disorder and substance use disorder may be deemed too high-risk for medical certification. This would include alcohol use disorder or substance use disorder that is treated with impairing medications, associated with impairing signs and symptoms, or associated with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. Alcohol use disorder or substance use disorder that is not in remission is considered disqualifying and generally will not be approved for issuance of a medical waiver.
- c. Applicants with alcohol use disorder or substance use disorder that have not been abstinent for a minimum of 90 days at the time of application, may be considered disqualified and generally will not be approved for issuance of a medical waiver.
- d. Alcohol use disorder or substance use disorder that is in remission and determined to pose low risk of sudden incapacitation or impairment may be considered for a waiver, or may not require any waiver or restriction.
- e. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- f. Mariner applicants with alcohol use disorder or substance use disorder should:
  - (1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
    - (a) Their mental health condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.

- (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (a) The **Treating Provider's Assessment**; and

- (b) **Recommended Evaluation Data**.

## 2. Guidance to Treating Providers.

### a. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition, as follows:

- (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
- (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) How long the applicant has been abstinent and whether the substance abuse or dependence condition is considered to be in remission;
- (5) Treatment efficacy and compliance;
- (6) An assessment of the applicant's prognosis, and risk for impairment, decompensation, sudden incapacitation, or debilitating complication;
- (7) Whether the applicant's condition is being treated with anti-psychotic medications, controlled substances, or impairing medications;
- (8) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions and meet the physical demands that would reasonably arise during an emergency response;
- (9) Reports of objective testing and standard evaluation data used to support the assessment; and
- (10) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (11) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist, for example.



b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation are requested to better assess the severity of the condition, the applicant's functional capacity, and the presence or absence of impairing symptoms or complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
- (2) The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- (6) Examples of recommended evaluation data for alcohol use disorder or substance use disorder include, but are not limited to:
  - (a) Full mental health evaluation from the treating provider/treating mental health specialist;
  - (b) Applicants with a diagnosis of alcohol use disorder or substance use disorder within the last 6 years should submit an evaluation from a substance abuse professional that includes assessment of the applicant's suitability to return to work in safety-sensitive positions; and
  - (c) Applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be asked to submit the results of neuropsychological/neurocognitive testing. See Chapter 7 of this Manual for guidance on medications subject to further review.

3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
  - a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
      - (a) Favorable recommendation from the treating provider and/or substance abuse professional that indicates that mariner is in remission and has been abstinent for a minimum of 90 days at time of application;
      - (b) The condition is asymptomatic and without recent need for major intervention, hospitalization, or surgery;
      - (c) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation or impairing complication;
      - (d) The condition is not being treated with anti-psychotic medications, controlled substances, or impairing medications;
      - (e) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
      - (f) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
      - (g) Documentation supports the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.

- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (a) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (b) The applicant is not in remission and/or has not been abstinent for a minimum of 90 days;
    - (c) The applicant has evidence of instability, or impairing symptoms and/or complications;
    - (d) The applicant has other symptoms or findings that suggest a significant risk of sudden incapacitation or debilitating complication;
    - (e) The applicant has a history of, or is at risk for psychosis, suicidal ideation, or homicidal ideation;
    - (f) The applicant has required emergency treatment or hospitalization in the past 6 years;
    - (g) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
    - (h) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; or
    - (i) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
  - (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

c. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

4. Medical Certification Evaluation.

a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms;
- (3) The stability of the condition;
- (4) Whether the applicant is in remission;
- (5) Whether, and for what period of time the applicant has been abstinent;
- (6) Whether there is a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
- (7) The need for access to medical care;
- (8) The applicant's ability to perform routine and emergency duties;
- (9) The risk for sudden incapacitation or debilitating complications;
- (10) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- (11) The written assessment of the treating provider and/or qualified substance abuse professional; and
- (12) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver; and
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with alcohol use disorder or substance use disorder that is not in remission will be found unqualified and generally **will not** be considered suitable for a medical waiver;
- (2) Mariner applicants with alcohol use disorder or substance use disorder who do not have at least 90 days of documented abstinence will be found unqualified and generally **will not** be considered suitable for a medical waiver;
- (3) Mariner applicants whose SAP evaluation does not support applicant's suitability to return to work in safety-sensitive positions will be found unqualified and generally **will not** be considered suitable for a medical waiver;
- (4) Mariner applicants with unstable conditions or impairing symptoms/complications may be found unqualified;
- (5) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
- (6) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
- (7) Mariner applicants with risk of impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (8) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified (*See Chapter 7 of this Manual for guidance on medications that are subject to further review*); and

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- (9) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and emergency duties may be found unqualified.

## **F. Schizophrenia/Psychotic Conditions.**

### **1. Guidance to Mariner Applicants.**

- a. In most cases, schizophrenia and psychotic disorders are deemed too high-risk for medical certification. This would include schizophrenia and psychotic disorders that are treated with controlled substances or impairing medications, associated with impairing signs and symptoms, or associated with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. Schizophrenia and psychotic disorders are disqualifying and generally will not be approved for issuance of a waiver.
- c. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- d. Mariner applicants with schizophrenia and psychotic disorders should:
  - (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (a) Their mental health condition and the limitations of medical care aboard the vessel;
    - (b) The safety sensitive nature of their merchant mariner credential;
    - (c) How/whether the mental health condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (d) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing the assessment for medical certification.
  - (2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
    - (a) The **Treating Provider's Assessment**; and
    - (b) **Recommended Evaluation Data**.

### **2. Guidance to Treating Providers.**

#### **a. Treating Provider's Assessment.**

The treating provider's assessment should detail a full evaluation of the condition, as follows:

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- (1) Pertinent medical examination, mental status assessment, and physical evaluation data;
- (2) The history of the condition, to include current or prior history of psychosis, suicidal ideation, or homicidal ideation (unless previously reported to the Coast Guard);
- (3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- (4) Treatment efficacy and compliance;
- (5) An assessment of the applicant's prognosis, and risk of impairment, decompensation, sudden incapacitation, or debilitating complication;
- (6) Whether the applicant's condition is being treated with anti-psychotic medications, controlled substances, or impairing medications;
- (7) The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions and meet the physical demands that would reasonably arise during an emergency response;
- (8) Reports of objective testing and standard evaluation data used to support the assessment; and
- (9) The extent to which the applicant's mental health condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- (10) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a psychiatrist, for example.

b. Recommended Evaluation Data.

- (1) Objective testing and supporting documentation may be requested to better assess the severity of the condition and the presence or absence of impairing symptoms or complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or other impairment.
- (2) The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's mental health condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.



- (3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
  - (4) If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
  - (5) The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
  - (6) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
    - (a) Full mental health evaluation from the treating provider/treating mental health specialist; and
    - (b) Applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be asked to submit the results of neuropsychological/neurocognitive testing. See Chapter 7 of this Manual for guidance on medications subject to further review.
3. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.
- a. Documentation.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
    - (2) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
      - (a) An evaluation from the treating provider and/or specialist; and
      - (b) Any appropriate recommended evaluation data.
  - b. Certification Recommendation: Certification Recommended.
    - (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the

medical certificate if their evaluation finds that the applicant meets all of the following:

- (a) Favorable recommendation from the treating provider;
  - (b) The condition is asymptomatic and without recent need for major intervention, hospitalization, or surgery;
  - (c) The condition has been stable, and the assessment indicates low likelihood of sudden exacerbation or impairing complication;
  - (d) The condition is not being treated with anti-psychotic medications, controlled substances, or impairing medications;
  - (e) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
  - (f) The applicant has no risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications; and
  - (g) Documentation supports the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- (2) If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- c. Certification Recommendation: Certification Not Recommended or Needs Further Review.
- (1) The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
- (a) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (b) The applicant has evidence of instability, or impairing symptoms and/or complications;
  - (c) The applicant has other symptoms or findings that suggest a significant risk of sudden incapacitation or debilitating complication;

- (d) The applicant has a history of, or is at risk for psychosis, suicidal ideation, or homicidal ideation;
  - (e) The applicant has required emergency treatment or hospitalization in the past 6 years;
  - (f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
  - (g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; or
  - (h) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties.
- (2) If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- d. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

#### 4. Medical Certification Evaluation.

##### a. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- (1) The severity of the condition;
- (2) The presence of symptoms;
- (3) The stability of the condition;
- (4) Whether there is a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
- (5) The need for access to medical care;
- (6) The applicant's ability to perform routine and emergency duties;

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- (7) The risk for sudden incapacitation or debilitating complication;
- (8) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
- (9) The written assessment of the treating provider; and
- (10) The results of objective testing and standard evaluation data.

b. Medical Waivers.

- (1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- (2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver; and
- (3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

c. Disqualification.

- (1) Mariner applicants with schizophrenia or psychotic disorders may be found unqualified and generally will not be granted a medical waiver;
- (2) Mariner applicants with unstable conditions or impairing symptoms/complications may be found unqualified;
- (3) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
- (4) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
- (5) Mariner applicants with risk of impaired cognitive ability, judgment, or reaction time may be found unqualified;
- (6) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified (*See Chapter 7 of this Manual for guidance on medications that are subject to further review*); and
- (7) Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and emergency duties may be found unqualified.

## **CHAPTER 24. PULMONARY CONDITIONS**

### **A. Conditions of Concern.**

1. Pulmonary conditions likely to interfere with the ability to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response are subject to further review, and may be determined disqualifying. Examples include, but are not limited to severe chronic obstructive pulmonary disease, poorly controlled asthma, and conditions causing significant dyspnea or respiratory dysfunction.
2. Conditions requiring use of supplemental oxygen while working are disqualifying and generally will not be approved for issuance of a waiver.

### **B. Guidance to Mariner Applicants.**

1. In some cases, pulmonary conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Pulmonary conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with pulmonary conditions should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.

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- b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

- (1) The **Treating Provider's Assessment**; and

- (2) **Recommended Evaluation Data.**

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency care, major intervention, hospitalization, or surgery within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support their assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a pulmonologist, for example.

2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the likelihood of symptom recurrence or exacerbation, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the

mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in the assessment, along with the results of previously performed testing.
- d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in the assessment.
- e. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- f. Examples of recommended evaluation data for pulmonary conditions include, but are not limited to:
  - (1) Pulmonary function tests; and
  - (2) Cardiopulmonary exercise testing.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;
  - (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
  - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
- b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

3. Certification Recommendation: Certification Not Recommended or Needs Further Review.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
  - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
  - (2) The applicant's history indicates severe symptoms, frequent exacerbations, or hospitalization within the past 6 years;
  - (3) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
  - (4) The applicant requires supplemental oxygen while working;
  - (5) The applicant's condition is treated with controlled substances or impairing medications; and
  - (6) The applicant has other symptoms or findings that suggest a significant risk of an adverse event, syncope, impairment, collapse or sudden death.



- b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.

4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

**E. Medical Certification Evaluation.**

1. Certification Determinations.

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.

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- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- b. Mariner applicants with severe symptoms or frequent exacerbations may be found unqualified;
- c. Mariner applicants with findings that indicate a significant risk of an adverse event, syncope, collapse, impairment, or sudden death may be found unqualified;
- d. Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified;
- e. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review; and
- f. Mariner applicants who require supplemental oxygen while working may be found unqualified and likely will not be considered suitable for a medical waiver.

## CHAPTER 25. SKIN CONDITIONS

### A. Conditions of Concern.

Skin conditions that are life-threatening or impairing, or that pose risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, skin conditions that are associated with systemic complications, that interfere with wearing of protective equipment, or that impair the individual's ability to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response.

### B. Guidance to Mariner Applicants.

1. In some cases, skin conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of a credential.
2. Skin conditions that are determined to pose a low risk of sudden incapacitation and that do not impair the applicant's ability to perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response may be considered for a waiver, or may not require any waiver or limitation.
3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
4. Mariner applicants with skin conditions should:
  - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
    - (1) Their medical condition and the limitations of medical care aboard the vessel;
    - (2) The safety sensitive nature of their merchant mariner credential;
    - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
    - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
  - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:

(1) The **Treating Provider's Assessment**; and

(2) **Recommended Evaluation Data**.

**C. Guidance to Treating Providers.**

1. Treating Provider's Assessment.

The treating provider's assessment should detail a full evaluation of the condition as follows:

- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition (unless previously reported to the Coast Guard);
- c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
- f. Whether the applicant's condition is being treated with controlled substances or impairing medications;
- g. The applicant's ability to meet/demonstrate the physical ability guidelines, and to safely perform shipboard functions or meet the physical demands that would reasonably arise during an emergency response;
- h. Reports of objective testing and standard evaluation data used to support the assessment; and
- i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
- j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist, such as a dermatologist, for example.

2. Recommended Evaluation Data.

- a. Objective testing and supporting documentation may be requested to better assess the severity of the condition, the applicant's functional capacity; and the presence or absence of impairing complications. This information assists evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.

- b. The treating provider should submit objective testing and supporting documentation, as appropriate, for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.
- d. The Coast Guard may request additional testing, studies, or specialist evaluation, on a case-by-case basis, if the mariner applicant's medical condition is determined to be of significant concern.
- e. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

**D. Guidance to the Medical Practitioner Completing the Application for Medical Certificate, Form CG-719K.**

1. Documentation.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should provide a Certification Recommendation in the Summary section of the Application for Medical Certificate, Form CG-719K.
- b. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K should also ensure that the mariner applicant has provided adequate documentation for the condition, to include:
  - (1) An evaluation from the treating provider and/or specialist; and
  - (2) Any appropriate recommended evaluation data.

2. Certification Recommendation: Certification Recommended.

- a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
  - (1) Favorable recommendation from the treating provider;
  - (2) The condition is asymptomatic and without recent need for emergency intervention, hospitalization, or surgery;
  - (3) The condition is not being treated with controlled substances or impairing medications;

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- (4) The condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or impairing complications; and
    - (5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
  - b. If the medical practitioner recommends issuance of the medical certificate, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 3. Certification Recommendation: Certification Not Recommended or Needs Further Review.
  - a. The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, may choose to recommend against medical certification or may recommend further review of the application by the Coast Guard, particularly if any of the following apply:
    - (1) Unfavorable recommendation or insufficient documentation from the treating provider;
    - (2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
    - (3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
    - (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation, or impairing complication; or
    - (5) The applicant's condition is treated with controlled substances or impairing medications.
  - b. If the medical practitioner recommends against medical certification or requests further review of the application, they should document the reason(s) for their recommendation in the Discussion section of the Application for Medical Certificate, Form CG-719K.
- 4. Education.

The medical practitioner who completes the Application for Medical Certificate, Form CG-719K, should consider educating the mariner applicant, as appropriate, on how the condition may affect, or be affected by service at sea.

**E. Medical Certification Evaluation.****1. Certification Determinations.**

Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:

- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
- h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.

**2. Medical Waivers.**

- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
- c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

**3. Disqualification.**

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
- c. Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified; and

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- d. Mariner applicants whose conditions are treated with controlled substances or impairing medications may be found unqualified. See Chapter 7 of this Manual for guidance on medications that are subject to further review.



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