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1 3. DIRECTIVES AFFECTED. This Commandant Instruction Manual replaces prior guidance 2 on the medical evaluation of Merchant Mariners. Medical and Physical Evaluation 3 Guidelines for Merchant Mariner Credentials, NVIC 04-08, COMDTPUB 16700.4, and 4 Guidance on the Issuance of Medical Certificates, NVIC 01-14, COMDTPUB 16721, are 5 hereby cancelled. Part A of the Marine Safety Manual (MSM) Volume III, Chapter 4, 6 COMDTINST M16000.8 (series) has not been updated since 1999, and may contain some 7 information that conflicts with the guidance in this Manual. Until Part A of the MSM is 8 updated, the guidance in this Manual supersedes the MSM in any areas where they may 9 conflict.

10 4. <u>BACKGROUND</u>.

- a. Reference (a) requires each party to establish standards of medical fitness for seafarers. 11 12 Reference (a) applies to seagoing vessels, defined as vessels which operate beyond the Boundary Line. It does not apply to inland mariners. References (b) and (c) require that 13 14 mariners be physically able to perform their duties, using terms such as "general physical condition," "good health" and "of sound health." Reference (d) contains special 15 requirements for registration as a Great Lakes Pilot, including the requirement to "pass a 16 physical examination given by a licensed medical doctor." With the exception of hearing, 17 18 visual acuity, and color vision, none of these references contains specific standards for 19 determining whether mariners are physically and medically qualified.
- b. As noted in the introduction to NVIC 04-08, due to the lack of specificity in references
 (a) through (d), the physical and medical standards upon which medical certificate
 applicants are evaluated, and the medical tests and other information needed to make
 these evaluations may be unclear, leading to confusion and unnecessary delays. This lack
 of specificity may also lead to inconsistencies by medical practitioners conducting
 examinations of mariner applicants, and ultimately by Coast Guard personnel
 determining whether medical certificates should be issued.
- c. NVIC 04-08 detailed medical conditions that were subject to further review, and the 27 28 recommended data for evaluating each condition to determine fitness for certification. It also detailed physical ability guidelines and acceptable vision and hearing standards. 29 This was necessary to reduce the subjectivity of the physical and medical evaluation 30 31 process and promote more consistent evaluations. NVIC 04-08 also reduced the time required to process credential applications by helping eliminate the uncertainty that 32 mariners encountered as to the appropriate physical and medical information needed to 33 34 process their applications. This Manual provides more detail on medical conditions 35 subject to further review and the recommended evaluation data for evaluating those 36 conditions.

1 d. The Coast Guard recognizes the need for qualified mariners and the potential shortage of 2 mariners in the United States and worldwide. Since this Manual continues the prior 3 guidance on the evaluation of merchant mariners, it should not result in higher rates of 4 disqualification for service, or in increased processing time for credential applications 5 with physical and/or medical issues. To the contrary, the Coast Guard expects the 6 process to be fairer and less subjective, and anticipates application processing time to be 7 reduced by all parties knowing precisely what information is needed at the outset of the 8 application process. The information contained in this Manual consolidates guidance 9 previously contained in three separate documents; as well as reproducing, in writing, 10 several current practices that were not contained in any guidance document, making them transparent and consistent. 11

12 5. <u>DISCUSSION</u>.

- a. This Manual is a resource to assist mariner applicants in understanding how the Coast 13 14 Guard will evaluate their physical and medical status to determine whether they are fit for merchant mariner medical certification. It is also a resource to assist medical personnel 15 in performing examinations of applicants. It provides guidance on conditions that are 16 subject to further review for issuance of the medical certificate and the recommended 17 supplemental medical tests and evaluations. Medical practitioners should provide 18 19 comments and recommendations with regard to the ability of applicants to meet the 20 standards. The final determination regarding issuance of the medical certificate lies with 21 the Coast Guard. This manual provides guidance to evaluators on how to assess a mariner's condition. This will ensure consistency in evaluation of applications for 22 23 medical certificates.
- b. 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. In the
 event of an emergency, immediate response may be limited to the vessel's crew, and
 outside help may be delayed. Mariners should be medically and physically fit to perform
 their duties, not only on a routine basis but also in an emergency.
- 30 c. This Manual has been developed by the Coast Guard in consultation with the experienced maritime community medical practitioners and industry stakeholders comprising the 31 Merchant Mariner Medical Advisory Committee (MEDMAC). This Manual reflects a 32 synthesis of their recommendations, the medical requirements in references (a) through 33 (d), and the recommendations of other federal transportation mode authorities as to 34 35 appropriate physical and medical standards. The public was afforded opportunity to 36 participate in the development of the guidance contained in this Manual by providing public comment and serving on working groups at the public meetings of MEDMAC. 37 38 The public was also afforded opportunity to comment on drafts of the policies contained 39 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) 40 41 [Medications], 78 FR 17917 (March 25, 2013) [Seizures], and 77 FR 55174 (September 42 7, 2012) [Implantable Cardioverter Defibrillators].

- 1 d. Chapter 1 of this Manual provides guidance on the medical review process for the 2 issuance of medical certificates. This chapter additionally discusses limitations, waivers 3 and/or other conditions of issuance that may be placed on the medical certificate or 4 credential. The Coast Guard will not enforce the requirement of 46 CFR 15.401(c) on 5 those mariners who are not required to have a general medical exam or demonstration of physical ability per 46 CFR part 10, subpart C. 6 7 e. Chapter 2 describes the contents of the medical certificate and discusses key terms and 8 application procedures, and provides a sample medical certificate. 9 f. Chapter 3 provides discussion of the medical certification standards that apply to applicants for each of the various types of credentials, as set forth in reference (c). 10 g. Chapter 4 provides guidance on the general medical examination. 11 12 h. Chapter 5 provides guidance on evaluating vision and hearing. i. Chapter 6 provides guidance for determining whether mariner applicants are physically 13 able to perform their duties. 14 j. Chapter 7 provides guidance on the evaluation of mariner applicants who take certain 15 16 medications. k. Chapters 8 through 25 contain guidance on medical conditions that are subject to further 17 review, and the supplemental information that should be submitted to facilitate the 18 review. The list of conditions is non-exhaustive, and not all of the medical conditions 19 20 listed will require a waiver. 1. Applicants for the medical certificate must utilize the Application for Medical Certificate, 21 Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, as 22 23 appropriate for the credential held or sought. The forms are publicly available on the 24 Coast Guard website at: http://www.uscg.mil/forms/cg/CG_719K.pdf and 25 http://www.uscg.mil/forms/cg/CG/719KE.pdf. Submission of inadequate information will result in processing delays. Medical practitioners should review and initial each 26 27 page of the form, where requested. 28 m. Some individuals may have conditions or limitations that are not listed but which would 29 render them incapable of performing their duties. Others with a listed condition or 30 limitation may be capable of working at sea without posing a risk to the ship, their 31 shipmates, or themselves. While each applicant is evaluated individually, the conditions 32 described in this Manual are those which may be subject to further review, in accordance 33 with Chapter 1, before a medical certificate will be issued. 34 n. In situations where the applicant does not meet the standards specified in references (a) 35 through (d), as supplemented by the guidance contained herein, waivers, limitations, 36 and/or restrictions may be considered by the Coast Guard. The supplemental medical
- and/or restrictions may be considered by the Coast Guard. The supplemental mec
 records, consultations, and test results listed in Chapters 8 through 25, Medical

- Conditions Subject to Further Review, should be submitted as clinically indicated. *See* also 46 CFR 10.303 and Paragraphs E, F, and G of Chapter 1 of this Manual.
- o. Maritime academies should ensure that entrants into a cadet program are physically and
 medically qualified. A cadet with a condition listed in Chapters 8 through 25 should be
 advised as early as possible that he or she may not be physically or medically eligible to
 receive a credential upon graduation. Medical staff at an academy may consult with the
 NMC.
- p. Nothing in this Manual precludes marine employers from establishing more rigorous medical or physical ability guidelines.
- 6. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it 10 11 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 12 13 Coast Guard. It represents the Coast Guard's current thinking on this topic and is issued for guidance purposes to outline methods of best practice for compliance with the applicable 14 15 law. You may use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. While not required, those who wish to discuss alternative 16 17 approaches may contact the NMC Medical Evaluations Branch, which is responsible for 18 implementing this guidance. Contact information for the NMC Medical Evaluations 19 Division is listed in paragraph 13, below. This Manual complies with Executive Order 13422 and associated OMB Bulletin on Agency Good Guidance Practices. See 72 FR 3432 20 21 (Jan 25, 2007).
- MAJOR CHANGES. This Manual consolidates, clarifies, and updates prior guidance on merchant mariner medical evaluation, rather than instituting new policies. The material was reorganized into this Manual to provide clarity and improve utility.
- 25 a. After reviewing comments from the public, medical appeal complaints, and 26 recommendations from the Merchant Mariner Medical Advisory Committee (MEDMAC) 27 regarding the vague and sometimes confusing guidance contained in NVIC 04-08, the 28 Coast Guard began a series of revisions to its medical evaluation guidelines, published as Change 1 and Change 2 to NVIC 04-08. Reference (e) proposed another revision to 29 30 NVIC 04-08 and requested public comment on proposed policy clarifications for the 31 issuance of medical waivers for the conditions of diabetes mellitus, cardiomyopathy and 32 sleep disorders. Comments received in response to reference (e) were used to revise the 33 proposed policy, which is now included as guidance in this Manual.
- b. Because NVIC 04-08 was published prior to publication of the final STCW rule, there
 was a requirement to update the references contained in NVIC 04-08. Incorporating the
 required reference updates and the proposed policy clarifications, along with changes that
 had already been incorporated into Change 1 and Change 2 to NVIC 04-08, triggered
 issuance of a new policy document, in accordance with COMDTINST M5215.6H.
- c. Increased focus on medical issues in the last decade highlighted the confusion caused by
 having guidance related to the medical evaluation of mariners contained in several

- 1 different guidance documents. With the implementation of a Designated Medical 2 Examiner (DME) program, in accordance with 46 U.S.C. 7509, it is important that the 3 applicable guidance be contained in a single document so that DMEs can be sure that 4 their medical certification decisions are made in accordance with Coast Guard policies 5 and procedures. 6 d. The material was reorganized into a manual format instead of a NVIC to improve utility 7 and ease of use for the regulated community and others who reference the document. 8 Additionally, with a Commandant Instruction Manual, the name and number of the 9 document does not change with every future issuance of the document, reducing the risk 10 of confusion. e. Most of the Guidance on the Issuance of Medical Certificates, NVIC 01-14, discussed 11 12 implementation and transition provisions for moving to issuance of separate medical certificates. That information is no longer relevant and has been removed. 13 (1) Material was added that provides detailed processing direction to the NMC so that 14 15 Coast Guard personnel will have a standardized process for dealing with a number of situations that recur regularly. 16 (2) Information was added to provide more detail on the interplay between medical 17 certificates for pilots and the requirement for annual pilot physicals. 18 f. In accordance with 46 CFR 10.304(a), information was added to provide guidance and 19 20 clarity on the conduct of the merchant mariner general medical examination. 8. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. 21 The development of this Manual and the general policies contained within it have been 22 a. thoroughly reviewed by the originating office and are categorically excluded under 23 current USCG categorical exclusion (CE) #33 from further environmental analysis, in 24 accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act 25 Implementing Procedures and Policy for Considering Environmental Impacts, 26 27 COMDTINST M16475.1 (series). 28 b. This directive will not have any of the following: significant cumulative impacts on the 29 human environment; substantial controversy or substantial change to existing 30 environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions 31 resulting from the general policies in this Manual must be individually evaluated for 32 33 compliance with the National Environmental Policy Act (NEPA), Council on 34 Environmental Policy NEPA regulations at 40 CFR Parts 1500-1508, DHS and Coast 35 Guard NEPA policy, and compliance with all other environmental mandates. 36 9. DISTRIBUTION. No paper distribution will be made of this Manual. An electronic version 37 will be located on the following web sites: http://www.uscg.mil/nmc/ and
- 38 http://www.uscg.mil/directives/listing_cim.asp?id=16000-16999.

- 10. <u>RECORDS MANAGEMENT CONSIDERATIONS</u>. 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
- 4 further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C.
- 5 3101 et seq., National Archives and Records Administration (NARA) requirements, and
- 6 Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This
- 7 policy does not have any significant or substantial change to existing records management
- 8 requirements.
- 9 11. <u>FORMS/REPORTS</u>. The forms referenced in this Manual are available from USCG
- 10 Electronic Forms on the Standard Workstation, or on the Internet at <u>http://www.uscg.mil/nmc</u>
 11 or <u>http://www.uscg.mil/forms/;</u> on the Coast Guard Portal at
- 12 <u>https://cgportal2.uscg.mil/library/forms/SitePages/Home.aspx;</u> and available to the public at
- 13 <u>http://www.uscg.mil/forms/cg/CG_719K.pdf</u>, and
- 14 <u>http://www.uscg.mil/forms/cg/CG_719KE.pdf</u>.
- 15 12. <u>REQUESTS FOR CHANGES</u>. This Manual will be posted on the internet at
- 16 <u>http://www.uscg.mil/directives/listing_cim.asp?id=16000-16999</u>. It will also be posted on
- 17 the NMC website at <u>http://www.uscg.mil/nmc/</u>. Changes will be issued as necessary. All
- 18 requests for changes should be directed to the Office of Merchant Mariner Credentialing
- 19 (CG-MMC), at (202) 372-2357, or MMCPolicy@uscg.mil.
- 20 13. <u>QUESTIONS</u>. All questions regarding implementation of this Manual should be directed to
- the NMC Medical Evaluations Division at <u>iasknine@uscg.mil</u>. The NMC can also be
 telephonically contacted at: 1-888-I-ASK-NMC.
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1 CHAPTER 1. GUIDANCE ON THE ISSUANCE OF MEDICAL CERTIFCATES

2 A. Introduction.

- Chapter 1 provides guidance for 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 (a)).
- 7
 2. Topics covered in Chapter 1include the medical review process, to include waivers,
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- As discussed in Paragraph D of this Chapter, the Coast Guard will not enforce the
 requirement of 46 CFR 15.401(c) on those mariners who are not required to have a
 general medical exam or demonstration of physical ability under 46 CFR 10.302.
- 4. Details concerning the format and contents of medical certificates are found in Chapter 2
 of this Manual, The Medical Certificate. Key terms related to medical certificates are
 also defined in Chapter 2.
- 16 5. Substantive medical qualification guidance follows in this Manual.

17 B. Background.

- STCW Regulation 1/9 and Section A-I/9 of the STCW Code set forth minimum standards for the medical certification of seafarers. Specifically, the STCW Convention and Code require that seafarers:
- a. Have the physical capability to fulfill the requirements of their duties and the basic
 training as required by Section A-VI/1;
- b. Demonstrate adequate hearing and speech to communicate effectively and detect any audible alarms;
- c. Have no medical condition, disorder or impairment that will prevent the effective and safe conduct of the seafarer's routine and emergency duties;
- d. Are not suffering from any medical condition likely to be aggravated by service at sea
 or to render the seafarer unfit for service or to endanger the health and safety of other
 personnel on board;
- e. Are not taking medication that has side effects that will impair judgment, balance or
 the ability to effectively and safely perform routine and emergency duties on board;
 and

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- f. Have medical certificates that will remain valid for a maximum period of two years unless the seafarer is under the age of 18, in which case the maximum period of validity will be one year.
- 2. Title 46 CFR part 10, subpart C contains the physical ability and medical examination requirements. Specifically, table 1 to 46 CFR 10.302(a) lists various credentials and references the vision, hearing, general medical examination and demonstration of physical ability requirements that must be met prior to receiving a medical certificate. While initially an STCW requirement, the Coast Guard implemented the change to a separate medical certificate to all credentialed mariners, including those holding only a national endorsement.
- 3. The Maritime Labour Convention (MLC) entered into force on August 20, 2013 and 11 12 requires mariners serving on vessels to have a valid medical certificate. Until such time that the United States ratifies the MLC, the Coast Guard cannot mandate enforcement of 13 14 its requirements for U.S. mariners. However, Article V, Paragraph 7 of the MLC contains a "no more favorable treatment clause" that requires ratifying governments to 15 impose Convention requirements on all vessels—even those from a non-ratifying 16 government—when calling on their ports. As a result, U.S. vessels visiting foreign ports 17 18 that cannot demonstrate compliance with the MLC may be at risk of port state control 19 actions, including detention, when operating in the port of a ratifying nation. The MLC 20 does provide that medical certificates meeting STCW requirements also satisfy the MLC 21 requirement. Medical certificates issued under reference (c) meet the requirements of 22 MLC Regulation 1.2.
- 4. In the event a vessel is not subject to STCW but is subject to MLC, and is calling on a
 port in a country that has ratified the MLC, the Coast Guard will issue a medical
 certificate to qualified crewmembers upon proper application under 46 CFR 10.302(a).
- 26 C. Medical Review Process.
- The medical review process is used to determine if a mariner meets the medical and
 physical standards for a credential, as contained in references (a) through (c) of this
 Manual.
- 30 2. When individuals submit an application for a medical certificate, the Coast Guard will 31 thoroughly review the application to determine if the applicant has any of the medical 32 conditions listed in Chapters 8 through 25, or any other conditions that may create a risk 33 of sudden incapacitation or debilitating complication (See 46 CFR 10.304). The Coast Guard will advise the applicant if there are any discrepancies or if any additional 34 information is needed. Mariner applicants should then schedule additional appointments, 35 receive test results, or meet other requirements as soon as possible to prevent unnecessary 36 37 delays (See 46 CFR 10.303(a)).
- 38 3. The NMC will reevaluate all medical and physical conditions requiring further review
 39 (*see* Chapters 8 through 25) prior to making a fitness determination. The NMC will

- consider the applicant's completed application, as well as all supporting documentation,
 in making a decision whether to issue a medical certificate.
- 4. The NMC will review all information provided and will make one of the determinations
 below, as indicated in 46 CFR 10.301(a). The Coast Guard will inform the applicant of
 the results of the review.
- 6 a. If the mariner is qualified, the Coast Guard will issue a medical certificate.
- b. If issuance of a medical certificate is denied due to a determination that the applicant
 is not physically and/or medically qualified, the applicant will be informed in writing
 of the cause and be advised that:
- 10 (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.
- 5. Deterioration of a waived medical condition and/or failure to comply with any
 operational limitations and/or restrictions placed on the medical certificate 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.

21 D. Detailed Guidance.

- 22 1. <u>Coast Guard Procedures</u>.
- a. 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 when serving under the authority of a merchant mariner
 credential (MMC) (*See* 46 CFR 15.401(d)).
- b. The Coast Guard will continue to enforce medical standards in accordance with
 46 CFR part 10, subpart C. Waivers, restrictions and limitations will be applied in
 accordance with Paragraphs E, F, and G of this chapter.
- c. Applications for a medical certificate will be processed in accordance with Paragraph
 I of this chapter. The issuance of the medical certificate will not change the
 expiration date of the mariner's MMC unless the applicant applies for renewal of the
 MMC under 46 CFR 10.227.
- 34 d. No fees will be charged for medical certificates.

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1 2	e.	Mariners who have been determined to be medically disqualified will be processed in accordance with Paragraph K of this chapter.
3	f.	Procedures during the Transition Period.
4 5 6		Under 46 CFR 15.401(c), all mariners are required to hold a valid medical certificate in order to serve on a vessel under the authority of their credential. This requirement will be phased-in during a transition period as follows:
7 8 9		(1) Mariners should have a valid medical certificate if they hold an STCW endorsement, regardless of when issued except as specified in Paragraph J of this Chapter.
10 11 12		(2) Mariners holding only a national endorsement issued after January 24, 2014 will have had a medical certificate issued to them and will be required to maintain and carry it with their MMC.
13 14 15 16 17 18 19		(3) Mariners holding only a national endorsement issued before January 24, 2014 have their medical certification embedded in their MMC, and a separate medical certificate is not required. Upon the first credential transaction requiring a medical review after January 24, 2014, mariners with national endorsements will be issued a medical certificate that must be carried with their MMC. This includes mariners who previously had a waiver for a medical condition that was subject to annual reporting requirements.
20	2. <u>M</u>	ariner Procedures.
21 22	a.	A mariner may not serve under the authority of their STCW endorsement without holding a valid medical certificate (<i>See</i> 46 CFR 15.401(c)).
23 24 25 26	b.	Mariners holding only a national endorsement will be transitioned to a separate medical certificate, in accordance with Paragraph D.1.f of this Chapter. Once transitioned, a mariner holding a national endorsement may not serve under the authority of that endorsement without holding a valid medical certificate.
27 28	c.	Mariners should remain cognizant of the expiration dates on their medical certificates and the applicability of the dates to their current employment.
29		(1) Mariners should monitor the NMC website for information on processing time.
30 31		(2) Mariners with medical conditions should submit their applications early to allow adequate processing time.
32 33 34 35		(a) Mariners may be issued medical certificates with certain limitations or restrictions pursuant to Paragraphs F and G of this chapter. These may differ from those on the MMC. The mariner must operate within the most restrictive of the limitations.

(b) Mariners holding pilot endorsements should consult Chapter 3 of this Manual 1 2 to ensure compliance with all applicable requirements for medical 3 certification. 3. Company and Vessel Operator Procedures. 4 5 In order to avoid foreign port state control actions and to comply with 46 CFR 15.401, companies and vessel operators should: 6 7 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 8 9 STCW; or when engaged on a vessel calling on a port in a country ratifying the MLC. b. Determine whether employed mariners have a valid medical certificate in accordance 10 with 46 CFR 15.401(c). During the transition period, not all mariners will have a 11 medical certificate, as implementation of the medical certificate provisions will be 12 transitioned in accordance with Paragraph D.1.f of this Chapter. 13 14 4. Enforcement Posture: Title 46 CFR 15.401(c) requires that all mariners who must hold an MMC must also hold 15 a valid medical certificate in order to serve under the authority of their MMC. 16 a. Each mariner holding an STCW endorsement has been issued a medical certificate 17 and must have a valid medical certificate in order to serve under the authority of their 18 19 STCW endorsement on an international voyage. b. There are several exceptions to the requirement of 15.401(c) to hold a medical 20 21 certificate. These exceptions are described in Paragraph J of this Chapter. 22 c. Most entry level mariners will be issued an MMC endorsed as food handler. 23 However, in order to serve as a food handler, entry-level mariners must hold a valid medical certificate endorsed for food handlers. 24 E. Medical Waivers. 25 26 1. The Coast Guard may grant a waiver if a mariner applicant does not possess the vision, 27 hearing, or general physical condition necessary; and extenuating circumstances warrant 28 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 29 30 whether a waiver is warranted. 31 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 32 33 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 34 35 46 CFR 10.303(a)).

- 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)).
- 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. Except when used in a title of an endorsement, the Coast Guard considers the terms 16 17 "restriction" and "limitation" to be synonymous. The terms are used throughout Title 46 18 CFR, chapter I, subchapter B, without assigning a particular meaning or distinguishing 19 between the terms. Both terms are considered constraints on the authority granted by a 20 credential or certificate. The granting of a medical waiver is conditioned upon compliance with the limitation or restriction. Within subpart C, it is relatively common 21 22 practice to use the term "operational limitation" on a constraint that limits the actual 23 operating authority of a credential (e.g., daylight hours only) while "restriction" is used to 24 describe a more general constraint such as annual reporting requirements or specialized 25 testing.

26 F. Operational Limitations.

- The Coast Guard may place an operational limitation on the mariner's medical certificate
 (See 46 CFR 10.303(d)).
- 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 continue to be applied in accordance with the
 hearing standards outlined in Chapter 5 of this Manual—Vision and Hearing
 Standards (*See* 46 CFR 10.306(e)).

1 2		d.	No Watchkeeping: May be applied to mariners with an inordinate risk of sudden incapacitation or impaired cognition as a result of a medical condition or medications.
3 4 5		e.	No Lone Watchkeeping: May be applied to mariners with possibly full physical and cognitive functioning where there is an ongoing risk of transient physical or cognitive deficiencies.
6 7		f.	No Bridge Watchkeeping: May be applied to mariners who fulfill the requirements for general shipboard service but not necessarily for the bridge.
8 9 10		g.	No Engine Room Watchkeeping: May be applied to mariners who fulfill the requirements for general shipboard service but not necessarily for the engine room watch.
11 12		h.	Service in Deck/Engine/Steward Department only. May be applied to mariners who meet the criteria for only one of the shipboard departments.
13 14 15		i.	No Food Handling: May be applied to mariners who may not be assigned duties handling food due to a communicable disease that poses a direct threat to the health or safety of other individuals in the workplace.
16 17 18	3.	me	e Coast Guard may impose other limitations, as appropriate, depending on the specific edical condition and its impact on the mariner's ability to perform routine and hergency duties.
19	G. R	estri	ctions.
20	1.	<u>Ti</u>	<u>me Restrictions</u> .
21 22 23 24 25		a.	Medical Certificates may receive 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 (<i>See</i> 46 CFR 10.301(b)(1)).
26 27 28 29 30		b.	Time-restricted 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).
31	2.	Ge	ographical Restrictions.
		a.	Geographical restrictions may reduce the waters upon which a mariner may operate a

b. Other geographical restrictions, such as "25 NM from Harbor of Safe Refuge," etc., 1 may be applied as appropriate, depending on the medical condition and the need for 2 3 surveillance and/or availability to obtain medical assistance. 4 3. Medical Restrictions. 5 a. 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: 6 7 "Special equipment required while sleeping." b. For mariners with conditions requiring medications to ensure safe functioning and 8 9 provide for any emergency needs, the following restriction will be applied: "Must carry self-administered medications." 10 c. Other medical restrictions may be applied as appropriate, depending on the specific 11 medical condition and its impact on the mariner's ability to perform routine and 12 13 emergency duties. 14 H. Processing of Mariners with Existing Waivers. 1. Mariners who hold waivers previously granted by the Coast Guard present a unique 15 situation when the current reviewer believes a waiver is not warranted, or the restrictions 16 17 on the prior waiver should be increased. Mariners rely on the determinations made by the 18 Coast Guard in planning their careers, and should not be unnecessarily subjected to repeated changes in waiver status based merely on differing professional assessments by 19 different reviewers. 20 21 2. If a mariner has a waiver previously granted by the Coast Guard, the prior waiver should 22 be honored and the conditions retained in the new waiver unless one of the following 23 conditions exist: 24 a. Failure to comply with the terms of the prior waiver; including any requirements for providing additional medical information: 25 b. Material change in the mariner's condition (see Paragraph H.3 of this Chapter); 26 27 c. A bona fide change in duly promulgated policy or regulations; or 28 d. The prior waiver was issued in clear error, contrary to duly promulgated policy in effect at the time of issuance (see Paragraph H.4 of this Chapter). 29 30 3. A 'material change in the mariner's condition' is a significant change in the mariner's condition that would have caused the prior reviewer to deny the waiver or have more 31 restrictive conditions placed upon it. 32 33 a. Examples include, but are not limited to:

1 2 3 4			 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 indicate an increase in risk;
5 6 7 8			(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
9 10 11 12			(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 the credential.
13 14 15 16 17 18 19 20			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 which pose a risk of impairment.
21 22 23 24 25		4.	Clear error is not a difference of opinion between different reviewers. 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 by the mistakes of its employees, especially in a situation where public safety is at issue.
26 27 28		5.	These provisions do not prohibit the issuance of a time-restricted medical certificate, in accordance with Paragraph G.1 of this Chapter, where the prior waiver had recurring reporting requirements.
29 30	I.	St 1.	Andard NMC Procedures: Application for a Medical Certificate Only.
31 32 33 34			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 3 of this Manual—Medical Certification Standards. The complete application package includes:
35 36			(1) The Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E.
37 38			(2) The Application for Merchant Mariner Credential, Form CG-719B, is not required.

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1		(3) The application will be reviewed in accordance with the guidance in this Manual.
2 3	b.	If the applicant is found to have a potentially disqualifying condition, conduct an individualized assessment and consider for issuance of a waiver in accordance with
4		46 CFR 10.303 and Paragraph E of this Chapter.
5 6	c.	If the applicant is found not qualified, process in accordance with Paragraph K of this Chapter.
7 8 9	d.	If the applicant is found qualified, issue a medical certificate. Medical certificates may be time-limited, in accordance with 46 CFR 10.303 and Paragraph G.1 of this Chapter.
10	2. <u>A</u> p	oplication for Original Merchant Mariner Credential (MMC) (See 46 CFR 10.225).
11	a.	Complete application package includes:
12		(1) Application for Merchant Mariner Credential, Form CG-719B.
13 14 15		(2) Application for Medical Certificate, Form CG-719K or Application for Medical Certificate, Short Form CG-719K/E, or the applicant must hold a valid medical certificate (<i>See</i> 46 CFR 10.225(b)(7)).
16 17 18	b.	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 3 of this Manual—Medical Certification Standards.
19 20 21	c.	If the applicant is found to have potentially disqualifying condition, conduct an individualized assessment and consider for waiver in accordance with 46 CFR 10.303 and Paragraph E of this chapter.
22 23	d.	If the applicant is found not qualified, process in accordance with Paragraph J of this Chapter.
24 25 26	e.	If the applicant is found qualified, issue a medical certificate. Medical certificates may be time-limited, in accordance with 46 CFR 10.303 and Paragraph E of this Chapter.
27	3. <u>Ar</u>	oplication for Renewal of an MMC (See 46 CFR 10.227).
28	a.	Complete application package includes:
29		(1) Application for Merchant Mariner Credential, Form CG-719B.
30 31 32		(2) Application for Medical Certificate, Form CG-719K, or Application for Medical Certificate, Short Form CG-719K/E, or the applicant must hold a valid medical certificate (<i>See</i> 46 CFR 10.227(d)(6)).

1 2 3		b.	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 3 of this Manual – Medical Certification Standards.
4 5 6		c.	If the applicant is found to have potentially disqualifying condition, conduct an individualized assessment and consider for waiver in accordance with 46 CFR 10.303 and Paragraph E of this Chapter.
7 8		d.	If the applicant is found not qualified, process in accordance with Paragraph K of this Chapter.
9 10 11		e.	If the applicant is found qualified, issue a medical certificate. Medical certificates may be time-limited, in accordance with 46CFR 10.303 and Paragraph G.1 of this Chapter.
12	4.	<u>Ap</u>	oplication for Raise-of-Grade of MMC (See 46 CFR 10.231).
13		a.	Complete application package includes:
14			(1) Application for Merchant Mariner Credential, Form CG-719B.
15 16 17			(2) Application for Medical Certificate, Form CG-719K, or Application for Medical Certificate, Short Form CG-719K/E, or the applicant must hold a valid medical certificate (<i>See</i> 46 CFR 10.231(c)(3) and 46 CFR 11.201(a)).
18 19 20		b.	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 3 of this Manual.
21 22 23		c.	If the applicant is found to have potentially disqualifying condition, conduct an individualized assessment and consider for waiver in accordance with 46 CFR 10.303 and Paragraph E of this Chapter.
24 25		d.	If the applicant is found not qualified, process in accordance with Paragraph K of this Chapter.
26 27 28		e.	If the applicant is found qualified, issue a medical certificate. Medical certificates may be time-limited, in accordance with 46 CFR 10.303 and Paragraph G.1 of this Chapter.
29	5.	<u>Ar</u>	pplication for New Endorsement ¹ .
30		a.	Complete application package includes, but is not limited to:
31			(1) Application for Merchant Mariner Credential, Form CG-719B.

¹A new endorsement is an endorsement that is not an original, renewal, or raise-in-grade of an endorsement. For example, the holder of an MMC endorsed as "master of Great Lakes or inland self-propelled vessels of unlimited tonnage" applies for an endorsement as "mate of near coastal self-propelled vessels of unlimited tonnage."

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1 2 3			(2) Application for Medical Certificate, Form CG-719K, or Application for Medical Certificate, Short Form CG-719K/E, or the applicant must hold a valid medical certificate (<i>See</i> 46 CFR 10.231(c)(8)).
4 5 6		b.	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 3 of this Manual.
7 8 9		c.	If the mariner is found to have potentially disqualifying condition, conduct an individualized assessment and consider for waiver in accordance with 46 CFR 10.303 and Paragraph E of this Chapter.
10 11		d.	If the mariner is found not qualified, process in accordance with Paragraph K of this Chapter.
12 13 14		e.	If the mariner is found qualified, issue a medical certificate. Medical certificates may be time-limited, in accordance with 46 CFR 10.303 and Paragraph G.1 of this Chapter.
15	6.	<u>Ar</u>	oplication for Removal of Medical Restriction or Operational Limitation.
16		a.	If the restrictions are on an MMC, see 46 CFR 10.223.
17			(1) An application for Merchant Mariner Credential, Form CG-719B, is required.
18 19 20 21 22			(2) If the MMC was issued prior to January 24, 2014 and medical certification was embedded in the MMC, determine if restrictions were based on a prior medical waiver. If restrictions were based upon a prior medical waiver, ensure the Application for Medical Certificate Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, is submitted.
23		b.	Medical Certificate Restrictions.
24 25 26			(1) Submit 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.
27 28			(2) The Application for Merchant Mariner Credential, Form CG-719B, is not required.
29 30 31			(3) If the mariner is found to have a potentially disqualifying condition, conduct an individualized assessment and consider for waiver in accordance with 46 CFR 10.303 and Paragraph E of this Chapter.
32 33			(4) If the mariner is found not qualified, process in accordance with Paragraph K of this Chapter.

1 (5) If the mariner is found qualified, issue a medical certificate. Medical certificates 2 may be time-limited, in accordance with 46 CFR 10.303 and Paragraph G.1 of 3 this Chapter. J. Special Considerations for Entry Level Mariners and Staff Officers. 4 5 1. Mariners applying for or holding an MMC with an entry-level endorsement or a staff officer endorsement only, who require a medical certificate that complies with STCW or 6 MLC requirements, should apply using the Application for Medical Certificate, Short 7 8 Form CG-719K/E. 9 a. Qualified mariners will be issued a medical certificate. b. The information blocks described in Paragraph D of Chapter 2, The Medical 10 Certificate, will be marked either "N/A" or "N" on the certificate, as appropriate. 11 c. The medical certificate will be **restricted to entry-level only**. 12 d. Unless a statement regarding communicable diseases is provided, in accordance with 13 46 CFR 10.304(b), all medical certificates will contain a limitation stating "No food 14 15 handling. 2. Mariners applying for or holding an MMC with a national entry-level endorsement only, 16 seeking to be qualified for lookout duties should submit the Application for Medical 17 Certificate, Form CG-719K. Sections III (Medical Conditions), IV (Medications) and V 18 (Physical Examination) DO NOT have to be completed. 19 20 a. Mariners will be evaluated on hearing and vision requirements and, if found qualified, 21 will be issued a medical certificate with the appropriate information blocks marked "Y." 22 b. Medical certificates will be restricted to entry-level only. 23 c. Unless a statement regarding communicable diseases is provided, in accordance with 24 25 46 CFR 10.304(b), all medical certificates will contain a limitation stating "No food 26 handling." 27 K. Processing of Medically Disqualified Mariners. 28 Mariners who don't meet the medical qualification standards in 46 CFR part 10, subpart C, 29 and who have been provided an individual assessment regarding eligibility for a waiver; will 30 be processed in accordance with the following directions if a waiver is not granted or the mariner is no longer compliant with an existing waiver. 31 32 1. Mariners noncompliant with existing medical waiver conditions. 33 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 34

1 2 3 4 5	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.
6 7 8	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.
9 10 11	c. If the mariner does not cure the deficiency within the time allotted, determine whether the medical certification is embedded in the MMC ² or the mariner holds a separate medical certificate.
12 13	 If embedded, refer to the Coast Guard Suspension and Revocation National Center of Expertise (S&R NCOE) for possible action under 46 CFR part 5; or
14	2. <u>Medically Disqualified Mariners</u> ³ .
15	a. Mariners applying for a medical certificate.
16 17	(1) Deny the medical certificate. Provide a written statement as required by 46 CFR 10.237(a).
18 19 20 21	(2) If the mariner holds a valid MMC, 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.
22 23	b. Mariners seeking continuation of a waiver or submitting information as required by a waiver.
24	(1) Deny the waiver continuance.
25 26	(2) If the mariner holds a valid credential with an embedded medical certificate (<i>see</i> Footnote 1 of this Chapter):
27	(a) Advise the mariner of the right to appeal under 46 CFR 1.03-15.
28 29 30	(b) Once determination that the mariner is unfit becomes final agency action, advise the mariner that operating under the authority of his or her credential could subject the mariner to action under 46 CFR part 5 for physical

 $^{^{2}}$ For MMCs with only national endorsements, the medical certification is embedded in MMCs issued before January 24, 2014, unless the mariner has applied for and been issued a medical certificate.

³In Paragraphs K.2.a-d, we assume the mariner was considered for a waiver under 46 CFR 10.303 and Chapter 8 through 25 of this Manual, as applicable, but the waiver was not issued. When reviewing mariners who hold prior waivers, consider the specific instructions found in Paragraph H of this Chapter.

1 2	incompetence. Refer to S&R NCOE for investigation and possible action under 46 CFR part 5.
3 4	c. The National Maritime Center (NMC) receives credible information that leads to the conclusion that the mariner is unfit.
5 6 7 8 9 10	(1) The NMC will inform the mariner of the situation and provide 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. The NMC will establish a reasonable deadline, by which time mariner must comply with the request for more information.
11	(2) If the mariner is then determined to be unfit:
12 13 14	 (a) 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 E of this Chapter.
15	(b) Advise the mariner of the right to appeal under 46 CFR 1.03-15.
16	L. Mariner Appeals and Reconsideration.
17	1. <u>Reconsiderations (See 46 CFR 1.03-40)</u> .
18	a. Should be received within 30 days of the action or decision by the NMC.
19	b. Have no requirement to be in writing.
20	c. Have no requirement that new information or specific errors be alleged.
21	d. Have no specific format requirements.
22 23 24	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.
25 26	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.
27	2. <u>Appeals (See 46 CFR 1.03-15)</u> .
28 29	a. Appeals on reconsideration must be received within 30 days of action or decision by the NMC.
29	the NMC.

1 CHAPTER 2. THE MEDICAL CERTIFICATE

2 A. Medical Certificate Overview.

- 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 format and information contained on the medical certificate is outlined
 below, along with a sample medical certificate.
- To qualify for a medical certificate, a mariner must provide evidence of meeting the
 medical and physical standards on the Application for Medical Certificate, Form CG719K or the Application for Medical Certificate, Short Form, CG-719K/E, as described
 in Paragraph C 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)).
- Mariner applicants seeking additional merchant mariner credential (MMC) endorsements,
 who hold a current medical certificate, are not required to submit a new physical
 examination if their existing medical certification meets all the requirements for the
 endorsement sought (*See* 46 CFR 10.301(b)(4)).
- 4. Mariner applicants who have been determined to be medically disqualified and not
 eligible for a waiver, or who are non-compliant with an existing waiver (in accordance
 with Chapter 1, Paragraph E of this Manual) will be processed in accordance with
 Chapter 1 of this Manual.
- 21 B. Medical Certificate Key Terms.
- 22 1. <u>Date of Examination</u>.

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- The Coast Guard considers the date of examination to be the date that the Coast Guard approves the issuance of a medical certificate. It will not 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 issuance date of the medical certificate.
- a. A mariner applicant seeking an original MMC may be medically approved on a
 particular date, while the MMC may not be issued for an undetermined amount of
 time as the applicant completes professional requirements.
- b. A mariner 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 the date of examination, February 4, 2016, a mariner applicant is issued a time-limited certificate with a 1-year expiration and waiver conditions. 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. <u>Date of Expiration</u>.

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- Because of differing legal requirements, each medical certificate will have three
 expiration dates and validity periods. One will be the expiration date for STCW (*See*46 CFR 10.301(b)(1)). A second expiration date will be for Pilotage under
 46 CFR 15.812 (*See* 46 CFR 10.301(b)(2)). A third will be for the national endorsement
 (*See* 46 CFR 10.301(b)(3)).
- 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 (46 CFR 11.709) and those who act 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 acting 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 be issued every 2 years.
- c. *National Endorsement expiration date*: The validity period applicable to all other mariners will be for a maximum period of 5 years (*See* 46 CFR 10.301(b)(3)).
- 27 3. <u>Time-Restricted Medical Certificates</u>.
- 28 Mariners receiving a waiver of certain medical conditions may be issued a time-limited 29 certificate. Those certificates will expire in either 1 or 2 years, depending on the 30 condition. Applicants must comply with the terms of their waiver letters in order to be 31 issued a new medical certificate (*See* 46 CFR 10.303(c)).
- 32 C. Application Procedures.
- Mariners applying for or holding an MMC with an entry-level or a staff officer
 endorsement only, who require a medical certificate that complies with STCW or MLC
 requirements, and 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 below, in Paragraph D, 6 through 11, will be marked "N" on the certificate. No lookout duties will be authorized.

1 2		c. The medical certificate will be restricted to entry-level only or staff officer endorsements, as appropriate.
3		d. Mariners seeking to serve as food handlers should provide a statement from a
4		licensed physician, physician assistant, or nurse practitioner attesting that they are
5		free of communicable diseases that pose a direct threat to the health or safety of other
6		individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement
7		may be documented in any verifiable format, including as notes on the Application
8		for Medical Certificate, Form CG-719K, or the Application for Medical Certificate,
9		Short Form, CG-719K/E, or on letterhead from the medical practitioner.
10	2.	Mariners applying for or holding an MMC with an entry-level endorsement only, who
11		serve on a vessel not subject to STCW but requesting a medical certificate that satisfies
12		the MLC, who want to be qualified for lookout duties, should submit an Application
13		for Medical Certificate, Form CG-719K. Sections III (Medical Conditions), IV
14		(Medications) and V (Physical Exam) DO NOT have to be completed.
1.5		
15 16		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
10		lookout duties" will be annotated on the medical certificate.
18		b. The medical certificate will be restricted to entry-level .
19		c. Mariners seeking to serve as food handlers should provide a statement from a
20		licensed physician, physician assistant, or nurse practitioner attesting that they are
21		free of communicable diseases that pose a direct threat to the health or safety of other
22		individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement
23		may be documented in any verifiable format, including as notes on the Application for Medical Cartificate Form CC 710V, or the Application for Medical Cartificate
24 25		for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.
26		Mariners applying for an officer endorsement (other than a staff officer endorsement), a
27		qualified rating endorsement, or an STCW endorsement, should either hold a valid U.S
28 29		issued medical certificate or submit an Application for Medical Certificate, Form CG-719K.
29		/19K.
30	4.	All medical certificates will contain a limitation stating "No food handling," unless a
31		statement is provided from a licensed physician, physician assistant, or nurse practitioner
32		attesting that the applicant is free of communicable diseases that pose a direct threat to
33		the health or safety of other individuals in the workplace, in accordance with
34		46 CFR 10.304(b). The statement may be documented in any verifiable format, including
35		as notes on the Application for Medical Certificate, Form CG-719K, or the Application
36		for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical
37		practitioner.
38	D. Mee	dical Certificate Contents.
•	T 1	

- 39 The medical certificate will include the following information blocks--
- 40 1. Authorizing authority and the requirements under which the document is issued;

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1	2. Name (Last, first, middle);
2	3. Date of birth (day/month/year);
3	4. Gender (Male/Female);
4	5. Date of examination (day/month/year);
5	6. Hearing meets the standards in section A-I/9 (Y/N);
6	7. Visual acuity meets standards in section A-I/9 (Y/N);
7	8. Color vision meets standards in section A-I/9 (Y/N);
8	9. Fit for look-out duties (Y/N);
9	10. Unaided Hearing Satisfactory (Y/N);
10	11. No limitations or restrictions on fitness (Y/N). If "N", specify limitations or restrictions;
11 12 13 14 15 16 17	 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
18 19	17. Mariner's signature confirming that the mariner has been informed of the contents of the certificate and of the right to a review in accordance with 46 CFR 1.03-40. The medical
20	certificate is not valid until signed by the mariner.
21	

1 E. Sample Medical Certificate.

- 2 Figures 2-1 and 2-2 provide a sample of the merchant mariner medical certificate.
- 3 **Figure 2-1**: Medical Certificate Front Page

Gender: STCW Exp Date: <i>17-DE0-2</i>	Medical Certificate er Name: MERCHANTMARINER, KIME Nationality: US D 2015 National Exp Date: 17-DEO-2018 Pilot DEFFREY P. NOVOTNY, CAPT, USCG OFFICER INCHARSE, MARINE INSPECTION MPLE	OB: 16-APR-1966	
	SEAFA RER SIG NATURE		
NI 00051040		Ref Num: 3530363	
Figure 2-2: Media	cal Certificate – Back Page	ated by service at sea or	
Figure 2-2: Medic Mariner is free from ar	cal Certificate – Back Page		
Figure 2-2: Media Mariner is free from an to render the seafarer	cal Certificate – Back Page ^ DO NOT DETACH ^ hy medical condition likely to be aggrava unfit for such service or to endanger the		
Figure 2-2: Media Mariner is free from ar to render the seafarer on board.	cal Certificate – Back Page ^ DO NOT DETACH ^ ny medical condition likely to be aggrava unfit for such service or to endanger the	e health of other persons	
Figure 2-2: Media Mariner is free from ar to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A	cal Certificate – Back Page ^DO NOT DETACH ^ any medical condition likely to be aggrava unfit for such service or to endanger the Date: I-I/9:	e health of other persons 17-DEC-2013 Y	
Figure 2-2: Media Mariner is free from an to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A	cal Certificate – Back Page ^DO NOT DETACH ^ ny medical condition likely to be aggrava unfit for such service or to endanger the Date: I-I/9: WW A-I/9:	e health of other persons 17-DEC-2013 Y Y	
Figure 2-2: Media Mariner is free from an to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A Visual Acuity IAW STC Color Vision IAW STC	Cal Certificate – Back Page ^DO NOT DETACH ^ any medical condition likely to be aggrava unfit for such service or to endanger the Date: I-I/9: W A-I/9: CW A-I/9:	e health of other persons 17-DEC-2013 Y Y Y Y	
Figure 2-2: Media Mariner is free from an to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A Visual Acuity IAW STC Color Vision IAW STC Fit for Look-out duties:	Cal Certificate – Back Page ^DO NOT DETACH ^ any medical condition likely to be aggrava unfit for such service or to endanger the Date: I-I/9: XW A-I/9: CW A-I/9:	e health of other persons 17-DEC-2013 Y Y	
Figure 2-2: Media Mariner is free from an to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A Visual Acuity IAW STC Color Vision IAW STC Fit for Look-out duties: Unaided Hearing Sati	Cal Certificate – Back Page ^DO NOT DETACH ^ ay medical condition likely to be aggrava unfit for such service or to endanger the Date: I-/9: W A-I/9: CW A-I/9: Stactory:	e health of other persons 17-DEC-2013 Y Y Y Y Y Y Y Y	
 Mariner is free from ar to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A Visual Acuity IAW STC Color Vision IAW STC Fit for Look-out duties: 	Cal Certificate – Back Page ^DO NOT DETACH ^ ay medical condition likely to be aggrava unfit for such service or to endanger the Date: I-/9: W A-I/9: CW A-I/9: Stactory:	e health of other persons 17-DEC-2013 Y Y Y Y	
Figure 2-2: Media Mariner is free from an to render the seafarer on board. Date of Examination: Last Color Vision Test Hearing IAW STCW A Visual Acuity IAW STC Color Vision IAW STC Fit for Look-out duties: Unaided Hearing Sati	Cal Certificate – Back Page ^DO NOT DETACH ^ hy medical condition likely to be aggrava unfit for such service or to endanger the Date: I/9: XW A-I/9: XW A-I/9: Stactory: at Examination:	e health of other persons 17-DEC-2013 Y Y Y Y Y Y Y Y Y Y	

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1 CHAPTER 3. MEDICAL CERTIFICATION STANDARDS

A. Table 3-1, Medical and Physical Requirements for Mariner Endorsements, 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. The following Notes apply to Table 3-1:

- 7 1. <u>Table Note 1- Food Handlers</u>.
- a. Applicants for endorsement as food handlers are required to produce a statement from a licensed physician, physician assistant, or nurse practitioner. 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, certifying that the applicant is free from communicable disease (*See* 46 CFR 10.304(b)).
- b. Communicable disease is defined in 46 CFR 10.107(b) as "any disease capable of 14 being transmitted from one person to another directly, by contact with excreta or 15 other discharges from the body; or indirectly, via substances or inanimate objects 16 contaminated with excreta or other discharges from an infected person." The 17 Department of Health and Human Services periodically publishes, in the Federal 18 *Register*, a list of infectious and communicable diseases transmissible through the 19 food supply, and that list provides examples of communicable diseases for the 20 purposes of 46 CFR 10.304. 21

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

B. Original Officer and Qualified Rating Endorsements.

In accordance with 46 CFR 10.225(b)(7), every application for an original MMC must include proof, documented on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, as appropriate, that the applicant has passed all applicable vision, hearing, medical, and/or physical exams as required by 46 CFR 10.302(a), or has a valid medical certificate issued by the Coast Guard.

7 C. Renewal of Officer and Qualified Rating Endorsements.

- 8 In accordance with 46 CFR 10.227(d)(6), applicants seeking a national endorsement must
- 9 either hold an unexpired medical certificate or submit a medical certificate application.

10 **D. Raise of Grade or New Endorsements.**

- Applicants holding a current medical certificate who are seeking additional MMC
 endorsements are not required to submit a new medical physical exam if their existing
 medical certification meets all of the requirements for the endorsement sought (*See* 46 CFR 10.301(b)(4)).
- Applicants without a medical certificate valid for the endorsement sought must submit an
 Application for Medical Certificate, Form CG-719K (*See* 46 CFR 10.231(c)(8) and
 46 CFR 11.201(a)).
- Mariners holding only a national staff officer endorsement or those endorsements
 identified in line 19 of Table 1 to 46 CFR 10.302(a), and in line 19 of Table 3-1 of this
 Chapter, are exempt from this requirement.

21 E. Mariners' Duties.

The duties and responsibilities that a mariner may perform can vary widely according to the 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 duties.

26 **F. Supplements and Medications.**

- Supplements and over-the-counter (OTC) medications may interact with prescription drugs
 or cause hazardous side effects on their own. Medical practitioners should question
- or cause hazardous side effects on their own. Medical practitioners should question
 applicants about their use of these substances. See Chapter 7 of this Manual, Guidance on
- Medications, and Paragraph 6 of Chapter 8 of this Manual, Medical Conditions Subject to
- 31 Further Review.

32 G. Short-term Conditions.

- 33 Short-term conditions may render a mariner not physically or medically competent at the 34 time of application, even though the condition is being appropriately treated and will be of 35 relatively short duration. An example of this would be a broken arm. The NMC will hold
 - 3-1

- 1 medical certificate applications open for no more than 90 days to allow the short term
- condition to resolve itself. If, after 90 days, the condition still persists, the application will be
 denied, and the applicant will be required to resubmit an application.

4 H. Medical Exams, Tests, and Demonstrations of Physical Ability.

- All exams, tests, and demonstrations must be performed, witnessed, or reviewed by a
 physician, physician assistant, or nurse practitioner licensed by a state in the United
 States, or a U.S. possession or territory.
- 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.
- 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).
- Individuals who submit false information to the Coast Guard may be subject to criminal prosecution under 18 U.S.C. 1001.
- 16 I. First Class Pilots and Those Individuals Serving As Pilots.
- 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 shall have a thorough physical examination each year, and that this physical examination must meet the same requirements for originally obtaining the medical certificate as specified in 46 CFR, part 10, subpart C, and be recorded on an Application for Medical Certificate, Form CG-719K.
- 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. The individual may not operate under the authority of that endorsement until a physical examination has been satisfactorily completed.
- Annual physicals are still required. Every other year, in accordance with the medical
 certificate requirements found in 46 CFR 11.709(b), the results of the physical
 examination must be recorded on an Application for Medical Certificate, Form CG 719K, and submitted to the Coast Guard no later than 30 calendar days after completion
 of the physical examination.
- 4. For the purposes of 46 CFR 11.709(b) and (d), the Coast Guard considers the
 "individual's most recently completed Coast Guard required physical examination" to be
 the same as the date of examination on the medical certificate. To reiterate, in the years
 the mariner must submit the results of the annual physical to the Coast Guard, the Coast
 Guard considers the date of examination to be the date that the Coast Guard approves the
 issuance of a medical certificate. It will not coincide with the date the medical

- practitioner signs the Application for Medical Certificate, Form CG-719K. (See Chapter 1 2 1 of this Manual.) In the years that the mariner is not required to submit the annual physical, the date of the most recently completed Coast Guard physical examination is 3 4 the date the medical practitioner signs the Application for Merchant Mariner Medical Certificate, Form CG-719K. 5
- 5. Mariners are responsible for holding a valid medical certificate and must be aware of the 6 expiration dates on their medical certificates and the applicability of the dates to their 7 current employment. Renewals should be submitted in sufficient time so that the medical 8 certificate does not lapse. Mariners should monitor the NMC website 9 (http://www.uscg.mil/nmc/) for information on processing time. Additionally, mariners 10 with medical conditions should submit their applications early to allow adequate 11 processing time. 12
- 6. Title 46 CFR 15.812 (b)(3)(iii) and (c)(3) requires that other licensed individuals who 13 serve as pilots on certain types of vessels must have a current physical examination, in 14 accordance with the provisions of 46 CFR 11.709. A physical examination meeting the 15 guidelines in Chapters 4, 5, and 6 of this Manual satisfies these regulatory requirements. 16
- 7. First-class pilots, and all other individuals serving as pilots, in accordance with 17 46 CFR 15.812(b)(3) and (c), should have a physical examination documented annually 18 on an Application for Medical Certificate, Form CG-719K. Biennially, this should be 19 submitted to the Coast Guard, no later than 30 calendar days after completion of the 20 physical examination each year. The annual physical examination must, in accordance 21 with 46 CFR 10.709(d), be completed by the first day of the month following the first 22 anniversary of the individual's most recent satisfactorily completed physical examination. 23
- 8. The Coast Guard may initiate appropriate administrative action in the event that any first-24 class pilot, or any other individual serving as a pilot (as described above), does not meet 25 the physical examination requirements specified in 46 CFR 10.301, up to and including 26 suspension or revocation of the mariner's credential, in accordance with 46 CFR part 5. 27
- 9. Individuals with endorsements as pilot, master, or mate (and individuals applying for 28 those credentials) who do not, in fact, serve as first-class pilots or otherwise serve as 29 pilots, in accordance with 46 CFR 15.812(b)(3) and (c), are not required to have an 30 annual physical examination. 31

J. Great Lakes Registered Pilots. 32

- 1. The Director, Office of Great Lakes Pilotage at Coast Guard Headquarters (Director), has 33 designated the Application for Medical Certificate, Form CG-719K, as the required form 34 for physical examinations, replacing the previous requirement to use Page 3 of the 35 Application for Registration as United States Registered Pilot, Form CG-4509. 36
- 2. A Great Lakes Registered Pilot must be "physically competent to perform the duties of a 37 U.S. Registered Pilot and meet the medical requirements prescribed by the Commandant" 38 (See 46 CFR 401.210(a)(4)). The annual physical examination required by 39 40

- given by a "licensed medical doctor." A copy of the Application for Medical Certificate,
 Form CG-719K, submitted annually to the Director, will satisfy all original, renewal and
 annual physical reporting requirements of 46 CFR 401.210 and 402.210. Great Lakes
 Registered Pilots will be responsible for submitting the original Application for Medical
 Certificate, Form CG-719K, to the NMC for issuance of a medical certificate.
- 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).

1 CHAPTER 4. THE MERCHANT MARINER MEDICAL EXAMINATION

2 A. The General Medical Examination.

- 1. The public safety risks associated with the medical and physical condition of mariners is 3 an important consideration in the safe operation of vessels. An illness, condition, or 4 medication that has the potential to cause sudden incapacitation, altered sensorium, or 5 loss of awareness could render the mariner unable to perform his or her duties or respond 6 appropriately in an emergency situation. Such an occurrence places the vessel at risk of 7 an accident and poses a danger to the mariner, other crewmembers, and to public and 8 maritime safety. Additionally, in the event that a mariner experiences a medical 9 emergency, immediate medical response may be limited to the vessel's crew, and outside 10 help may be delayed. 11
- Because of these grave 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)). With respect to this regulatory requirement, the Coast Guard provides the following guidance on the Merchant Mariner General Medical Examination:
- 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 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;
 - c. 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 include, but are not limited to, obstructive sleep apnea, diabetes mellitus, and coronary heart disease/coronary artery disease;
- d. 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
- e. Should document on the Application for Medical Certificate, Form CG-719K,
 whether and to what extent the medical examiner has screened and/or assessed the
 applicant for conditions that pose a significant risk of sudden incapacitation or
 debilitating complication.
- **B.** Screening for Significant Medical Conditions.

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1 2 3 4 5 6 7	 Mariner applicants who have significant medical conditions that are left undiagnosed and/or untreated are at risk for developing disease complications that may threaten the health and eventually lead to loss of medical certification. Accordingly, it is recommended that the examining medical practitioner take appropriate steps to ident and refer mariner applicants for further evaluation, as appropriate, if they are determ to be at high risk for conditions that pose a significant risk of sudden incapacitation of debilitating complication. 			
8 9 10	2.	co	e medical practitioner should also provide education to applicants about their health nditions and risk factors for disease, and discuss how those conditions and risk factors ght affect, or be affected by, work in the maritime environment.	
11 12 13 14 15 16 17	3.	scr inc cor	is guidance does not preclude the issuance of a medical certificate to those whose reening indicates that they may be at risk for a medical condition, unless there is lication that the applicant may be at high risk for sudden incapacitation or debilitating mplication. Examples of screening outcomes that may preclude certification include, t are not limited to: The examiner/evaluator determines that the applicant is at significant risk for obstructive sleep apnea that is severe, symptomatic, and inadequately treated; OR	
18 19 20		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	
21 22		c.	The examiner/evaluator determines that the applicant is at significant risk for coronary artery disease that is symptomatic, uncontrolled, or unstable.	
23	C. Re	con	nmendations on Screening for Obstructive Sleep Apnea (OSA).	
24	1.	Th	e medical examiner should assess the mariner applicant's risk factors for OSA and	
25			en determine whether further evaluation is indicated. Risk factors for OSA include, but	
26		are	not limited to:	
27 28		a.	Medical history of hypertension, diabetes, elevated blood sugars, elevated cholesterol, coronary artery disease, atrial fibrillation or stroke.	
29		b.	Personal history of smoking.	
30 31		c.	Personal history of obesity, and /or neck circumference greater than 17 inches (male) or 16 inches (female).	
32		d.	Personal history of sedentary lifestyle.	
33		e.	Personal history of snoring, or observed apnea.	
34 35		f.	Personal history of accident(s) related to falling asleep while working, driving or operating a vessel.	
36		g.	Symptoms of non-restful sleep, fatigue, or day-time sleepiness.	

- 1 2. Examples of validated office screening tools for obstructive sleep apnea include:
- 2 a. STOP-BANG questionnaire.
- b. Berlin questionnaire.

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- 4 3. If the medical examiner determines that the mariner applicant is at significant risk for
 5 OSA, the mariner should be referred 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 3 channels to include air flow, respiratory effort, and pulse oximetry; or attended polysomnogram.
- If the examining provider determines that the applicant needs further evaluation for OSA, but assesses that the applicant is **NOT** at significant risk for OSA that is severe, symptomatic and inadequately treated, then the applicant may be considered for a timelimited medical certificate to allow time to complete the evaluation.
- 15 **D. Recommendations on Screening for Diabetes Mellitus.**
- The medical examiner 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:
- 19 a. Medical history of hypertension, abnormal cholesterol, or elevated blood sugar levels.
- 20 b. Family history of diabetes.
- 21 c. Personal history of obesity, sleep apnea or sedentary lifestyle.
- 22 2. If the medical examiner determines that the mariner applicant is at significant risk for 23 diabetes, the applicant should be referred for appropriate evaluation and testing.
- 24 a. Further evaluation may include referral to primary care provider, internist or 25 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.
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 3. If the examining provider determines that the applicant needs further evaluation for
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1	E.	Re	commendations on Screening for Coronary Artery Disease.
2 3 4		1.	The medical examiner should consider the mariner applicant's risk factors for coronary artery disease and then determine whether further evaluation is indicated. Risk factors for coronary artery disease include, but are not limited to:
5 6			a. Medical history of hypertension, abnormal blood sugar, diabetes, high cholesterol, sleep apnea, stroke or other vascular disease.
7			b. Family history of premature cardiovascular disease.
8			c. Personal history of smoking, obesity or sedentary lifestyle.
9 10 11		2.	If the medical examiner determines that the mariner applicant is at significant risk for coronary artery disease, the mariner should be referred for appropriate evaluation and testing.
12 13			a. Further evaluation may include referral to a primary care provider, internist, or cardiologist, as appropriate.
14			b. When medically indicated, office testing may include resting electrocardiogram.
15 16			c. When medically indicated, diagnostic testing may include exercise (treadmill) stress testing, myocardial perfusion stress testing, and coronary angiography.
17 18 19 20		3.	If the examining provider 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
21			evaluation.

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1 CHAPTER 5. VISION AND HEARING STANDARDS

2 A. Vision Requirements.

3 4	1.	The vision requirements for merchant mariner medical certification are contained in 46 CFR 10.305.
5	2.	Vision Requirements for Credentialed Deck Personnel.
6 7		Applicants for any national endorsement or qualified deck rating must demonstrate correctable vision to at least 20/40 in one eye and uncorrected vision of at least
8		20/200 in the same eye.
9		b. The horizontal field of vision should be not less than 100 degrees in each eye.
10 11 12		e. After January, 1, 2017, applicants for an STCW endorsement must have correctable vision to at least 20/40 in both eyes and uncorrected vision of at least 20/200 in both eyes, with the following exceptions:
13		(1) A mariner who loses vision in one eye after already meeting this requirement, and
14		after receiving a merchant mariner credential (MMC), may be granted a medical
15		waiver, and/or may have operational limitations placed upon the credential,
16		subject to the requirements of paragraphs (c), (d), and (e) of 46 CFR 10.305, as
17		applicable.
18		(2) A mariner who already holds an MMC prior to January 1, 2017, need only meet
19		the vision requirements of 46 CFR $10.305(a)(1)$ in one eye. The mariner may be
20		granted a medical waiver, and/or may have operational limitations placed upon
21		his or her credential, subject to the requirements of paragraphs (c), (d), and (e) of
22		46 CFR 10.305, as applicable.
23		I. Applicants must also demonstrate satisfactory color sense when tested by one of the
24		screening methods listed in 46 CFR 10.305(a)(1) or by an alternative test acceptable
25		to the Coast Guard.
26		(1) In order to meet the standard, applicants must demonstrate satisfactory color sense
27		without the use of lenses that enhance color perception.
28		(2) Applicants seeking to demonstrate satisfactory color sense through the use of an
29		alternative test should consider the information that follows and contact the NMC
30		for further guidance.
31		(a) Alternative Color Vision Testing Methodologies.
32 33		[1] The test submission should include a full description of the test in addition to a discussion of test results.

1 2 3 4 5	[2] 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.
6 7 8	(b) If submitting a test such as the Farnsworth D-15 as an alternative color vision test, the test should be performed by, or accompanied by, a formal color vision evaluation from an ophthalmologist or qualified optometrist.
9 10	(c) The Coast Guard retains final authority for determining whether the alternative testing is sufficient for issuance of the medical certificate.
11 12 13	3. Vision Requirements for Credentialed Engineering Personnel, Tankermen, Offshore Installation Managers, Barge Supervisors, Ballast Control Officers, and Radio Officers.
14 15 16 17	 Applicants for any engineering officer credential, qualified engineering rating, offshore installation manager, barge supervisor, ballast control officer, radio officer, or tankerman endorsement should demonstrate correctable vision to at least 20/50 in one eye and uncorrected vision of at least 20/200 in the same eye.
18 19	b. Applicants for STCW endorsements such as RFPEW, or for any STCW engineering officer endorsement, must meet the same standard.
20	c. The horizontal field of vision should be not less than 100 degrees in each eye.
21	d. Applicants need only the ability to
22 23 24	e. distinguish red, green, blue, and yellow. They must demonstrate satisfactory color sense when tested by one of the screening methods listed in 46 CFR 10.305(a)(1), or by an alternative test acceptable to the Coast Guard.
25 26	(1) In order to meet the standard, applicants must demonstrate satisfactory color sense without the use of lenses that enhance color perception.
27 28	(2) Applicants seeking to demonstrate satisfactory color sense through use of an alternative test should contact the NMC for further guidance.
29	(a) Alternative Color Vision Testing Methodologies.
30 31	[1] The test submission should include a full description of the test in addition to a discussion of test results.
32 33 34 35	[2] 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

1	the NMC.
2 3 4	(b) If submitting a test such as the Farnsworth D-15 as an alternative color vision test, the test should be performed by, or accompanied by, a formal color vision evaluation from an ophthalmologist or qualified optometrist.
5 6	(c)The Coast Guard retains final authority for determining whether the alternative testing is sufficient for issuance of the medical certificate.
7	4. Vision Waivers and Limitations.
8	a. Visual Acuity Waivers.
9 10 11 12 13 14 15	(1) Any applicant whose uncorrected vision does not meet the 20/200 standard and is correctable to standards listed in 46 CFR 10.305 (a)(2) may be considered for a medical waiver. If a vision 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. Additional waiver information is contained in paragraph 4) below. See 46 CFR 10.305(c) and (d).
16 17	(2) Waivers are not normally granted to an applicant whose corrected vision in the better eye is not at least 20/40, for deck officers, or 20/50, for engineer officers.
18 19 20 21 22	(3) Vision operational limitation. If corrective lenses are required in order to meet the vision standards set forth in 46 CFR 10.305 (a)(2), a 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 his or her medical certificate.
23 24 25 26 27	(4) Applicants with uncorrected vision of up to 20/800 may be granted a waiver by the Coast Guard provided that the corrected vision meets the applicable standards set forth in 46 CFR 10.305 (a)(2). The waiver may include a requirement that the applicant carry spare corrective lenses and wear the corrective lenses when acting under the authority of the credential.
28	b. Monocular Vision Waivers.
29 30 31 32 33 34	(1) An individual with monocular vision may be granted a medical waiver, with or without an operational limitation placed upon the credential, 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.
35 36	(2) Generally, waivers for monocular vision are not granted until the applicant has been subject to monocular vision for at least 180 days.

1 2	(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.
3	c. Color Vision Waivers.
4 5	(1) Waivers will generally not be granted for applicants who cannot demonstrate satisfactory color vision without the use of lenses that enhance color perception.
6	(2) Applicants for AB endorsement and applicants for deck officer credentials who
7	cannot demonstrate satisfactory color vision may be issued a medical certificate
8 9	with the following limitations: No watchstanding or navigating at night or during periods of low/limited visibility.
10	(3) For renewal applicants who previously passed color vision screening and operated
11	without need of a credential limitation, but who are unable to pass one of the
12	listed color vision screening tests at time of current application, it is
13	recommended that the applicant submit a formal color vision evaluation from an
14	ophthalmologist.
15	(a) If the formal ophthalmology evaluation supports a finding of mild color visior
16	deficiency without significant functional impairment, and extenuating
17	circumstances support the absence of significant color vision-related
18	functional impairment, then the applicant may be considered for a waiver,
19	with or without the daylight-only credential limitation, or other limitations as
20	deemed appropriate by the Coast Guard.
21	(b) In some cases, the renewal applicant seeking to demonstrate the absence of
22	significant color-vision-related functional impairment may be required to
23	undergo a practical demonstration of color-vision-critical tasks prior to
24	consideration for a waiver.
25	(c) An applicant who passes the demonstration to the satisfaction of the Coast
26	Guard may be considered for a medical certificate limited to the vessel and
27	route tested.
28	d. Waivers for Other Vision Disorders.
29	Waivers are not normally granted for conditions that accelerate the normal decline in
30	vision from aging. Such conditions include, but are not limited to, macular
31	degeneration that is unstable or uncontrolled.
32	5. Great Lakes Pilotage (United States Registered Pilots) Vision Standards.
33	a. Registered pilots and applicants for original registration must meet the vision
34	standards set forth in 46 CFR 402.210(c).
35	b. An applicant for original registration must have a visual acuity either with or without
36	corrective lenses of at least 20/20 vision in one eye and at least 20/40 in the other. An

1		applicant who wears corrective lenses must also pass a test without corrective lenses
2		of at least 20/40 in one eye and at least 20/70 in the other.
3		c. Registered pilots must have visual acuity either with or without corrective lenses of
4		at least 20/30 in one eye and at least 20/50 in the other. A registered pilot who wears
5		corrective lenses must also pass a test without corrective lenses of at least 20/50 in
6		one eye and at least $20/100$ in the other.
7		d. The color sense of original applicants and registered pilots must be tested by a
8		pseudoisochromatic plate test or equivalent. Passing the Williams lantern test or its
9		equivalent is an acceptable substitute for a pseudoisochromatic plate test. See
10		46 CFR 402.210(c).
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11	В. Н	earing Requirements.
10	1	Applicants for a medical certificate must meet the hearing standards as set forth in
12 13	1.	46 CFR 10.306.
15		40 CTK 10.300.
14	2	If the medical examiner has concerns regarding the applicant's ability to adequately hear,
15	2.	the medical examiner should refer the applicant to an audiologist or other hearing
16		specialist to conduct an audiometer test and/or a speech discrimination test, as
17		appropriate.
17		uppropriate.
18		a. When such testing is indicated, the audiometer test should include testing at the
19		following thresholds: 500 hertz (Hz); 1,000 Hz; 2,000 Hz; and 3,000 Hz. The
20		frequency responses for each ear must be averaged to determine the measure of an
21		applicant's hearing ability. Applicants must demonstrate an unaided threshold of 30
22		decibels (dB) or less in at least one ear.
23		b. The functional speech discrimination test must be carried out at a level of 65 dB. For
24		issuance of an original MMC or endorsement, the applicant must demonstrate
25		functional speech discrimination of at least 90 percent. For renewal or raise of grade,
26		the applicant must demonstrate functional speech discrimination of at least 80
27	•	percent.
	2	
28	3.	Hearing waivers.
29		a. An applicant who is unable to meet the hearing standards of the audiometer test, but
30		who can pass the functional speech discrimination test; or who requires hearing aids
31		to meet the hearing standards, may be eligible for a medical waiver in accordance
32		with 46 CFR 10.303.
33		b. Hearing operational limitation. If hearing aids are required in order to meet the
33 34		hearing standards listed above, a mariner may not serve under the authority of his or
35		her endorsement unless hearing aids are worn in the operational mode, and spare
36		batteries are carried onboard the vessel. This operational limitation will be placed on
30		the medical certificate.
51		the metrear contineate.

1 CHAPTER 6. PHYSICAL ABILITY GUIDELINES

2 A. Introduction.

For the purposes of this Manual, a medical condition is considered to cause "significant functional impairment" if it impinges upon the ability of the applicant to fully perform all of the physical abilities listed in this chapter, or if it otherwise interferes with the ability of the applicant to fully perform the duties and responsibilities of the requested credential. In some cases, applicants with physical limitations who do not meet the related physical ability guidelines contained in this chapter 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.

10 B. <u>The Physical Ability Evaluation.</u>

- Mariner applicants should be physically able to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response.
 As used in this context, an *emergency response* refers to emergency evolutions such as
 "abandon ship" and "firefighting," and the basic procedures to be followed by each
 mariner. Those basic functions and associated physical requirements are listed in Table
 6-1, the Physical Ability Guidelines Table.
- If the examining medical practitioner doubts the applicant's ability to meet the Physical
 Ability Guidelines contained within Table 6-1 of this Chapter, and for all applicants with
 a body mass index of 40.0 or higher, the practitioner should require that the applicant
 demonstrate the ability to meet the guidelines.
- 21 a. This does not mean that the applicant must actually don an exposure suit, for example, or pull an uncharged 1.5-inch diameter 50-foot fire hose with nozzle to full 22 extension, or lift a charged 1.5-inch diameter fire hose to fighting position. Rather, 23 the medical practitioner may utilize alternative measures to satisfy him- or herself that 24 the applicant possesses the ability to meet the Physical Ability Guidelines listed in 25
 Table 6-1. A description of the methods utilized by the medical practitioner should
 26 27 be reported on the Application for Medical Certificate, Form CG-719K or the Application for Medical Certificate, Short Form CG-719K/E, as appropriate. 28
- b. All practical demonstrations should be performed by the applicant, without assistance.
- c. Any prosthesis normally worn by the applicant, and other aid devices (such as
 prescription glasses), may be used by the applicant in all practical demonstrations,
 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.
- 38 d. Any prosthesis or similar device used to successfully meet the physical standards will

1 2 3		be documented on the medical certificate, along with a requirement that the individual must use the prosthesis or similar device while acting under the authority of the credential(s).
4 5 6 7		e. Mariner applicants who are only required to pass a demonstration of physical ability may submit either the Application for Medical Certificate, Short Form CG-719K/E or the Application for Medical Certificate, Form CG-719K. Chapter 3 of this Manual details the relevant standards applicable to each type of credential.
8 9 10 11 12 13		3. The Coast Guard recognizes that all medical practitioners may not have the equipment necessary to test all of the tasks listed in the third column of the table. If the examining medical practitioner is unable to perform the practical evaluation, the applicant should be referred to a competent evaluator of physical ability. Equivalent alternate testing methodologies may be used. The results of such evaluation should be attached to the completed medical certificate application.
14 15 16 17 18	2	4. The Coast Guard recognizes that the guidelines contained in Table 6-1, the Physical Ability Guidelines Table, refer to shipboard conditions and tasks that may not be applicable to all vessels; for example, a crewmember on a 79-foot towing or small passenger vessel may not be required to carry a 1.5 inch diameter fire hose with nozzle 50 feet.
19 20 21		a. For the most part, however, credentials issued by the Coast Guard are not vessel- specific, and they provide authority to work on different types and sizes of vessels, with each vessel having its own equipment and operating conditions.
22 23 24 25 26 27		b. An applicant who is unable to meet the guidelines contained within the table may (along with his or her employer, as appropriate), propose alternatives that reflect the conditions applicable to his or her operating environment. Such proposals should be made in writing to the National Maritime Center (<u>iasknmc@uscg.mil</u>), which will give full consideration to each proposal on an individual, case-by-case basis.
28 29 30 31 32 33 34		5. If an applicant is unable to meet all of the guidelines contained in Table 6-1 , the Physical Ability Guidelines Table, then 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 examination/ underway practical examination.
35	C. <u>7</u>	The Practical Examination/Underway Practical Examination.
36 37 38	1	1. For applicants with physical disabilities that may impair their ability to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response, the Coast Guard may offer or request that the applicant undergo a

39 practical examination/underway practical examination. Such cases may include, but are

1			not	t limited to, mariner applicants who:
2 3			a.	have physical impairments or medical conditions that could prevent normal movement and physical activity;
4			b.	have loss of limb(s) and/or restricted motion of limb(s);
5			c.	require use of an assistive device in order to meet the physical ability requirements; or
6			d.	require modifications to their vessel in order to safely operate.
7 8 9		2.	to	e purpose of the practical examination/underway practical examination is to determine, the satisfaction of the Coast Guard, whether an applicant can safely carry out all duties trusted to him/her by virtue of holding an MMC.
10 11 12				a. The practical examination/underway practical examination is performed by Coast Guard personnel within the Officer in Charge, Marine Inspection (OCMI) zone where the mariner applicant seeks to operate.
13 14 15 16				b. If the Coast Guard determines that a practical examination/underway practical examination is appropriate, the mariner applicant will be directed to contact the local OCMI to arrange for the practical examination/underway practical examination.
17 18 19 20 21		3.	loc Ma wil	llowing completion of the practical examination/underway practical examination, the cal Coast Guard OCMI will provide written recommendation to the Office of Merchant ariner Credentialing regarding the mariner applicant's performance. The Coast Guard Il review the recommendation to determine whether the applicant may be approved for uance of a medical certificate with appropriate waivers and/or limitations.
22	D.	Co	mpo	onents of the Practical Examination/Underway Practical Examination.
23 24 25 26 27		1.	fou det dif	general list of the tasks that will be evaluated during the practical examination can be ind in Paragraphs E and F of this Chapter. Additional tasks may be required as termined by the local OCMI, and may differ between OCMI zones based upon ferences in operating requirements for particular zones. In some cases, an underway actical examination may be required.
28 29 30 31 32		2.	apj sch orc	hen an underway practical examination is required, the Coast Guard will provide the plicant with notice of the specific areas that will be evaluated in advance of the neduled demonstration. If the applicant has made modifications to his/her vessel in her to operate, then the practical examination should be conducted aboard the vessel on hich the mariner seeks to operate.
33 34	E.			or of Uninspected Towing or Passenger Vessels (OUTV, OUPV) and Master or Mate s Than 200 Gross Tons.

- In addition to the tasks listed in the Table of Physical Abilities, a practical demonstration
 may include the following elements:
- 3 1. Handling of mooring lines.
- 4 2. Ascending and descending the vessel's ladder.
- 3. Reaching, handling, grasping, and lifting lifesaving and firefighting equipment required
 by the vessel's certificate of inspection (COI), or applicable regulations.
- Donning and properly wearing a personal flotation device (PFD); assisting passengers
 don PFDs; casting ring buoys.
- 9 5. Properly operating firefighting equipment.
- 10 6. Recovering a person who has fallen overboard.
- 11 7. Rendering first aid to a person who may be unconscious or otherwise incapacitated.
- 12 8. Using shipboard tools to repair a mechanical breakdown.
- 13 9. Properly using navigation/communication equipment, if applicable.
- 14 F. Deck and Engineer Officer Licenses.
- In addition to the tasks listed in the Table of Physical Abilities, a practical demonstrationmay include the following elements:
- 17 1. Ascending and descending the ship's ladder.
- 18 2. Ascending and descending a Jacob's ladder.
- 19 3. Opening and closing watertight doors.
- 20 4. Exiting the vessel via emergency routes.
- 21 5. Rowing a lifeboat.
- 22 6. Wearing an emergency breathing apparatus.
- 7. Reaching, handling, grasping, and lifting lifesaving and firefighting equipment requiredby the vessel's COI.
- 25 8. Donning and properly wearing a PFD and casting ring buoys.

- 1 9. Properly using navigation/communication equipment if applicable.
- 2 10. Deck Officers must handle mooring lines and operate winch controls.
- 3 11. Engineers must operate valves and related machinery control equipment.
- 4



TABLE 6-1: PHYSICAL ABILITY GUIDELINES							
SHIPBOARD TASKS, 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).	Has no disturbance in sense of balance.					
Routine access between levels.	Climb up and down vertical ladders and stairways.	Is able, without assistance, to climb up and down vertical ladders and stairways.					
Routine movement between spaces and compartments.	Step over high door sills and coamings, and move through restricted accesses.	Is able, without assistance, to step over a door sill or coaming of 24 inches (61 centimeters) in height. Able to move through a restricted opening of 24 inches by 24 inches (61 centimeters by 61 centimeters).					
Open and close watertight doors, hand-cranking systems, and valve wheels.	Manipulate mechanical devices using manual and digital dexterity and strength.	Is able, without assistance, to open and close watertight doors that may weigh up to 55 pounds (25 kilograms). Should be able to move hands/arms to open and close valve wheels in vertical and horizontal directions, rotate wrists to turn handles, and reach above shoulder height.					
Handle ship's stores.	Lift, pull, push and carry a load.	Is able, without assistance, to lift at least a 40-pound (18.1 kilogram) load off the ground, and to 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.	Is able, without assistance, to crouch, kneel, and stoop, and to grasp, lift and manipulate various common shipboard tools.					
Emergency response procedures including escape from smoke-filled spaces.	Crawl (the ability to move the body with hands and knees); feel (the ability to handle or touch to examine or determine differences in texture and temperature).	Is able, without assistance, to crouch, kneel and crawl, and to distinguish differences in texture and temperature by feel.					
Stand a routine watch.	Stand a routine watch.	Is able, without assistance, to intermittently stand on feet for up to four hours with minimal rest periods.					
React to visual alarms and instructions, and emergency response procedures.	Distinguish an object or shape at a certain distance.	Fulfills the eyesight standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of this table and Chapter 5 of this Manual.</i>					
React to audible alarms and instructions and emergency response procedures.	Hear a specified decibel (dB) sound at a specified frequency.	Fulfills the hearing capacity standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of 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.	Be able to carry and handle fire hoses and fire extinguishers.	Is able, without assistance, to 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.					
Abandon ship.	Use survival equipment.	Be able to physically demonstrate the agility, strength and range of motion to put on a PFD and exposure suit without assistance.					

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¹ The vision and hearing standards listed in Chapter 5 are not applicable to entry level ratings, nor to cadet, student observer, apprentice engineer or apprentice mate ratings. As discussed in Chapter 3, Medical Certification Standards, 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 on the CG-719K/E 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 CG-719K/E for this purpose.

1 CHAPTER 7. MEDICATIONS SUBJECT TO FURTHER REVIEW

2	A.	De	finitions.
3		1.	Acting under the authority of the credential.
4 5			a. The definition of "acting under the authority of a credential" is found in 46 CFR 5.57. It states, in part, that:
6 7 8			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:
9			(1) Required by law or regulation; or
10			(2) Required by an employer as a condition for employment.
11 12 13 14			b. For the purposes of this chapter, the definition of "acting under the authority of the 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.
15		2.	Alcohol means any form or derivative of ethyl alcohol (ethanol) (See 33 CFR 95.010).
16 17 18		3.	<i>Controlled substance</i> 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 (<i>See</i> 21 CFR part 1308 and 33 CFR 95.010).
19 20 21		4.	<i>Drug</i> 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 (<i>See</i> 33 CFR 95.010).
22		5.	Intoxicant means any form of alcohol, drug, or combination thereof (See 33 CFR 95.010).
23	B.	<u>Pro</u>	<u>ohibitions</u> .
24		1.	<u>Illegal Substances</u> .
25 26 27			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.
28		2.	Intoxicants.
29			Operation of vessels while under the influence of drugs or alcohol is regulated under

30 33 CFR part 95. Issuance of a credential does not authorize a mariner to operate a vessel 31 contrary to the provisions in 33 CFR part 95 (*See also* 46 USC 2302).

1 C	. Imp	ortant Safe	ty Warning.

- Certain medications, whether prescription or over-the-counter, have known impairing
 effects, and their labels warn about the risk of drowsiness and caution against use while
 driving or operating hazardous machinery.
- 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.
- 9 3. In the interest of safety of life and property at sea, the Coast Guard views shipboard life,
 10 and the attendant shipboard duties that can arise without warning, as safety-sensitive
 11 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 their credential while
 under the influence of medications that:
- 16 (1) can cause drowsiness;
- 17 (2) can impair cognitive ability, judgment or reaction time; or
- 18 (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 the 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.
- 23 D. Disclosure of Prescription and Over-the-Counter (OTC) Medications.
- 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)).
- 28
 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 over-the-counter (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)).
- 34 E. <u>Recommended Evaluation Data for Medications</u>.

- Applicants seeking medical certification should provide amplifying information for all
 prescription and OTC medications, filled or taken within 30 days prior to the date that the
 applicant submits the Application for Medical Certificate, Form CG-719K, to the Coast
 Guard.
- 5 2. The amplifying information should include, at a minimum.
- 6 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.
- 13
 3. The amplifying information will be reviewed to determine whether the medication and/or underlying condition—
- 15 a. Is approved for use without a waiver;

7

- 16 b. Is approved for issuance of a waiver; or
- 17 c. Poses such a risk that the mariner will not be approved for medical certification.
- 18 4. See Chapter 1 of this Manual for additional information on the medical review process.
- 19 F. <u>Medication Waivers General Information</u>.
- 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.
- 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 1 2 may include restriction of route or trade. 3 5. Medication waivers are generally not approved for use of legally prescribed controlled 4 substances while acting under the authority of the credential. Legally prescribed 5 controlled substances include, but are not limited to, opioid /opiate medications, 6 benzodiazepine medications, non-benzodiazepine sedative hypnotic medications, and 7 barbiturate medications. Further guidance on these medications is provided in Paragraphs 8 I (Medication Waivers Requiring Special Consideration) and J (Recommended 9 Evaluation Data for Medication Waivers Requiring Special Consideration) of this 10 Chapter. 6. The Coast Guard retains final authority for the issuance of medical waivers. 11 G. Medications Subject to Further Review due to Risk of Impaired Cognitive Ability, Judgment, 12 13 or Reaction Time. 1. Medications that may impair cognitive ability, judgment, or reaction time, may be 14 considered disqualifying for issuance of a medical certificate (See 46 CFR 10.304(a)). 15 16 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 17 application. Mariners and applicants who require the use of potentially impairing 18 medications may seek consideration for a waiver in accordance with 46 CFR 10.303. 19 2. The following is a non-exhaustive list of medications that may be deemed disqualifying 20 due to risk of impaired cognitive ability, judgment or reaction time. Mariners who use 21 22 these medications are subject to further medical review to determine whether their use of 23 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 24 25 determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Please refer 26 to the Paragraphs E (Recommended Evaluation Data for Medications) and I (Medication Waivers Requiring Special Consideration) of this Chapter. 27 a. Anti-depressants (Medicines for Treatment of Depression). 28 29 Examples include, but are not limited to, citalopram (Celexa), duloxetine (Cymbalta), 30 paroxetine (Paxil), trazodone (Desyrel), amitriptyline (Elavil) and venlafaxine 31 (Effexor). In many cases, use of anti-depressant medications may be approved 32 without need for a waiver. The medication and the underlying condition will be 33 reviewed to determine whether the mariner applicant requires and/or qualifies for a waiver under 46 CFR 10.303. 34 35 b. Anti-Motion Sickness Agents (Medicines for Treatment of Motion Sickness). Intermittent use of these medications does not require a waiver; however, mariners 36 37 are cautioned against acting under the authority of the credential while under the influence of anti-motion sickness agents that can cause drowsiness or impairment, or 38 39 that carry warnings that caution against driving or operating heavy machinery.

1	c.	Antipsychotics.
2		Examples include, but are not limited to, aripiprazole (Abilify), olanzapine (Zyprexa),
3		quetiapine (Seroquel), lurasidone (Latuda), and risperidone (Risperdal). The
4		medication and the underlying condition will be reviewed to determine whether the
5		mariner qualifies for a waiver under 46 CFR 10.303.
6	d.	Anti-Convulsives, Anti Epileptic Drugs (Medications for Treatment of Seizures).
7		The medication and the underlying condition will be reviewed to determine whether
8		the mariner applicant qualifies for a waiver under 46 CFR 10.303. See Chapter 19 of
9		this Manual, Paragraph E, Seizure or Convulsive Disorders, for guidance on
10		evaluating waivers for conditions that result in use of anti-convulsive or anti-epileptic
11		medications.
12	e.	Antihistamines, Allergy Medications:
13		(1) Non-sedating medications (medications without significant risk of drowsiness).
14		Examples include loratadine (Claritin), fexofenadine (Allegra) and desloratadine
15		(Clarinex). Use of non-sedating antihistamines does not require a waiver.
16		(2) Sedating medications (medications with significant risk of drowsiness,
17		sleepiness). Examples include, but are not limited to diphenhydramine (Benadryl,
18		ClearQuil Nighttime Allergy Relief), cetirizine (Zyrtec), and doxylamine (Aldex
19		AN, Clearquil Nighttime Sinus and Congestion Relief). For chronic or regular
20		use, the medication and the underlying condition will be reviewed to determine
21		whether the mariner applicant qualifies for a waiver under 46 CFR 10.303.
22		Intermittent use of these medications does not require a waiver; however mariners
23		are cautioned against acting under the authority of the credential while under the
24		influence of anti- histamines (allergy medications) that can cause drowsiness or
25		impairment, or that carry warnings that caution against driving or operating heavy
26		machinery.
27	f.	Barbiturate Medications.
28		Examples include, but are not limited to, butalbital (Fiorinal or Fioricet) and
29		phenobarbital. Due to the risk of impaired cognitive ability, judgment, and reaction
30		time, use of barbiturate medications is disqualifying. The medication and the
31		underlying condition will be reviewed to determine whether the mariner applicant
32		qualifies for a waiver under 46 CFR 10.303. Waivers for use within 48 hours prior
33		to, or while acting under the authority of the credential will only be approved on a
34		case-by-case basis if the Coast Guard determines that there are exceptional
35		circumstances that mitigate risk to public safety. See Paragraph I (Medication
36		Waivers Requiring Special Consideration) of this Chapter.
37	g.	Benzodiazepine Medications.

1 2 3		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 diagonalifying. The medications and the underlying condition will be reviewed to
4		disqualifying. The medication and the underlying condition will be reviewed to
5		determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Waivers
6 7		for use within 48 hours prior to, or while acting under the authority of the credential
7		will only be approved on a case-by-case basis if the Coast Guard determines that
8 9		there are exceptional circumstances that mitigate risk to public safety. See Paragraph I (Medication Waivers Requiring Special Consideration) of this Chapter.
10	h.	Cough and Cold Medicines.
11		(1) A number of over-the-counter cough and cold preparations contain sedating anti-
12		histamines or other medicines that can cause drowsiness. Intermittent use of these
13		medications does not require a waiver; however mariners are cautioned against
14		acting under the authority of the credential while under the influence of cough or
15		cold medications that can cause drowsiness or impairment, or that carry warnings
16		that caution against driving or operating heavy machinery.
17		(2) For prescription medications containing opioid or opiate ingredients (such as
18		cough syrups containing codeine or hydrocodone) see Paragraph G.2.k (Legally
19		Prescribed Controlled Substances) of this Chapter.
20	i.	Stimulant Medications.
21		Examples include, but are not limited to, modafinil, methylphenidate, and
22		amphetamine. The medication and the underlying condition will be reviewed to
23		determine whether the mariner qualifies for a waiver under 46 CFR 10.303.
24	j.	Sleep Aids (Medications to help people fall asleep):
25		(1) Over-the-counter (OTC) medications to help with sleep include, but are not
26		limited to, diphenhydramine (Benadryl, Sominex, Tylenol PM, Compoz
27		Nighttime Sleep Aid, ZZZQuil) and doxylamine (Unisom). Mariners are
28		cautioned against acting under the authority of the credential while under the
29		influence of sleep medications that can cause drowsiness or impairment, or that
30		carry warnings that caution against driving or operating heavy machinery.
31		(2) Prescription sleep medications and non-benzodiazepine sedative hypnotic
32		medications. Examples include, but are not limited to zolpidem (Ambien,
33		Intermezzo, Zolpimist), eszopiclone (Lunesta), and zaleplon (Sonata). Due to the
34		risk of impaired cognitive ability, judgment, and reaction time, use of non-
35		benzodiazepine sedative hypnotic medications is disqualifying. The medication
36		and the underlying condition will be reviewed to determine whether the mariner
37		qualifies for a waiver under 46 CFR 10.303. Waivers for use within 12 hours
38		prior to, or while acting under the authority of the credential will only be
39		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.

4 Examples include, but are not limited to, opiate and opioid pain medication such as 5 Tylenol with codeine, oxycodone (Percocet), hydrocodone (Vicodin), hydromorphone (Dilaudid), tramadol (Ultram), methadone, and bruprenorphine (Suboxone). Due to 6 7 the risk of impaired cognitive ability, judgment, and reaction time, use of legally 8 prescribed controlled substances is disqualifying. The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a 9 waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while 10 acting under the authority of the credential will only be approved on a case-by-case 11 12 basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See Paragraph I (Medication Waivers Requiring Special 13 14 Consideration) of this Chapter.

- 15 l. <u>Medical Use of Hallucinogens</u>.
- Examples include, but are not limited to, medical marijuana (use of the marijuana plant), nabinol, nabiximols (Sativex), tetrahydrocannabinol, dronabinol (Marinol),
 Epidiolex, peyote or ecstasy. Even if legalized by a state, use of these substances is disqualifying and will **not** be waived under any circumstances.
- 20 m. <u>Muscle Relaxants</u>.

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- 21 Examples include, but are not limited to, carisoprodol (Soma), cyclobenzaprine (Flexeril), and methocarbamol (Robaxin). The medication and the underlying 22 condition will be reviewed to determine whether the mariner applicant qualifies for a 23 waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while 24 acting under the authority of the credential will only be approved on a case-by-case 25 26 basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See Paragraph I (Medication Waivers Requiring Special 27 Consideration) of this Chapter. 28
- H. <u>Medications Subject to Further Review due to Risk of Other Impairment and Safety</u>
 <u>Concerns.</u>
- 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.
- 35 1. Medications that may impair a mariner's ability to perform routine and emergency duties.
- 36 a. Central nervous system depressants and/or stimulants.
- b. Agents that increase the likelihood of sudden incapacitation.

1			c. Medications that impair vision.
2 3		2.	Medications that may have serious adverse consequences for the user while underway, and may require limitations.
4 5			a. Medications that can cause prolonged bleeding, either spontaneous or traumatic. Individual risk assessment of bleeding likelihood may be needed.
6			b. Dangers from cessation of medication use.
7			c. Long-term or periodic need for antibiotics and other anti-infection agents.
8			d. Anti-metabolites and cancer treatments.
9			e. Medications supplied for use at individual discretion.
10		3.	Medications that may require periodic medical monitoring.
11	I.	<u>M</u>	edication Waivers Requiring Special Consideration.
12 13 14 15		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.
16 17 18 19 20 21 22 23		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 the 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.
24 25 26 27 28 29		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 the credential are listed below. Applicants unable to meet all of the criteria will only be considered for a waiver under extraordinary circumstances if the Coast Guard deems the risk of impairment to be sufficiently low.
30 31 32			a. The mariner was previously granted a waiver allowing use of the same medication while working under the authority of the credential, where the credential was of the same scope of authority.
33			b. The mariner demonstrated compliance with all terms of the prior waiver.

1 2			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).
3 4			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.
5 6				(1) Mariners who have required periodic increases in medication dosing during the preceding 2-year period would not meet this criterion.
7 8 9 10 11 12 13				(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.
14 15				(3) Mariners whose medication dose has been decreased or tapered off, without subsequent dose increase, may be considered as meeting this criterion.
16 17 18			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 the credential.
19 20 21 22 23			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.
24 25 26			g.	When requested, formal neuropsychological/neurocognitive testing, performed as outlined in Paragraph J.2 of this Chapter, documents the absence of significant medication impairment.
27 28			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.
29			i.	Use of methadone may not be waived under any circumstances.
30 31 32		4.	to g	e risk presented by the mariner's position may be considered in determining whether grant a waiver. Because of the wide range of operational conditions, it is impossible to out in advance which positions may be suitable for a waiver.
33		5.	The	e Coast Guard retains final authority for the issuance of waivers.
34		6.	Wa	ivers may include restrictions and/or operational limitations on the credential.
35	J.	Re	com	mended Evaluation Data for Medication Waivers Requiring Special Consideration.

1 2 3	impai	cants seeking consideration for a medication waiver for the use of medications that may r cognitive ability, judgment, or reaction time while acting under the authority of the ntial should submit the additional information detailed below, for each medication:
4	1. A	letter from the prescribing and/or treating physician that includes the following:
5 6	a.	Whether the physician has familiarized him- or herself with the detailed guidelines on medical conditions and medications contained in this Manual.
7 8	b.	Whether the physician understands the safety-sensitive nature of the credential and the specialized shipboard environment.
9 10	c.	A detailed discussion of the condition that requires the use of the potentially impairing medication.
11 12 13 14	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.
15 16 17 18 19	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.
20 21	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.
22 23	g.	A statement about whether the mariner is compliant with therapy and follow-up appointments.
24 25 26 27	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.
28 29 30	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.
31 32 33 34	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.

1 2 3		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.
4 5 6		1.	A medical opinion of whether the mariner has 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.
7 8 9		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.
10 11	2.		hen specifically requested by the reviewing authority, additional amplifying formation, to include formal neuropsychological/neurocognitive evaluation .
12 13 14 15		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 the credential, may be asked to submit the results of a formal neuropsychological/neurocognitive evaluation.
16 17 18 19		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.
20 21		c.	Mariners are advised that submission of neuropsychological/neurocognitive testing results does not guarantee issuance of a waiver.
22 23 24		d.	When formal neuropsychological/neurocognitive evaluation is requested, the assessment should include objective evaluation of the following functions, at a minimum ¹ :
25			(1) Alertness, arousal and vigilance;
26			(2) Attention (focused, shifting and divided), processing speed, and working memory;
27 28			(3) Reaction time (choice and complex), psychomotor function, upper motor speed and coordination;
29			(4) Sensory perceptual function;
30 31 32			(5) Executive function: mental flexibility, adaptive problem solving, abstract reasoning, impulse control, risk taking/risk assessment, organizational ability (including visual spatial organization), and planning;

¹ 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.

1		(6) Memory; and
2		(7) Communication skills.
3 4 5	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.
6 7	f.	The report of formal neuropsychological/neurocognitive evaluation should also include:
8		(1) Documentation of witnessed administration of the medication in question by a
9		licensed medical provider.
10		(2) Documentation of the time interval between ingestion of the medication and
11		administration of the neuropsychological/neurocognitive testing battery.

1	CHAPTER 8. MEDICAL CONDITIONS SUBJECT TO FURTHER REVIEW
2 3	A. Conditions that may be subject to further review include (but are not limited to) the following:
4	1. Allergic Conditions
5	2. Blood or Hematologic Conditions
6	3. Cancer or Malignant Conditions
7	4. Cardiovascular Conditions
8	5. Ear, Nose, and Throat Conditions
9	6. Endocrine Conditions
10	7. Gastrointestinal Conditions
11	8. Genitourinary Conditions
12	9. Infectious Conditions
13	10. Musculoskeletal Conditions
14	11. Neurologic Conditions
15	12. Ophthalmologic Conditions
16	13. Organ Transplant
17	14. Pregnancy
18	15. Psychiatric Conditions
19	16. Pulmonary Conditions
20	17. Skin Conditions
21 22 23	B. Chapters 9-25 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.
24 25	C. 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.

- D. Limitations, waivers and restrictions are discussed in further detail in Chapter 1. Terms used in the Chapters are clarified below:
 - 1. <u>Active Condition</u>.

4		If not specified as "history of" in this Manual, a condition must be currently active to
5		be subject to further review. For purposes of this Manual, "active" means that the
6		applicant is currently under treatment for the condition, or that the applicant is
0 7		currently under observation for possible worsening or recurrence of the condition, or
8		that the condition is currently present. For all active conditions (as defined in this
9		paragraph), the status report, evaluation report or consultation should have been
10		completed no more than one year prior to the date the application is received by the
11		Coast Guard. For conditions that are not active but for which the Manual indicates
12		that a "history of" the condition should be reported (as defined in paragraph 2 below),
13		the appropriate timeframe depends on what is medically relevant given the individual
14		circumstances of the applicant's condition. Medical providers should contact NMC if
15		they have any questions about how recent a status report, evaluation report or
16		consultation should be. See 46 CFR 10.304(d).
17	2.	<u>History Of</u> .
18		As used in this Manual, the term "history of" means a previous diagnosis or treatment
19		of a medical condition by a healthcare provider, even once in the applicant's life,
20		unless otherwise specified in this chapter. It includes all active and present medical
21		conditions.
22	3.	Significant Functional Impairment.
22	5.	<u>Significant i dictional impairment</u> .
23		As used in this Manual, the term "significant functional impairment" means that the
24		medical condition impairs the applicant's ability to fully perform the physical abilities
25		listed in Chapter 6, Physical Ability Guidelines, or that it otherwise interferes with the
26		ability of the applicant to fully perform the duties and responsibilities of the
27		credential.
28	4.	Status Reports, Evaluation Reports and Consultations.
29		All timeframes specified with respect to the evaluation data listed in this table are
30		measured from the date that the application is received by the Coast Guard. For
31		example, if the table calls for a medical test that is no more than 90 days old, the test
32		should have been completed no more than 90 days before the date that the
33		Application for Medical Certificate, Form CG-719K or Application for Medical
34		Certificate, Short Form, CG-719KE is received by the Coast Guard.
35	5.	Other Conditions.
55	5.	<u>other conditions</u> .
36		Any medical condition or physical impairment not otherwise specified in this Manual,
37		which may cause significant functional impairment or sudden incapacitation, or
38		which might otherwise compromise shipboard safety, including required response in

an emergency situation, may be subject to further review. Any medical condition or 1 2 physical impairment not otherwise specified in this Manual which may result in gradual deterioration of performance of duties, or which otherwise poses a threat to 3 the health and safety of the applicant or others may be subject to further review. 4 5 6. Medications, Vitamins and Dietary Supplements. Mariners should not perform a safety sensitive function on any vessel while under the 6 influence of any substance that may negatively impact their performance. To that 7 end, mariners are strongly warned that some prescription medications, over-the-8 counter medications, vitamins, and dietary supplements, alone or in combination with 9 other substances, may adversely affect an individual's ability to perform critical 10 functions and place the individual at risk of sudden incapacitation. Mariners are 11 strongly advised to seek the advice of a physician before taking any medications, 12 vitamins, or dietary supplements. 13 Mariners should read and follow the manufacturer's warnings and directions, and the 14 warnings and directions of their own physicians, in order to minimize the risk of 15 adverse affects. Notwithstanding, little is known about the effects of some 16 supplements and their interaction with other substances. Therefore, the risks 17 associated with their use cannot be determined. See Chapter 7, Guidance on 18 Medications. 19 7. Recommended Evaluation Data. 20 At the time of publication of this Manual, the evaluation data listed in this chapter is 21 what the Coast Guard recommends should be submitted for each condition. 22 Submission of other than the recommended evaluation data may result in processing 23 delay. 24 Documentation of evaluation data specified in this chapter for all applicable medical 25 conditions subject to further review should be submitted with each application, unless 26 otherwise specified by the NMC. Mariners, including first class pilots and those 27 individuals "serving as" pilots (as well as Great Lakes pilots) who are required to 28 submit annual physical examinations to the Coast Guard, may be issued a letter by the 29 NMC specifying the extent of the evaluation data, if any, that should be submitted to 30 the Coast Guard for any medical conditions that have been previously reported to, and 31 evaluated by, the NMC. 32 The Coast Guard will consider alternative approaches proposed by applicants 33 regarding substitution of evaluation data for the recommended evaluation data listed 34 in these chapters, if the alternative approach satisfies the requirements of the 35 applicable statutes and regulations. 36 If you wish to discuss alternative approaches, you should contact the NMC Medical 37 Evaluations Branch, which is responsible for implementing this guidance. All 38 questions regarding implementation of this Manual should be directed to the NMC 39 Medical Evaluations Branch at the following e-mail address: 40

marinermedical@uscg.mil. The NMC can also be telephonically contacted at: 1-888 I-ASK-NMC.

1 CHAPTER 9. ALLERGIC CONDITIONS

2 A. Conditions of Concern.

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Allergic conditions that are life-threatening, impairing, or that pose a 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 and angioedema.

7 **B.** Guidance to Mariner Applicants.

- 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 the credential.
- Allergic conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 18 4. Mariner applicants with allergic conditions should:
- 19a.Discuss the following with their treating provider, and with the provider performing20the medical certificate examination:
- 21 (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:
- 30 (1) The **Treating Provider's Assessment**; and
- 31 (2) **Recommended Evaluation Data**.

1 **C. Guidance to Treating Providers.**

2 1. <u>Treating Provider's Assessment</u>.

3 4		the treating provider's assessment should detail a full evaluation of the condition, as llows:
5	a.	Pertinent medical examination and physical evaluation data;
5	a.	r ertificit inculcar examination and physical evaluation data,
6	b.	The history of the condition;
7	с.	The status of the condition, to include severity, stability, symptoms, presence of
8		impairing complications, and whether the applicant has required emergency
9		treatment, intervention, or hospitalization within the past 6 years;
10	d.	Treatment compliance and efficacy;
11	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation,
12	U.	or debilitating complication;
12		of debilitating completation,
13	f.	Reports of objective testing and standard evaluation data used to support the
14		assessment; and
15	g.	The extent to which the applicant's medical condition is likely to affect, or be
16	U	affected by, service aboard the vessel or service at sea.
17	h.	In some cases, the Coast Guard may request that the applicant submit documentation
18		from a specialist such as an allergist, for example.
19	2. <u>Re</u>	ecommended Evaluation Data.
20	a.	J B II C J I
21		assess the severity of the condition, the applicant's functional capacity; and the
22		presence or absence of impairing complications. This information assists the
23		evaluators in determining whether the mariner is able to perform routine and
24		emergency duties without risk of sudden incapacitation.
25	b.	The treating provider should submit objective testing and supporting documentation
26		as appropriate for the specifics of the mariner applicant's medical condition.
27		Generally, the type and manner of evaluation data or objective testing submitted will
28		be left to the discretion of the treating provider or specialist.
29	c.	If the applicant has undergone prior testing, and the treating physician feels strongly
30		that further testing is not clinically indicated, then the provider should include a
31		statement to that effect in their assessment, along with the results of previously
32		performed testing.

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations</u>.
- 5 Certification determinations will be made on a case-by-case basis. Information 6 considered during the evaluation for issuance of a medical certificate will include, but is 7 not limited to:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 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;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers</u>.
- 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.
- 26 3. <u>Disqualification</u>.
- 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; and

1 2			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.
3	E.	Gı	iida	nce to Designated Medical Examiners (DMEs).
4		1.	Do	ocumentation.
5 6				e DME should ensure that the mariner applicant has provided adequate documentation the condition, to include:
7			a.	An evaluation from the treating provider and/or specialist; and
8			b.	Any appropriate recommended evaluation data.
9		2.	<u>Ap</u>	oproval.
10 11			a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
12				(1) Favorable recommendation from the treating provider;
13 14				(2) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
15 16				(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
17 18				(4) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
19 20 21			b.	If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
22		3.	De	<u>ferral</u> .
23			a.	The DME must defer the decision to the Coast Guard if any of the following apply:
24 25				(1) Unfavorable recommendation or insufficient documentation from the treating provider;
26 27				(2) The applicant has evidence of instability, or history of life-threatening reactions, or impairing symptoms or complications;
28 29				(3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
30 31				(4) The applicant has other symptoms or findings that suggest a significant risk of a syncope, sudden incapacitation, or impairing complication.

- b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
- 4 4. <u>Education</u>.
- 5 The DME should provide education to mariner applicants on how their condition may 6 affect, or be affected by service at sea.
- 7 5. <u>Referral</u>.

The DME should refer mariner applicants to the treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

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1 CHAPTER 10. BLOOD/HEMATOLOGIC CONDITIONS

2 A. Conditions of Concern.

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- Blood or hematologic conditions that are life-threatening, impairing, or that pose a risk of
- 4 sudden incapacitation or debilitating complication are subject to further review, and may be
- 5 determined disqualifying. Examples include, but are not limited to, anemia,
- 6 thrombocytopenia or hypercoagulable states that are symptomatic or unstable.

7 B. Guidance to Mariner Applicants.

- 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 the credential.
- Blood or hematologic conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 19 4. Mariner applicants with blood or hematologic conditions should:
- 20a. Discuss the following with their treating provider, and the provider performing the21medical certificate examination;
- 22 (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:
- 31 (1) The **Treating Provider's Assessment**; and
- 32 (2) **Recommended Evaluation Data**.

1	C. G	Juida	nce to Treating Providers.
2	1	. <u>Tr</u>	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a hematologist, for example.
19	2	. <u>Re</u>	commended Evaluation Data:
20 21 22 23		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 the evaluators in determining whether the mariner is able to perform routine and emergency duties
24			without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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.

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations.</u>
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 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;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers.</u>
- 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.
- 26 3. <u>Disqualification.</u>
- 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; and

1 2	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
3	E. Guidance to Designated Medical Examiners (DMEs).
4	1. Documentation.
5 6	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
7	a. An evaluation from the treating provider and/or specialist; and
8	b. Any appropriate recommended evaluation data.
9	2. <u>Approval</u> .
10 11	a. The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
12	(1) Favorable recommendation from the treating provider;
13 14	(2) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
15 16	(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
17 18	(4) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
19 20 21	b. If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
22	3. <u>Deferral</u> .
23	a. The DME Must Defer the decision to the Coast Guard if any of the following apply:
24 25	(1) Unfavorable recommendation or insufficient documentation from the treating provider;
26 27	(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
28 29	(3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
30 31	(4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.

- b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
- 4 4. <u>Education</u>
- 5 The DME should provide education to mariner applicants on how their condition may 6 affect, or be affected by service at sea.
- 7 5. <u>Referral.</u>

The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

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1 CHAPTER 11. CANCER OR MALIGNANT CONDITIONS

2 A. Conditions of Concern.

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- 3 Cancer or malignant conditions that are impairing, or that pose a risk of sudden
- 4 incapacitation or debilitating complication are subject to further review, and may be
- 5 determined disqualifying. Examples include, but are not limited to, cancer that is not in
- 6 remission, or cancer associated with impairing complications.

7 B. Guidance to Mariner Applicants.

- 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 the credential.
- Cancer or malignant conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 19 4. Mariner applicants with cancer or malignant conditions should:
- 20a. Discuss the following with their treating provider and the provider performing the21medical certificate examination:
- 22 (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:
- 31 (1) The **Treating Provider's Assessment**; and
- 32 (2) **Recommended Evaluation Data**.

1	C. G	uida	nce to Treating Providers.
2	1	. <u>Tre</u>	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an oncologist, for example.
19	2.	<u>Re</u>	commended Evaluation Data.
20 21		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
22 23 24			absence of impairing complications. This information assists the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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.

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations</u>.
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 f. The risk for sudden incapacitation or debilitating complication;
- 14g. The risk of impaired cognitive ability, judgment or reaction time related to the15condition or associated medications;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers</u>.
- 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.
- 26 1. <u>Disqualification.</u>
- 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; and

1 2	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.
3	E. Guidance to Designated Medical Examiners (DMEs).
4	1. Documentation.
5 6	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
7	a. An evaluation from the treating provider and/or specialist; and
8	b. Any appropriate recommended evaluation data.
9	2. <u>Approval</u> .
10 11	a. The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
12	(1) The cancer or malignant condition has been in remission for five years;
13	(2) Favorable recommendation from the treating provider;
14 15	(3) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
16 17	(4) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
18 19	(5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
20 21 22	b. If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
23	3. <u>Deferral</u> .
24	a. The DME Must Defer the decision to the Coast Guard if any of the following apply:
25 26	 The cancer or malignant condition has not been in remission for at least five years;
27 28	(2) Unfavorable recommendation or insufficient documentation from the treating provider;
29 30	(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; or
 - (5) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
- b. If the DME defers the certification decision to the Coast Guard, the DME should
 discuss the reason(s) for deferral and document their recommendation regarding
 medical certification on the Application for Medical Certificate, Form CG-719K.
- 8 4. <u>Education</u>
- 9 The DME should provide education to mariner applicants on how their condition may 10 affect, or be affected by service at sea.
- 11 5. <u>Referral.</u>
- 12 The DME should refer_mariner applicants to their treating provider for follow-up of any 13 abnormal findings discovered during the examination or during screening.
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1 CHAPTER 12. CARDIOVASCULAR CONDITIONS

2 A. Introduction

3	<u>1.</u>	Ca	rdiovascular Conditions of Concern.
4		a.	Cardiovascular conditions known to be accompanied by sudden death,
5			syncope, dyspnea (difficult or labored breathing), collapse, or congestive heart
6 7			failure are subject to further review, and may be determined disqualifying. Examples include, but are not limited to: ischemic heart disease or angina,
8			myocardial infarction, cardiomyopathy, history/risk of arrhythmia, heart
9			failure, uncontrolled hypertension, valvular disease, conduction disturbance,
10			heart transplant, and cardiac tumors and conditions resulting in treatment with
11			a pacemaker.
12		b.	Conditions resulting in treatment with an implantable cardioverter defibrillator
13			are disqualifying and generally will not be approved for issuance of a waiver.
14			See Paragraph XX of this Chapter, Waivers for Cardiovascular Conditions
15			Requiring Special Consideration.
16		C	Conditions resulting in heart transplantation are disqualifying and generally
17		С.	will not be approved for issuance of a waiver. See Paragraph XX of this
18			Chapter, Waivers for Cardiovascular Conditions Requiring Special
19			Consideration.
20		d	General classes of cardiovascular conditions that are subject to further review
20		u.	are discussed in paragraphs B-F of this chapter. These conditions include, but
22			are not limited to:
23			(1) Coronary artery disease and cardiomyopathy;
24			(2) Cardiac arrhythmias;
25			(3) Valvular disease;
26			(4) Vascular disease; and
27			(5) Cerebrovascular disease.
28	2.	Ge	eneral Guidance to Mariner Applicants.
29		a.	Some heart and vascular conditions may be deemed too high-risk for medical
30			certification. This would include conditions with life-threatening reactions
31			and impairing complications, as well as conditions that put the individual at
32			high risk of becoming unstable, unconscious, incapacitated, or otherwise
33			unsafe to operate under the authority of the credential.

1 2 3	b. Heart and vascular conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
4 5 6 7	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.
8	d. Mariner applicants with cardiovascular conditions should:
9 10	(1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
11 12	(a) Their medical condition and the limitations of medical care aboard the vessel;
13	(b) The safety-sensitive nature of their merchant mariner credential;
14 15	(c) How/whether the medical condition may affect, or be affected by service aboard a vessel; and
16 17 18	(d) The recommendation that the treating provider/provider performing the medical certificate examination and review the guidance in this Manual when providing their assessment for medical certification.
19 20	(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
21	(a) The Treating Provider's Assessment; and
22	(b) Recommended Evaluation Data.
23	3. <u>Guidance to Treating Providers</u>
24	a. <u>Treating Provider's Assessment</u> .
25	The treating provider's assessment should detail a full evaluation of the
26	condition, as follows:
27	(1) Pertinent medical examination and physical evaluation data;
28	(2) The history of the condition;
29	(3) The status of the condition, to include severity, stability, symptoms,
30	presence of impairing complications, and whether the applicant has
31	required emergency treatment, intervention or hospitalization within the
32	past 5 years;

1	(4) Treatment compliance and efficacy;
2 3 4	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, sudden incapacitation, or debilitating complication;
5 6	(6) Reports of objective testing and standard evaluation data used to support the assessment; and
7 8	(7) 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.
9 10 11	(8) 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.
12	b. <u>Recommended Evaluation Data.</u>
13 14	(1) Objective testing results and supporting documentation are requested to better assess the severity of the condition, the presence of adequate cardiac
15	capacity; and the presence or absence of ischemia with exercise, or other
16	impairment. This information assists the evaluators in determining
17 18	whether the mariner applicant is able to perform routine and emergency duties without risk of sudden incapacitation.
19 20 21 22 23	(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.
24 25 26 27 28	(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 their assessment, along with the results of previously performed testing.
29 30 31	(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.
32 33 34 35 36	(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. Examples of recommended evaluation data for cardiovascular conditions include, but are not limited to:
37	(a) Echocardiogram with Doppler flow studies;

1	(b) Cardiac catheterization studies;
2	(c) Holter monitoring; and
3	(d) Graded exercise stress testing (treadmill stress testing), with or without
4	perfusion scanning, as indicated.
5	[1] Treadmill stress testing is preferably performed by standard Bruce
6	protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents
7	(METS) of work, and 85% of maximum predicted heart rate.
8	[2] If pharmacological stress testing is submitted in lieu of treadmill
9	testing, then the cardiologist's assessment should discuss the
10	rationale. Additionally, the cardiologist's assessment should
11	provide some manner of objective evaluation of the applicant's
12	exercise capacity, as well as objective evaluation of the applicant's
13	ability to meet the merchant mariner physical ability guidelines as
14	listed in Chapter 6 of this Manual, Physical Ability Guidelines.
15	[3] If medical conditions exist that prevent the mariner from
16	exercising, these conditions may be disqualifying in their own right
17	and will require further evaluation.
18	

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

2 <u>1. Guidance to Mariner Applicants.</u>

3	a.	In some cases, the conditions of coronary artery disease and cardiomyopathy
4		may be deemed too high-risk for medical certification. This would include
5		conditions with life-threatening reactions and impairing complications, as well
6		as conditions that put the individual at high risk of becoming unstable,
7		unconscious, incapacitated, or otherwise unsafe to operate under the authority
8		of the credential.
	1	
9	b.	Coronary artery disease and cardiomyopathy conditions that are determined to
10		pose a low risk of sudden incapacitation may be considered for a waiver, or
11		may not require any waiver or limitation.
12	c.	The evaluation for medical certification and waiver issuance will consider the
13		level of stability, the likelihood for worsening or recurrence, the written
14		assessment of the treating provider or specialist (as applicable), and the results
15		of appropriate testing.
16	d.	Mariner applicants with coronary artery disease and/or cardiomyopathy
17		should:
18		(1) Discuss the following with their treating provider, and with the provider
19		performing the medical certificate examination:
20		(a) Their medical condition and the limitations of medical care aboard the
21		vessel;
22		(b) The safety-sensitive nature of their merchant mariner credential;
		,
23		(c) How/whether the medical condition may affect, or be affected by
24		service aboard a vessel or by service at sea; and
25		(d) The recommendation that the treating provider/provider performing
25 26		the medical certificate examination review the guidance in this Manual
26 27		when providing their assessment for medical certification.
27		when providing their assessment for medical certification.
28		(2) Make sure to submit sufficient information on any of their medical
29		conditions that are subject to further review. This includes:
30		(a) The Treating Provider's Assessment; and
31		(b) Recommended Evaluation Data.
32	2. <u>G</u>	uidance to Treating Providers.
33	a.	The Treating Provider's Assessment.

1 2	The treating provider's assessment should detail a full evaluation of the condition, as follows:
3	(1) Pertinent medical examination and physical evaluation data;
4	(2) The history of the condition;
5 6 7 8	(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 5 years;
9	(4) Treatment compliance and efficacy;
10 11 12	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation or debilitating complication;
13 14	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
15 16	(7) 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.
17 18 19	(8) 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.
20	b. <u>Recommended Evaluation Data</u> .
21 22 23 24 25 26	(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
27 28 29 30 31	(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.
32 33 34 35	(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.

1 2 3	(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 their assessment.
4 5	(5) Examples of recommended evaluation data for coronary artery disease and cardiomyopathies include, but are not limited to:
6	(a) Echocardiogram with Doppler flow study;
7	(b) Cardiac catheterization reports, when applicable; and
8 9	(c) Treadmill stress testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
10 11	[1] Treadmill stress testing is preferably performed by standard Bruce protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents
12	(METS) of work, and 85% of maximum predicted heart rate.
13	[2] If pharmacological stress testing is submitted in lieu of exercise
14	testing, then the cardiologist's assessment should discuss the
15	rationale. Additionally, the cardiologist's assessment should
16	provide some manner of objective evaluation of the applicant's
17	exercise capacity, as well as objective evaluation of the applicant's
18	ability to meet the merchant mariner physical ability guidelines as
19	listed in Chapter 6 of this Manual, Physical Ability Guidelines.
20	[3] If medical conditions exist that prevent the mariner from
20	exercising, these conditions may be disqualifying in their own right
22	and will require further evaluation.
23	3. Medical Certification Evaluation
24	a. <u>Certification Determinations</u> .
25	Certification determinations will be made on a case-by-case basis.
26	Information considered during the evaluation for issuance of a medical
27	certificate will include, but is not limited to:
28	(1) The severity of the condition;
29	(2) The presence of symptoms or impairing complications;
30	(3) The stability of the condition;
31	(4) The need for access to medical care;
32	(5) The applicant's ability to perform routine and emergency duties;
33	(6) The risk for sudden incapacitation or debilitating complication;

1 2		(7) The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
3		(8) The written assessment of the treating provider; and
4		(9) The results of objective testing and standard evaluation data.
5	b.	Medical Waivers
6 7		(1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that
8 9		the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
10 11		(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
12 13		(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
14	c.	Disqualification.
15 16 17		(1) Mariner applicants with reversible cardiac ischemia, syncope; heart failure, angina or other active cardiac symptoms may be found unqualified;
18 19		(2) Mariner applicants with evidence of, or at significant risk for symptomatic or malignant arrhythmias may be found unqualified; and
20		(3) Mariner applicants with conditions requiring treatment with an
21		implantable cardioverter defibrillator (ICD) may be found unqualified.
22 23		Conditions requiring treatment with an ICD are generally considered unsuitable for a medical waiver. See Paragraph G of this Chapter,
24		Waivers for Cardiovascular Conditions Requiring Special
25		Consideration , for further guidance on waiver criteria for applicants with
26		an ICD
27		(4) Mariner applicants with an ejection fraction of less than 40% may be
28		found unqualified;
29		(5) Mariner applicants with other findings that indicate a significant risk of an
30		adverse cardiac event, syncope, collapse, or sudden death may be found
31		unqualified; and
32		(6) Mariner applicants who do not have the exercise/functional capacity
33		and/or physical ability necessary to perform routine and/or emergency
34		duties may be found unqualified.

1	4.	Guidance to Designated Medical Examiners (DMEs).
2		a. <u>Documentation</u> .
3 4		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
5		(1) An evaluation from the treating provider and/or specialist; and
6		(2) Any appropriate recommended evaluation data.
7		b. <u>Approval</u> .
8 9		(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
10		(a) Favorable recommendation from the treating provider;
11 12		(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
13 14		(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event; and
15 16 17		(d) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
18 19 20		(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.
21		c. <u>Deferral</u> .
22 23		(1) The DME must defer the decision to the Coast Guard if any of the following apply:
24 25		(a) Unfavorable recommendation or insufficient documentation from the treating provider;
26 27 28		(b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
29		(c) The applicant's left ventricular ejection fraction is less than 40%;
30 31		 (d) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;

1		(e) The applicant has undergone placement, or been advised to undergo
2		placement of a pacemaker, ICD; or other cardiac implantable device;;
3		or
4		(f) The applicant has other symptoms or findings that suggest a significant
5		risk of an adverse cardiac event, syncope, collapse or sudden death.
6		(2) If the DME defers the certification decision to the Coast Guard, the DME
7		should discuss the reason(s) for deferral and document their
8		recommendation regarding medical certification on the Application for
9		Medical Certificate, CG-719K.
10	d.	Education.
10 11	d.	Education. The DME should provide education to mariner applicants on how their
	d.	
11	d. e.	The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
11 12		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
11 12 13		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea. Referral. The DME should refer mariner applicants to their treating provider for
11 12 13 14		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea. <u>Referral</u> .

1	C. Ca	ardiac Arrhythmias.
2	1.	Guidance to Mariner Applicants.
3 4 5 6 7		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 the credential.
8 9 10		b. Cardiac arrhythmia conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
11 12 13 14		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.
15		d. Mariner applicants with cardiac arrhythmias should:
16 17		(1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
18 19 20		(a) Their medical condition and the limitations of medical care aboard the vessel;(b) The safety-sensitive nature of their merchant mariner credential;
21 22		(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
23 24 25		(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.
26 27		(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
28		(a) The Treating Provider's Assessment ; and
29		(b) Recommended Evaluation Data.
30	2.	Guidance to Treating Providers.
31		a. <u>The Treating Provider's Assessment</u> .
32 33		The treating provider's assessment should detail a full evaluation of the condition, as follows:

1	(1) Pertinent medical examination and physical evaluation data;
2	(2) The history of the condition;
3 4 5 6	(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 5 years;
7	(4) Treatment efficacy and compliance;
8 9 10	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, impairment, sudden incapacitation, or debilitating complication;
11 12	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
13 14	(7) 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.
15 16 17	(8) 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.
18	b. <u>Recommended Evaluation Data.</u>
19 20 21 22 23 24	(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28 29	(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.
30 31 32 33	(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.
34 35	(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

1 2	(5) Examples of recommended evaluation data for cardiac arrhythmias include, but are not limited to:
3	(a) Echocardiogram with Doppler flow study;
4	(b) 24-Hour Holter Monitoring; and
5 6	(c) Treadmill testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
7 8 9	[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.
10 11 12 13 14 15 16	[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.
17 18 19	[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.
20 21 22 23 24	(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.
25 26	 (e) Some arrhythmia conditions may require submission of electrophysiology (EP) studies.
27 28 29 30 31 32	(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).
33	3. <u>Medical Certification Evaluation.</u>
34	a. <u>Certification Determinations</u> .

1 2 3		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:
4		(1) The severity of the condition;
5		(2) The presence of symptoms or impairing conditions;
6		(3) The stability of the condition;
7		(4) The need for access to medical care;
8		(5) The applicant's ability to perform routine and emergency duties;
9		(6) The risk for sudden incapacitation or debilitating complication;
10 11		(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
12		(8) The written assessment of the treating provider; and
13		(9) The results of objective testing and standard evaluation data.
14	b.	Medical Waivers.
15 16 17 18		(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.
19 20		(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
21 22		(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
23	c.	Disqualification.
24		(1) Mariner applicants with reversible cardiac ischemia, syncope; heart
25 26		failure, angina or other active cardiac symptoms may be found unqualified;
27 28		(2) Mariner applicants with evidence of symptomatic or malignant arrhythmias may be found unqualified;
29 30 31 32		(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

1 2	Cardiovascular Conditions Requiring Special Consideration , for further guidance on waiver criteria for applicants with an ICD;
3 4	(4) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
5 6 7	(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; and
8 9 10	(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.
11 12 13	(7) 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.
14	4. <u>Guidance to Designated Medical Examiners (DMEs).</u>
15	a. <u>Documentation</u> .
16 17	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
18	(1) An evaluation from the treating provider and/or specialist; and
19	(2) Any appropriate recommended evaluation data.
20	b. <u>Approval</u> .
21 22	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
23	(a) Favorable recommendation from the treating provider;
24 25	(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
26 27	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse cardiac event; and
28 29 30	 (d) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
31 32 33	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.

1	
2	c. <u>Deferral</u> .
3 4	(1) The DME must defer the decision to the Coast Guard if any of the following apply:
5 6	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
7 8 9	 (b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
10 11	(c) The applicant has signs or symptoms of syncope, heart failure, or other active cardiac symptoms;
12	(d) The applicant's left ventricular ejection fraction is less than 40%;
13 14 15	 (e) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; and
16 17 18	(f) The applicant has undergone placement, or been advised to undergo placement of a pacemaker, ICD; or other cardiac implantable device;; or
19 20	(g) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse, or sudden death.
21 22 23 24	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, CG-719K.
25	d. Education.
26 27	The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
28	e. <u>Referral.</u>
29 30 31	The DME should refer mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.
32	

1 **D. Valvular Disease**

2	1. <u>Guidance to Mariner Applicants.</u>
3 4 5 6	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,
7 8	incapacitated, or otherwise unsafe to operate under the authority of the credential.
9 10 11	b. Valvular disorders that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
12 13 14 15	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.
16	d. Mariner applicants with valvular disease should:
17 18	(1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
19 20 21	(a) Their medical condition and the limitations of medical care aboard the vessel;(b) The safety-sensitive nature of their merchant mariner credential;
22 23	(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
24 25 26	(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.
27 28	(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
29	(e) The Treating Provider's Assessment ; and
30	(f) Recommended Evaluation Data.
31	2. <u>Guidance to Treating Providers.</u>
32	a. <u>The Treating Provider's Assessment</u> .

1 2	The treating provider's assessment should detail a full evaluation of the condition, as follows:
3	(1) Pertinent medical examination and physical evaluation data;
4	(2) The history of the condition;
5	(3) The status of the condition, to include severity, stability, symptoms,
6	presence of impairing complications, and whether the applicant has
7	required emergency treatment, intervention or hospitalization within the
8	past 5 years;
9	(4) Treatment efficacy and compliance;
10	(5) An assessment of the applicant's risk for future adverse cardiac events,
11	malignant arrhythmia, syncope, impairment, sudden incapacitation, or
12	debilitating complication;
13	(6) Reports of objective testing and standard evaluation data used to support
14	their assessment; and
15	(7) The extent to which the applicant's medical condition is likely to affect,
16	or be affected by, service aboard the vessel or service at sea.
17	(8) In some cases, the Coast Guard may request that the applicant submit
18	documentation from a specialist such as a cardiologist, or a
19	cardiothoracic surgeon, for example.
20	b. <u>Recommended Evaluation Data.</u>
21	(1) Objective testing and supporting documentation are requested to better
22	assess the severity of the condition, the applicant's functional capacity;
23	and the presence or absence of ischemia with exercise, or other
24	impairment. This information assists the evaluators in determining
25	whether the mariner is able to perform routine and emergency duties
26	without risk of sudden incapacitation.
27	(2) The treating provider should submit objective testing and supporting
28	documentation as appropriate for the specifics of the mariner applicant's
29	medical condition. Generally, the type and manner of evaluation data or
30	objective testing submitted will be left to the discretion of the treating
31	provider or specialist.
32	(3) If the applicant has undergone prior testing, and the treating physician
33	feels strongly that further testing is not clinically indicated, then the
34	provider should include a statement to that effect in their assessment,
35	along with the results of previously performed testing.

1 2 3	(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 their assessment.
4 5	(5) Examples of recommended evaluation data for valvular disease include, but are not limited to:
6	(a) Echocardiogram with Doppler flow study; and
7	(b) Treadmill testing (graded exercise stress testing), with or without
8	perfusion scanning, as indicated.
9	[1] Treadmill stress testing is preferably performed by standard Bruce
10	protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents
11	(METS) of work, and 85% of maximum predicted heart rate.
12	[2] If pharmacological stress testing is submitted in lieu of exercise
13	testing, then the cardiologist's assessment should discuss the
14	rationale. Additionally, the cardiologist's assessment should
15 16	provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's
10	ability to meet the merchant mariner physical ability guidelines as
18	listed in Chapter 6 of this Manual, Physical Ability Guidelines.
19	[3] If medical conditions exist that prevent the mariner from
20	exercising, these conditions may be disqualifying in their own right
21	and will require further evaluation.
22	(c) Post intervention evaluation for valvular disorders should include a
23	graded exercise stress test with perfusion scanning as clinically
24	indicated and an echocardiogram with Doppler flow study. Treadmill
25	testing is preferably performed by standard Bruce protocol to at least
26	7.5 minutes, 8 METS and 85% maximum predicted heart rate.
27	3. <u>Medical Certification Evaluation.</u>
28	a. <u>Certification Determinations</u> .
29	Certification determinations will be made on a case-by-case basis.
30	Information considered during the evaluation for issuance of a medical
31	certificate will include, but is not limited to:
32	(1) The severity of the condition;
33	(2) The presence of symptoms or impairing complications;
34	(3) The stability of the condition;

1	(4) The need for access to medical care;	
2	(5) The applicant's ability to perform routine and er	nergency duties;
3	(6) The risk for sudden incapacitation or debilitating	g complication;
4 5	(7) The risk of impaired cognitive ability, judgment to the condition or associated medications;	, or reaction time related
6	(8) The written assessment of the treating provider;	and
7	(9) The results of objective testing and standard eva	luation data.
8	b. Medical Waivers.	
9 10 11 12	 Mariner applicants whose condition does not me approved for a medical waiver if objective medi the condition is sufficiently controlled to pose no maritime and public safety. 	cal evidence indicates that
13 14	(2) The evaluation will consider whether there are e that warrant special consideration for issuance of	
15 16	(3) If approved, waivers and limitations may be app and/or medical certificate, on a case-by-case bas	
17	c. <u>Disqualification</u> .	
18 19 20	 Mariner applicants with reversible cardiac ische failure, angina or other active cardiac symptoms unqualified; 	
21 22	(2) Mariner applicants with evidence of, or at signif or malignant arrhythmias may be found unqualit	
23 24	(3) Mariner applicants with an ejection fraction of le found unqualified;	ess than 40% may be
25 26 27	(4) Mariner applicants with other findings that indic adverse cardiac event, syncope, collapse, or sud- unqualified; and	6
28 29 30	(5) Mariner applicants who do not have the exercise and/or physical ability necessary to perform rou duties may be found unqualified.	1 2
31	4. Guidance to Designated Medical Examiners (DMEs).	
32	a. <u>Documentation</u> .	

1 2	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
3	(1) An evaluation from the treating provider and/or specialist; and
4	(2) Any appropriate recommended evaluation data.
5	b. <u>Approval</u> .
6 7	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
8	(a) Favorable recommendation from the treating provider;
9 10	(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
11 12	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse cardiac event; and
13 14 15	 (d) Documentation that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
16 17 18	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.
19	c. <u>Deferral.</u>
20 21	(1) The DME must defer the decision to the Coast Guard if any of the following apply:
22 23	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
24 25 26	 (b) The applicant has evidence of cardiac arrhythmia or ischemia that is symptomatic, untreated, or suggestive of high risk for an adverse cardiac event;
27 28	(c) The applicant has signs or symptoms of syncope; heart failure, or other active cardiac symptoms;
29	(d) The applicant's left ventricular ejection fraction is less than 40%;
30 31	 (e) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;

1		(f) The applicant has undergone placement, or been advised to undergo
2		placement of a pacemaker, ICD; or other cardiac implantable device;;
3		or
4		(g) The applicant has other symptoms or findings that suggest a significant
5		risk of an adverse cardiac event, syncope, collapse, or sudden death.
6		(2) If the DME defers the certification decision to the Coast Guard, the
7		DME's deferral should address the reason(s) for deferral and document
8		their recommendation regarding medical certification on the Application
9		for Medical Certificate, Form CG-719K.
10	d.	Education.
11		The DME should provide education to mariner applicants on how their
12		condition may affect, or be affected by service at sea.
12	2	
13	e.	<u>Referral.</u>
14		The DME should refer mariner applicants to their treating provider for
15		follow-up of any abnormal findings discovered during the examination or
16		during screening.

17

1 E. Vascular Disease—Guidance to Mariner Applicants

2	1.	Guidance to Marin	er Applicants.

3	a.	In some cases, vascular disease may be deemed too high-risk for medical
4		certification. This would include conditions with life-threatening reactions
5		and impairing complications, as well as conditions that put the individual at
6		high risk of becoming unstable, unconscious, incapacitated, or otherwise
7		unsafe to operate under the authority of the credential. Examples of vascular
8		conditions that are subject to further review include, but are not limited to,
9		peripheral vascular disease, deep vein thrombosis, carotid artery disease,
10		aortic aneurysms, and symptomatic thrombophlebitis.
11	b.	Vascular disorders that are determined to pose a low risk of sudden
12		incapacitation may be considered for a waiver, or may not require any waiver
13		or limitation.
14	C	The evaluation for medical certification and waiver issuance will consider the
15	с.	level of stability, the likelihood for worsening or recurrence, the written
16		assessment of the treating provider or specialist (as applicable), and the results
17		of appropriate testing.
18	d.	Mariner applicants with vascular disease should:
19		(1) Discuss the following with their treating provider, and the provider
20		performing the medical certificate examination:
21		(a) Their medical condition and the limitations of medical care aboard the
22		vessel;
23		(b) The safety-sensitive nature of their merchant mariner credential;
24		(c) How/whether the medical condition may affect, or be affected by
25		service aboard a vessel or by service at sea; and
26		(d) The recommendation that the treating provider/provider performing
20 27		the medical certificate examination review the guidance in this Manual
28		when providing their assessment for medical certification.
29		(2) Make sure to submit sufficient information on any of their medical
30		conditions that are subject to further review. This includes:
31		(a) The Treating Provider's Assessment ; and
32		(b) Recommended Evaluation Data.
33	2. Gi	idance to Treating Providers.

1	a.	The Treating Provider's Assessment.
2 3		The treating provider's assessment should detail a full evaluation of the condition as follows:
4		(1) Pertinent medical examination and physical evaluation data;
5		(2) The history of the condition;
6 7 8 9		(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 5 years;
10		(4) Treatment efficacy and compliance;
11 12 13		(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;
14 15		(6) Reports of objective testing and standard evaluation data used to support their assessment; and
16 17		(7) 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.
18 19 20		(8) 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.
21	b.	Recommended Evaluation Data.
22 23 24 25 26 27		(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
28 29 30 31 32		(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
33 34		(3) If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the

1 2	provider should include a statement to that effect in their assessment, along with the results of previously performed testing.
3	(4) If the treating provider seeks to demonstrate the applicant's fitness by
4	alternate means, then the provider should include a statement to that effect
5	in their assessment.
6	(5) Examples of recommended evaluation data for vascular disease include,
7	but are not limited to:
8	(a) Echocardiogram with Doppler flow study;
9	(b) Vascular ultrasound studies;
10	(c) Arteriogram reports (if obtained); and
11	(d) Treadmill stress testing (graded exercise stress testing), with or
12	without perfusion scanning, as indicated.
13	[1] Treadmill stress testing is preferably performed by standard Bruce
14	protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents
15	(METS) of work, and 85% of maximum predicted heart rate.
16	[2] If pharmacological stress testing is submitted in lieu of exercise
17	testing, then the cardiologist's assessment should discuss the
18	rationale. Additionally, the cardiologist's assessment should
19	provide some manner of objective evaluation of the applicant's
20	exercise capacity, as well as objective evaluation of the applicant's
21 22	ability to meet the merchant mariner physical ability guidelines as listed in Chapter 6 of this Manual, Physical Ability Guidelines.
23	[3] If medical conditions exist that prevent the mariner from
24	exercising, these conditions may be disqualifying in their own right
25	and will require further evaluation.
26	3. <u>Medical Certification Evaluation.</u>
27	a. <u>Certification Determinations.</u>
28	Certification determinations will be made on a case-by-case basis.
29	Information considered during the evaluation for issuance of a medical
30	certificate will include, but is not limited to:
31	(1) The severity of the condition;
32	(2) The presence of symptoms or impairing complications;
33	(3) The stability of the condition;

1	(4) The need for access to medical care;
2	(5) The applicant's ability to perform routine and emergency duties;
3	(6) The risk for sudden incapacitation or debilitating complication;
4 5	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
6	(8) The written assessment of the treating provider; and
7	(9) The results of objective testing and standard evaluation data.
8	b. Medical Waivers.
9 10 11 12	(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.
13 14	(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
15 16	(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
17	c. <u>Disqualification.</u>
18 19	(1) Mariner applicants with unstable or symptomatic vascular conditions may be found unqualified; and
20 21 22	(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.
23	4. Guidance to Designated Medical Examiners (DMEs).
24	a. <u>Documentation.</u>
25 26	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
27	(1) An evaluation from the treating provider and/or specialist; and
28	(2) Any appropriate recommended evaluation data.
29	b. <u>Approval</u> .

1 2	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
3	(a) Favorable recommendation from the treating provider;
4 5	(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
6 7	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event; and
8 9 10	 (d) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
11 12 13	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.
14	c. <u>Deferral.</u>
15 16	(1) The DME must defer the decision to the Coast Guard if any of the following apply:
17 18	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
19 20	(b) The applicant is symptomatic or the assessment indicates significant risk for an adverse vascular event;
21 22	(c) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
23 24	(d) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse or sudden death.
25 26 27 28	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, CG-719K.
29	d. <u>Education.</u>
30 31	The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
32	e. <u>Referral.</u>

- 1 **The DME should refer mariner applicants** to their treating provider for 2 follow-up of any abnormal findings discovered during the examination or
 - follow-up of any abnormal findings discovered during the examination or during screening
- 3 4



1 F. Cerebrovascular Disease

2 1. <u>Guidance to Mariner Applicants</u>.

31		(b) Recommended Evaluation Data.
30		(a) The Treating Provider's Assessment; and
28 29		(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
27		when providing their assessment for medical certification.
26		the medical certificate examination review the guidance in this Manual
25		(d) The recommendation that the treating provider/provider performing
24		service aboard a vessel or by service at sea; and
23		(c) How/whether the medical condition may affect, or be affected by
22		(b) The safety-sensitive nature of their merchant mariner credential;
20 21		(a) Their medical condition and the limitations of medical care aboard the vessel;
18 19		(1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
17	d.	Mariner applicants with cerebrovascular disease should:
16		of appropriate testing.
15		
		assessment of the treating provider or specialist (as applicable), and the results
13 14	c.	The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written
12		waiver or limitation.
11		sudden incapacitation may be considered for a waiver, or may not require any
10	b.	Cerebrovascular disease conditions that are determined to pose a low risk of
9		not limited to, stroke and transient ischemic attacks.
8		cerebrovascular conditions that are subject to further review include, but are
7		otherwise unsafe to operate under the authority of the credential. Examples of
6		individual at high risk of becoming unstable, unconscious, incapacitated, or
5		reactions and impairing complications, as well as conditions that put the
3 4	a.	In some cases, cerebrovascular disease may be deemed too high-risk for medical certification. This would include conditions with life-threatening
2	0	In some asses, corebrousseuler disasse mouths deemed too high risk for

1	2. <u>Guida</u>	nce to Treating Providers.
2	a. <u>Tr</u>	eating Provider's Assessment.
3	Th	treating provider's assessment should detail a full evaluation of the
4		ndition as follows:
5	(1)) Pertinent medical examination and physical evaluation data;
6	(2)) The history of the condition;
7	(3)) The status of the condition, to include severity, stability, symptoms,
8		presence of impairing complications, and whether the applicant has
9		required emergency treatment, intervention or hospitalization within the
10		past 5 years;
11	(4)) Treatment efficacy and compliance;
12	(5)) An assessment of the applicant's risk for cerebrovascular events,
13	χ- ,	malignant arrhythmia, syncope, impairment, sudden incapacitation, or
14		debilitating complication;
15	(6)) Reports of objective testing and standard evaluation data used to support
16		their assessment; and
17	(7)) The extent to which the applicant's medical condition is likely to affect, or
18	ζ·,	be affected by, service aboard the vessel or service at sea.
19	(8)) In some cases, the Coast Guard may request that the applicant submit
20		documentation from a specialist such as a cardiologist, neurologist or
21		vascular surgeon, for example.
22	b. <u>Re</u>	ecommended Evaluation Data.
23	(1)) Objective testing and supporting documentation are requested to better
24		assess the severity of the condition, the applicant's functional capacity,
25		and the presence or absence of impairment. This information assists the
26		evaluators in determining whether the mariner is able to perform routine
27		and emergency duties without risk of sudden incapacitation
28	(2)) The treating provider should submit objective testing and supporting
29		documentation as appropriate for the specifics of the mariner applicant's
30		medical condition. Generally, the type and manner of evaluation data or
31		objective testing submitted will be left to the discretion of the treating
32		provider or specialist.
33	(3)) If the applicant has undergone prior testing, and the treating physician
34	(5)	feels strongly that further testing is not clinically indicated, then the

1 2	provider should include a statement to that effect in their assessment, along with the results of previously performed testing.
3 4 5	(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 their assessment.
6 7	(5) Examples of recommended evaluation data for cerebrovascular disease include, but are not limited to:
8	(a) Carotid ultrasound study; and
9	(b) Echocardiogram.
10	3. <u>Medical Certification Evaluation</u> .
11	a. <u>Certification Determinations</u> .
12	Certification determinations will be made on a case-by-case basis.
13	Information considered during the evaluation for issuance of a medical
14	certificate will include, but is not limited to:
15	(1) The severity of the condition;
16	(2) The presence of symptoms or impairing complications;
17	(3) The stability of the condition;
18	(4) The need for access to medical care;
19	(5) The applicant's ability to perform routine and emergency duties;
20	(6) The risk for sudden incapacitation or debilitating complication;
21	(7) The risk of impaired cognitive ability, judgment or reaction time related to
22	the condition or associated medications;
23	(8) The written assessment of the treating provider; and
24	(9) The results of objective testing and standard evaluation data.
25	b. <u>Medical Waivers.</u>
26	(1) Mariner applicants whose condition does not meet the standard may be
27	approved for a medical waiver if objective medical evidence indicates that
28	the condition is sufficiently controlled to pose no significant risk to
29	maritime and public safety.

1 2	(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
3 4	(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
5	c. <u>Disqualification.</u>
6 7	(1) Mariner applicants with symptomatic or unstable disease may be found unqualified; and
8 9 10	(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.
11	4. Guidance to Designated Medical Examiners (DMEs).
12	a. Documentation.
13	The DME should ensure that the applicant has provided adequate
14	documentation for the condition, to include:
15	(1) An evaluation from the treating provider and/or specialist; and
16	(2) Any appropriate recommended evaluation data.
17	b. <u>Approval</u> .
18 19	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
20	(a) Favorable recommendation from the treating provider;
21 22	(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
23 24	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope, or adverse cardiac event; and
25	(d) Documentation that the applicant has the exercise/functional capacity
26 27	and physical ability necessary to perform routine and emergency duties.
28 29	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application
29 30	for Medical Certificate, Form CG-719K.
31	c. <u>Deferral.</u>

1 2		(1) The DME must defer the decision to the Coast Guard if any of the following apply:
3 4		(a) Unfavorable recommendation or insufficient documentation from the treating provider;
5 6		(b) The applicant's exercise/functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
7 8		(c) The applicant has other symptoms or findings that suggest a significant risk of an adverse cardiac event, syncope, collapse or sudden death.
9		(2) If the DME defers the certification decision to the Coast Guard, the DME
10		should discuss the reason(s) for deferral and document their
11 12		recommendation regarding medical certification on the Application for Medical Certificate, CG-719K.
13	d.	Education.
14		The DME should provide education to mariner applicants on how their
15		condition may affect, or be affected by service at sea.
16	e.	Referral.
17		The DME should refer mariner applicants to their treating provider for
18		follow-up of any abnormal findings discovered during the examination or
19		during screening
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G. Waivers for Cardiovascular Conditions That Require Special Consideration.

2 1. <u>Cardiomyopathy.</u>

3	a.	Applicants with this condition may be denied medical certification unless they
4		meet criteria for waiver consideration. The Coast Guard recognizes that there
5		is significant clinical variation within the population of individuals with
6		cardiomyopathy, and that not all individuals with cardiomyopathy carry the
7		same risks of sudden incapacitation or sudden death. These criteria seek to
		discern those individuals with cardiomyopathy who have factors that mitigate
8		
9		their risk, and who have prognostic indicators suggestive of a low risk of
10		sudden incapacitation or adverse cardiac event.
11	b.	Criteria for consideration for a waiver for cardiomyopathy include:
12		(1) A left ventricular ejection fraction of \geq 35% with a stable or improving
12		trend;
14		(1) The absence of symptomatic or clinically significant heart failure in the
15		past two years (must be New York Heart Association Class I);
10		
16		(2) The absence of significant ischemia on cardiac stress testing;
17		(3) The applicant demonstrates an exercise capacity of greater than or equal to
18		8 metabolic equivalents (METs) on cardiac stress testing;
19		(4) The applicant has no history of syncope in the past 3 years;
20		(5) The applicant has no history of ventricular arrhythmia in the past 3 years;
21		and
22		(6) The written opinion of the treating cardiologist or electrophysiologist
23		supports low risk for sudden death, ventricular arrhythmia, adverse cardiac
24		event and sudden incapacitation based upon objective testing and standard
25		evaluation tools.
26		(7) Individuals with cardiomyopathy who have had an implantable
27		cardioverter defibrillator (ICD) placed will be evaluated under the criteria
28		for ICD's as discussed in Paragraph G.2 of this Chapter, Anti-tachycardia
29		Devices or Implantable Defibrillators (ICDs).
30		(8) Individuals with cardiomyopathy who have been advised to undergo
31		placement of an ICD by their cardiologist, but have failed to comply, do
32		not meet the low risk criteria for consideration for a medical waiver.
33		These individuals may be denied medical certification.
34		

1 2. Anti-tachycardia Devices or Implantable Cardioverter Defibrillators (ICDs). a. Mariner applicants with anti-tachycardia devices or implantable cardioverter 2 3 defibrillators (ICDs) are generally not qualified for issuance of a medical certificate. For applicants with these devices, the underlying condition usually 4 poses an inordinate risk of sudden incapacitation. In some very exceptional 5 circumstances, when the underlying condition has improved and stabilized 6 7 sufficiently, a waiver may be issued. The criteria listed below are to be used in assessing whether an applicant's underlying condition has improved 8 sufficiently to warrant granting a waiver. 9 b. A mariner applicant who meets all of the below criteria will normally be 10 considered for a waiver without operational limitations on their credential. 11 Mariners who meet most, but not all of the criteria may be granted a waiver if 12 the risk of sudden incapacitation is deemed sufficiently low. The risk 13 presented by the mariner's position may be considered in determining whether 14 to grant a waiver. Because of the wide range of operational conditions, it is 15 impossible to set out in advance which positions may be suitable for a waiver. 16 c. In cases of applicants with multiple conditions, care must be taken to consider 17 the impact the applicant's other medical conditions have on their suitability 18 for a waiver for ICDs or anti-tachycardia devices. 19 d. Criteria for consideration for a waiver for an ICD include: 20 (1) The applicant does not have a diagnosis of a cardiac channelopathy 21 affecting the electrical conduction of the heart (to include Brugada 22 syndrome, Long QT syndrome, etc.); 23 (2) The applicant does not have a prior history of ventricular fibrillation or 24 episodes of sustained ventricular tachycardia within the last 3 years; 25 (3) The ICD or anti-tachycardia device was implanted more than 3 years ago: 26 (4) The ICD has not fired nor has the applicant required anti-tachycardia 27 pacing therapy within the last three years; 28 29 (5) There are no additional risk factors for inappropriate shock such as uncontrolled atrial fibrillation: 30 (6) The applicant's left ventricular ejection fraction is greater than 35% with a 31 32 steady or improving trend; (7) There is no history of any symptomatic or clinically significant heart 33 failure in the past 2 years; 34

1 2	 (8) There is no evidence of significant reversible ischemia on myocardial perfusion imaging exercise stress testing;
3	(9) The applicant's exercise capacity on formal stress testing (using standard
4	Bruce Protocol) is greater than or equal to 8 metabolic equivalents
5	(METS);
6	(10) The applicant's treating cardiologist or electrophysiologist provides a
7	written assessment that supports a determination that the mariner
8	applicant is at low risk for future arrhythmia, adverse cardiac event, or
9	sudden incapacitation based upon objective testing and standard
10	evaluation tools; and
11	(11) The applicant does not have any other medical conditions which may
12	alone, or in combination with an ICD or anti-tachycardia device, affect
13	his or her fitness.
14	

1 3. <u>Heart Transplant</u>.

2	1.	Applicants who have had a heart transplant may be denied medical certification
3		unless they meet criteria for waiver consideration. These criteria seek to discern
4		those individuals who have undergone a heart transplant who have factors that
5		mitigate their risk, and who have prognostic indicators suggestive of a low risk of
6		sudden incapacitation or adverse cardiac event.
7	2.	Criteria for consideration for a waiver for heart transplant include:
8		a. The heart transplant was performed more than 2 years ago.
9		b. The applicant's left ventricular ejection fraction is greater than or equal to
10		35%, with a stable or improving trend; and
11		c. The applicant has not had symptomatic or clinically significant heart failure in
12		the past two years (must be New York Heart Association Class I); and
13		d. The applicant has no signs, symptoms or laboratory findings that indicate
14		rejection, allograft vasculopathy or significant transplant coronary artery
15		disease; and
16		e. The applicant demonstrates an exercise capacity of greater than or equal to 8
17		metabolic equivalents (METs) on cardiac stress testing;
18		f. The applicant has no history of ventricular arrhythmia in the past three years;
19		and
20		g. The written opinion of the treating cardiologist or transplant surgeon supports
21		low risk for rejection, sudden death, arrhythmia, adverse cardiac event or
22		sudden incapacitation based upon objective testing and standard evaluation
23		tools.

1 CHAPTER 13. EAR, NOSE, AND THROAT CONDITIONS

2 A. Conditions of Concern.

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Ear, nose and throat conditions that impair the applicant's ability to meet the hearing standards, impair and/or that cause disequilibrium are subject to further review, and may be determined disqualifying. Examples include, but are not limited to labyrinthitis, mastoiditis, or acoustic neuroma.

- 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.
- Ear, nose and throat conditions that are determined to pose a low risk of impairment may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 17 4. Mariner applicants with ear, nose, and throat conditions should:
- a. Discuss the following with their treating provider, and the provider performing the
 medical certificate examination;
- 20 (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:
- 29 (1) The **Treating Provider's Assessment**; and
- 30 (2) **Recommended Evaluation Data**.

1	C. G	uida	nce to Treating Providers.
2	1.	Tre	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an otolaryngologist, for example.
19	2.	Re	commended Evaluation Data:
20 21 22 23 24		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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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.

1 2		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.
3	D. Me	edic	cal Certification Evaluation.
4 5	1.		etailed information on the merchant mariner hearing standards and policy are contained Chapter 5 of this Manual, Vision and Hearing Standards.
6	2.	<u>Ce</u>	ertification Determinations.
7 8 9		co	ertification determinations will be made on a case-by-case basis. Information nsidered during the evaluation for issuance of a medical certificate will include, but is t limited to:
10 11		a.	The severity of the condition, to include the degree of auditory impairment, disequilibrium and /or impaired balance;
12		b.	The presence of symptoms or impairing complications;
13		c.	The stability of the condition;
14		d.	The need for access to medical care;
15		e.	The applicant's ability to perform routine and emergency duties;
16		f.	The risk for sudden incapacitation or debilitating complication;
17 18		g.	The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
19		h.	The written assessment of the treating provider; and
20		i.	The results of objective testing and standard evaluation data.
21	3.	M	edical Waivers.
22 23 24		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.
25 26		b.	The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
27 28		c.	If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
29	4.	Di	squalification.
30		a.	Mariner applicants who do not meet the hearing standards may be found unqualified;

1 2 3		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;
4 5		c.	Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
6 7		d.	Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; and
8 9		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.
10	E. Gu	iida	nnce to Designated Medical Examiners (DMEs).
11	1.	Do	ocumentation.
12 13			e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
14		a.	An evaluation from the treating provider and/or specialist; and
15		b.	Any appropriate recommended evaluation data.
16	2.	<u>Ar</u>	pproval.
17 18		a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
19 20			(1) Documentation supports that applicant meets the merchant mariner hearing standards;
21			(2) Favorable recommendation from the treating provider;
22 23			(3) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
24 25			(4) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
26 27			(5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
28 29 30		b.	If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
21	2	Da	formal

31 3. <u>Deferral</u>.

1	a.	The DME Must Defer the decision to the Coast Guard if any of the following apply:
2		(1) The applicant does not meet the merchant mariner hearing standards;
3 4		(2) Unfavorable recommendation or insufficient documentation from the treating provider;
5		(3) The applicant has evidence of instability, r impairing symptoms or complications;
6 7		(4) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
8 9		(5) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
10 11 12	b	. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
13	4. <u>E</u>	ducation
14 15		he DME should provide education to mariner applicants on how their condition may ffect, or be affected by service at sea.
15		<u>eferral.</u>
17		he DME should refer_mariner applicants to their treating provider for follow-up of any
18	al	bnormal findings discovered during the examination or during screening.
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1 CHAPTER 14. ENDOCRINE CONDITIONS

2 A. Conditions of Concern.

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- Endocrine disorders that pose a 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,
- 6 hypoglycemia, Cushing's disease and Addison's disease.

- 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 the credential.
- Endocrine conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 18 4. Mariner applicants with endocrine conditions should:
- 19a. Discuss the following with their treating provider, and the provider performing the20medical certificate examination:
- 21 (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:
- 30 (1) The **Treating Provider's Assessment**; and
- 31 (2) **Recommended Evaluation Data**.

1	C. G	uida	nce to Treating Providers.
2	1.	Tre	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a ophthalmologist, for example.
19	2.	<u>Re</u>	commended Evaluation Data:
20 21 22		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 the evaluators in
23 24			determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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.

1 2	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.
3 4	e.	Examples of recommended evaluation data for endocrinology disorders include but are not limited to glycated hemoglobin (HbA1c) levels.
5	D. Medi	cal Certification Evaluation.
6	1. <u>C</u>	ertification Determinations.
7	С	ertification determinations will be made on a case-by-case basis. Information
8 9	co	onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to:
10	a.	The severity of the condition;
11	b.	The presence of symptoms or impairing complications;
12	c.	The stability of the condition;
13	d.	The need for access to medical care;
14	e.	The applicant's ability to perform routine and emergency duties;
15	f.	The risk for sudden incapacitation or debilitating complication;
16 17	g.	The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
18	h.	The written assessment of the treating provider; and
19	i.	The results of objective testing and standard evaluation data.
20	2. <u>M</u>	ledical Waivers.
21	a.	
22 23		a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
	h	The evaluation will consider whether there are extenuating circumstances that warrant
24 25	0.	special consideration for issuance of a medical waiver.
26	c.	If approved, waivers and limitations may be applied to the credential and/or medical
27		certificate, on a case-by-case basis.
28	d.	Waivers for diabetes mellitus are discussed in Paragraph F, WAIVERS FOR
29		ENDOCRINE CONDITIONS THAT REQUIRE SPECIAL CONSIDERATION.
30		

1	3.	Disqualification.
2 3		a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairin complications may be found unqualified;
4 5		b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; and
6 7		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.
8 9 10 11		d. 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 <u>below</u> , WAIVERS FOR ENDOCRINE CONDITIONS THAT REQUIRE SPECIAL CONSIDERATION.
12	E. Gı	nidance to Designated Medical Examiners (DMEs).
13	1.	Documentation.
14 15		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
16		a. An evaluation from the treating provider and/or specialist; and
17		b. Any appropriate recommended evaluation data.
18	2.	Approval.
19 20		a. The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
21		(1) Favorable recommendation from the treating provider;
22 23		(2) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
24 25		(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications;
26 27		(4) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties; and
28 29 30 31		(5) For applicants with diabetes: The DME may approve if the applicant is not on insulin, their HbA1c level is less than 8%, they have no diabetic complications, and the treating provider documents good compliance, without diabetic complications or episodes of symptomatic hypoglycemia.

b. If the DME approves issuance of the medical certificate, the DME should document 1 the rationale for approving issuance of the medical certificate on the Application for 2 Medical Certificate, Form CG-719K. 3 3. Deferral. 4 a. The DME Must Defer the decision to the Coast Guard if any of the following apply: 5 (1) Unfavorable recommendation or insufficient documentation from the treating 6 provider; 7 (2) The applicant has evidence of instability, or history of life-threatening reactions or 8 impairing symptoms or complications; 9 (3) The applicant's functional capacity and/or physical ability suggests impaired 10 ability to perform routine and emergency duties; or 11 (4) The applicant has other symptoms or findings that suggest a significant risk of 12 syncope, sudden incapacitation or impairing complication. 13 (5) For applicants with diabetes: The DME must defer if the applicant is treated with 14 insulin, their HbA1c level is greater than or equal to 8%, they have diabetic 15 complications, or they have had episodes of symptomatic hypoglycemia. 16 b. If the DME defers the certification decision to the Coast Guard, the DME should 17 discuss the reason(s) for deferral and document their recommendation regarding 18 medical certification on the Application for Medical Certificate, Form CG-719K. 19 4. Education 20 The DME should provide education to mariner applicants on how their condition may 21 affect, or be affected by service at sea. 22 5. Referral. 23 The DME should refer mariner applicants to their treating provider for follow-up of any 24 abnormal findings discovered during the examination or during screening. 25 26

1F. WAIVERS FOR ENDOCRINE CONDITIONS THAT REQUIRE SPECIAL2CONSIDERATION

3	1.	Di	abetes mellitus treated with insulin or with history of diabetic ketoacidosis (DKA).
4		a.	Applicants with this condition may be denied medical certification unless they
5			demonstrate that their condition is sufficiently controlled to warrant consideration for
6			a medical waiver, according to the following:
7			(1) Applicants seeking medical certification should submit an evaluation from the
8			treating physician documenting interval history, and a current glycated
9			hemoglobin (HbA1c) level which is no more than 90 days old.
10			
11			(2) The evaluation from the treating physician should discuss the applicant's
12			treatment compliance, blood glucose log findings, whether the applicant has had
13			any hypoglycemic episodes, and whether the applicant has any diabetic
14			complications. The discussion should also provide explanation of any HbA1c
15			levels of 8% or above, if present.
16			
17		b.	If the evaluation of the treating physician supports good compliance with the
18			treatment regimen, the absence of recent, severe hypoglycemic episodes ¹ , and the
19			absence of impairing diabetic complications, applicants with a consistent pattern of
20			HbA1c levels of less than 8% may be considered for a waiver.
21			
22		c.	Applicants whose HbA1c levels are greater than or equal to 8% but less than 10%
23			may be considered for a medical waiver with a time-limited medical certificate, if the
24			evaluation of the treating physician and objective documentation support extenuating
25			circumstances that indicate low risk for sudden incapacitation or debilitating
26			complication.
27			
28		d.	Applicants with HbA1c levels of greater than 10% are generally not considered for a
29			waiver unless extenuating circumstances confirm temporary irregularity due to acute
30			illness, medication interaction, or other short-term occurrence that is not likely to
31			recur. If issued, the medical certificate would be time-limited.
32			▼
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¹A 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.

2. Diabetes Treated with Oral Medication. 1 a. Applicants with this condition may be denied medical certification unless they 2 demonstrate that their condition is sufficiently controlled according to the following: 3 4 (1) Applicants seeking medical certification should submit an evaluation from the treating physician documenting interval history and a current glycated 5 hemoglobin (HbA1c) level which is no more than 90 days old. 6 7 (2) The evaluation from the treating physician should discuss the applicant's 8 9 treatment compliance, whether the applicant has had any hypoglycemic episodes, and whether the applicant has any diabetic complications. The discussion should 10 also provide explanation of any HbA1c levels of 8% or greater, if present. 11 12 b. If the evaluation of the treating physician supports good compliance with the 13 treatment regimen, the absence of recent, severe hypoglycemic¹ episodes, and the 14 absence of impairing diabetic complications, applicants with a consistent pattern of 15 HbA1c levels of less than 8% may be considered for a full-term medical certificate. 16 17 c. Applicants whose HbA1c levels are greater than or equal to 8%, but less than 10%, 18 may be considered for a medical waiver if the evaluation of the treating physician and 19 objective documentation support extenuating circumstances that indicate low risk for 20 sudden incapacitation or debilitating complication. 21 22 d. Applicants with HbA1c levels of greater than 10% are generally not considered for a 23 waiver unless extenuating circumstances confirm temporary irregularity due to acute 24 illness, medication interaction, or other short-term occurrence that is not likely to 25 recur. If issued, the medical certificate would be time-limited. 26 27 28 29 30

1 CHAPTER 15. GASTROINTESTINAL CONDITIONS

2 A. Conditions of Concern.

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3 Gastrointestinal conditions that are life-threatening, impairing, or that pose a risk of sudden

- 4 incapacitation or debilitating complication are subject to further review, and may be
- 5 determined disqualifying. Examples of conditions that are subject to further review include,
- 6 but are not limited to peptic ulcer disease, symptomatic or clinically significant hernia,
- 7 inflammatory bowel disease, gastrointestinal bleeding, gastrointestinal malignancies,
- 8 hepatitis, cirrhosis, esophageal varices, ascites, and liver transplant.

- 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 the credential.
- Gastrointestinal conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 21 4. Mariner applicants with gastrointestinal 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;
- 26 (3) How/whether the medical condition may affect, or be affected by service aboard a
 27 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.
- 31b. Make sure to submit sufficient information on any of their medical conditions that are32subject to further review. This includes:
- 33 (1) The **Treating Provider's Assessment**; and

1	(2) Recommended Evaluation Data.		
2	C. Guida	ance to Treating Providers.	
3	1. <u>Tr</u>	reating Provider's Assessment.	
4 5		ne treating provider's assessment should detail a full evaluation of the condition as llows:	
6	a.	Pertinent medical examination and physical evaluation data;	
7	b.	The history of the condition;	
8 9 10	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;	
11	d.	Treatment compliance and efficacy;	
12 13	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;	
14 15	f.	Reports of objective testing and standard evaluation data used to support their assessment; and	
16 17	g.	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.	
18 19	h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as hepatologist, for example.	
20	2. <u>R</u> e	ecommended Evaluation Data:	
21 22 23 24 25	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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.	
26 27 28 29	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.	
30 31 32 33	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.	

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations.</u>
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 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;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers.</u>
- 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.
- 26 3. <u>Disqualification.</u>
- 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; and

1 2		
3	E. Guidance to Designated Medical Examiners (DMEs).	
4	4 1. <u>Documentation</u> .	
5 6		adequate documentation for the
7	7 a. An evaluation from the treating provider and/or spec	cialist; and
8	8 b. Any appropriate recommended evaluation data.	
9	9 2. <u>Approval</u> .	
10 11		ificate if their evaluation finds
12	2 (1) Favorable recommendation from the treating provid	er;
13 14		for emergency intervention,
15 16		
17 18		
19 20 21	the rationale for approving issuance of the medical of	
22	2 3. <u>Deferral</u> .	
23	a. The DME Must Defer the decision to the Coast Gua	ard if any of the following apply:
24 25		entation from the treating
26 27		of life-threatening reactions or
28 29		ability suggests impaired ability
30 31		

- (5) The applicant has a history of gastrointestinal bleeding, cirrhosis, ascites, esophageal varices, or liver transplant; or the applicant has a history of gastrointestinal malignancy that is not in remission.
- b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
- 7 4. <u>Education</u>
- 8 The DME should provide education to mariner applicants on how their condition may 9 affect, or be affected by service at sea.
- 10 5. <u>Referral.</u>
- 11 The DME should refer_mariner applicants to their treating provider for follow-up of any 12 abnormal findings discovered during the examination or during screening.
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1 CHAPTER 16. GENITOURINARY CONDITIONS

2 A. Conditions of Concern.

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Genitourinary conditions that are life-threatening, impairing, or that pose a risk of sudden
 incapacitation or debilitating complication are subject to further review, and may be
 determined disgualifying. Examples include, but are not limited to kidney (renal) failure.

Kidney (renal) failure requiring renal replacement therapy (dialysis) is disqualifying and
 generally will not be approved for issuance of a waiver.

- 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 the credential.
- Genitourinary conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 19 4. Mariner applicants with genitourinary 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:
- 31 (1) The **Treating Provider's Assessment**; and
- 32 (2) **Recommended Evaluation Data**.

1 **C. Guidance to Treating Providers.**

2 1. <u>Treating Provider's Assessment</u>.

3 4		The treating provider's assessment should detail a full evaluation of the condition as follows:	
5	a.	Pertinent medical examination and physical evaluation data;	
6	b.	The history of the condition;	
7	c.	The status of the condition - to include severity, stability, symptoms, presence of	
8		impairing complications, and whether the applicant has required emergency	
9		treatment, intervention or hospitalization within the past 6 years;	
10	d.	Treatment compliance and efficacy;	
11	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation,	
12	0.	or debilitating complication;	
12		of debinduning complication,	
13	f.	Reports of objective testing and standard evaluation data used to support their	
14		assessment; and	
15	g.	The extent to which the applicant's medical condition is likely to affect, or be	
16	-	affected by, service aboard the vessel or service at sea.	
17	h.	In some cases, the Coast Guard may request that the applicant submit documentation	
18		from a specialist such as a nephrologist, for example.	
10	1 D.		
19	2. <u>Re</u>	ecommended Evaluation Data:	
20	а	Objective testing and supporting documentation may be requested to better assess the	
20 21	<i>a</i> .	severity of the condition, the applicant's functional capacity; and the presence or	
21		absence of impairing complications. This information assists the evaluators in	
22 23		determining whether the mariner is able to perform routine and emergency duties	
23 24		without risk of sudden incapacitation.	
24		without fisk of sudden meapacitation.	
25	b.	The treating provider should submit objective testing and supporting documentation	
26		as appropriate for the specifics of the mariner applicant's medical condition.	
27		Generally, the type and manner of evaluation data or objective testing submitted will	
28		be left to the discretion of the treating provider or specialist.	
29	с.	If the applicant has undergone prior testing, and the treating physician feels strongly	
30		that further testing is not clinically indicated, then the provider should include a	
31		statement to that effect in their assessment, along with the results of previously	
32		performed testing.	

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations.</u>
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 f. The risk for sudden incapacitation or debilitating complication;
- 14g. The risk of impaired cognitive ability, judgment or reaction time related to the15condition or associated medications;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers.</u>
- 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.
- 26 3. <u>Disqualification.</u>
- 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; and

1 2	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
3	d.	. Mariner applicants who require dialysis treatment may be found unqualified.
4	E. Guid	ance to Designated Medical Examiners (DMEs).
5	1. <u>D</u>	ocumentation.
6 7		he DME should ensure that the applicant has provided adequate documentation for the ondition, to include:
8	a.	An evaluation from the treating provider and/or specialist; and
9	b.	. Any appropriate recommended evaluation data.
10	2. <u>A</u>	.pproval.
11 12	a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
13		(1) Favorable recommendation from the treating provider;
14 15		(2) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
16 17		(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
18 19		(4) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
20 21 22 23	b.	. The DME should document their rationale for approving issuance of the medical If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
24	3. <u>D</u>	<u>eferral</u> .
25	a.	The DME Must Defer the decision to the Coast Guard if any of the following apply:
26 27		(1) Unfavorable recommendation or insufficient documentation from the treating provider;
28 29		(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
30 31		(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 requires dialysis.
- b. If the DME defers the certification decision to the Coast Guard, the DME should
 discuss the reason(s) for deferral and document their recommendation regarding
 medical certification on the Application for Medical Certificate, Form CG-719K.
- 7 4. <u>Education</u>
- 8 The DME should provide education to mariner applicants on how their condition may 9 affect, or be affected by service at sea.
- 10 5. <u>Referral.</u>
- 11 The DME should refer_mariner applicants to their treating provider for follow-up of any 12 abnormal findings discovered during the examination or during screening.
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1 CHAPTER 17. INFECTIOUS CONDITIONS

2 A. Conditions of Concern.

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Infectious conditions that are life-threatening, impairing, or that pose a 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.

- 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 the credential.
- Infectious conditions that are determined to pose a low risk of sudden incapacitation may
 be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 19 4. Mariner applicants with infectious conditions should:
- 20a. Discuss the following with their treating provider, and the provider performing the21medical certificate examination:
- 22 (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:
- 31 (1) The **Treating Provider's Assessment**; and
- 32 (2) **Recommended Evaluation Data**.

1	C. (Gui	dance to Treating Providers.
2		l. <u>7</u>	Freating Provider's Assessment.
3 4			The treating provider's assessment should detail a full evaluation of the condition as follows:
5		8	. Pertinent medical examination and physical evaluation data;
6		ł	b. The history of the condition;
7 8 9		C	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;
10		C	I. Treatment compliance and efficacy;
11 12		e	e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		٤	g. 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.
17 18		ł	n. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an infectious disease specialist, for example.
19	4	2. <u>I</u>	Recommended Evaluation Data:
20 21 22 23 24	•	٤	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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		ł	5. 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.
29 30 31 32		C	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.

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations.</u>
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 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;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers.</u>
- 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.
- 26 3. <u>Disqualification.</u>
- 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; and

1 2	с.	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.
3	E. Guida	ance to Designated Medical Examiners (DMEs).
4	1. <u>D</u> o	ocumentation.
5 6		The DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
7	a.	An evaluation from the treating provider and/or specialist; and
8	b.	Any appropriate recommended evaluation data.
9	2. <u>A</u>	oproval.
10 11	a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
12	(1)) Favorable recommendation from the treating provider;
13 14	(2)) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
15 16	(3)) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
17 18	(4)	Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
19 20 21	b.	If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
22	3. <u>De</u>	<u>eferral</u> .
23	a.	The DME Must Defer the decision to the Coast Guard if any of the following apply:
24 25	(1)) Unfavorable recommendation or insufficient documentation from the treating provider;
26 27	(2)) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
28 29	(3)) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
30 31	(4)) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.

- b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
- 4 4. <u>Education</u>
- 5 The DME should provide education to mariner applicants on how their condition may 6 affect, or be affected by service at sea.
- 7 5. <u>Referral.</u>

The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

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1 CHAPTER 18. MUSCULOSKELETAL CONDITIONS

2 A. Conditions of Concern.

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Musculoskeletal conditions that are life-threatening, impairing, or that pose a 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 conditions, conditions resulting in use of controlled substances or impairing medications; and paraplegia, amputation or restricted motions of limb.

8 **B.** Guidance to Mariner Applicants.

- 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 the credential.
- Musculoskeletal conditions that are determined to pose a low risk of sudden
 incapacitation may be considered for a waiver, or may not require any waiver or
 limitation.
- 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.
- 20 4. Mariner applicants 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 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:
- 32 (1) The **Treating Provider's Assessment**; and
- 33 (2) **Recommended Evaluation Data**.

1	C. Guida	ance to Treating Providers.
2	1. <u>Tı</u>	reating Provider's Assessment.
3 4		he treating provider's assessment should detail a full evaluation of the condition as llows:
5	a.	Pertinent medical examination and physical evaluation data;
6	b.	The history of the condition;
7 8 9	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;
10	d.	Treatment compliance and efficacy;
11 12	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14	f.	Whether the applicant's condition is being treated with controlled substances or impairing medications;
15 16 17	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;
18 19	h.	Reports of objective testing and standard evaluation data used to support their assessment; and
20 21	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.
22 23 24	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.
25	2. <u>R</u> e	ecommended Evaluation Data:
26 27 28 29 30	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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
31 32	b.	The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition.

1 2		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 4 5 6	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.			
7 8 9 10	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. Examples of recommended evaluation data for musculoskeletal disorders include, but are not limited to:		
11		(1) Demonstration of physical abilities;		
12 13 14		(2) Practical examination underway – 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		
15 16 17		(3) Neuropsychological/neurocognitive testing - if condition results in use of controlled substances or impairing medications, and such testing was requested by the Coast Guard.		
18	D. Medi	cal Certification Evaluation.		
19	1. <u>Ce</u>	ertification Determinations.		
	Ce co	ertification Determinations. ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to:		
19 20 21	Ce co nc	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is		
19 20 21 22	Ce co nc	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition;		
19 20 21 22 23	Ce co nc a.	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition; The presence of symptoms or impairing complications;		
 19 20 21 22 23 24 	Ce co nc a. b.	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition; The presence of symptoms or impairing complications; The stability of the condition;		
 19 20 21 22 23 24 25 	Ce co no a. b. c.	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition; The presence of symptoms or impairing complications; The stability of the condition;		
 19 20 21 22 23 24 25 26 	Ce co no a. b. c. d.	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition; The presence of symptoms or impairing complications; The stability of the condition; The need for access to medical care;		
 19 20 21 22 23 24 25 26 27 	Ce co no a. b. c. d. e.	ertification determinations will be made on a case-by-case basis. Information onsidered during the evaluation for issuance of a medical certificate will include, but is the limited to: The severity of the condition; The presence of symptoms or impairing complications; The stability of the condition; The need for access to medical care; The applicant's ability to perform routine and emergency duties; The risk for sudden incapacitation or debilitating complication;		
 19 20 21 22 23 24 25 26 27 28 29 	Ce co no a. b. c. d. e. f.	ertification determinations will be made on a case-by-case basis. Information insidered during the evaluation for issuance of a medical certificate will include, but is of limited to: The severity of the condition; The presence of symptoms or impairing complications; The stability of the condition; The need for access to medical care; The applicant's ability to perform routine and emergency duties; The risk for sudden incapacitation or debilitating complication; The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;		

1	2	2. <u>M</u>	ledical Waivers.
2 3 4		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.
5 6		b.	The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
7 8		c.	If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
9	3	8. <u>D</u>	isqualification.
10 11		a.	Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
12 13		b.	Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified;
14 15		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
16 17 18		d.	Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified. See Chapter 7 of this Manual, Medications Subject to Further Review, for guidance on medications.
19	E. (Guid	ance to Designated Medical Examiners (DMEs).
20	1	. <u>D</u>	ocumentation.
21 22			be DME should ensure that the applicant has provided adequate documentation for the ondition, to include:
23	•	a.	An evaluation from the treating provider and/or specialist; and
24		b.	Any appropriate recommended evaluation data.
25	2	2. <u>A</u>	pproval.
26 27		a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
28			(1) Favorable recommendation from the treating provider;
29 30			(2) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;

1 2		 (3) The conditions is not being treated with controlled substances or impairing medications;
3 4		(4) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
5 6		(5) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
7 8 9	b	. If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
10	3. <u>D</u>	Deferral.
11	a	. The DME must defer the decision to the Coast Guard if any of the following apply:
12 13		(1) Unfavorable recommendation or insufficient documentation from the treating provider;
14 15		(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
16 17		(3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties;
18 19		(4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication; or
20 21		(5) The applicant's condition is treated with controlled substances or impairing medications.
22 23 24	b	. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
25	4. <u>E</u>	<u>Education</u>
26 27		The DME should provide education to mariner applicants on how their condition may ffect, or be affected by service at sea.
28	5. <u>R</u>	Referral.
29 30		The DME should refer_mariner applicants to their treating provider for follow-up of any bnormal findings discovered during the examination or during screening.
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1 CHAPTER 19. NEUROLOGIC CONDITIONS

2 A. Introduction.

3	1.	Ne	urologic Conditions of Concern.
4 5		a.	Neurologic conditions associated with impaired function, cognitive ability, judgment or reaction time; or associated with disturbance of consciousness or altered sensorium, including, but not limited to, stroke, transient ischemic
6 7			•
7 8			attack, tumor, disorders of disequilibrium, migraine headaches, migraine visual aura, and transient loss of control of nervous system function are
8 9			subject to further review, and may be determined disqualifying.
10		b.	The conditions of epilepsy, seizures, and convulsive disorders are
11			disqualifying and generally will not be approved for issuance of a waiver. See
12			Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring
13			Special Consideration.
14		c.	Sleep disorders, including but not limited to, obstructive sleep apnea, central
15			hypersomnias, and insomnia, are subject to further review, and may be
16			determined disqualifying. The conditions of narcolepsy and idiopathic
17			hypersomnia are disqualifying and generally will not be approved for issuance
18			of a waiver. See Paragraph G of this Chapter, Waivers for Neurologic
19			Conditions Requiring Special Consideration.
20		d.	General classes of neurologic conditions that are subject to further review
21			include, but are not limited to:
22			(1) Chronic, Progressive Conditions;
23			(2) Non-progressive Conditions;
24			(3) Intracranial Surgery, Brain Injury, Brain Tumors, or Central Nervous
25			System Infection;
26			(4) Seizure Disorders; and
27			(5) Sleep Disorders.
28	2.	Ge	neral Guidance to Mariner Applicants.
29		a.	Some neurologic conditions may be deemed too high risk for medical
30			certification. This would include conditions with life-threatening reactions
31			and impairing complications, as well as conditions that put the individual at
32			high risk of becoming unstable, unconscious, incapacitated, or otherwise
33			unsafe to operate under the authority of the credential.

1 2 3	0	at are determined to pose a low risk of sudden nsidered for a waiver, or may not require a waiver or
4 5 6 7	level of stability, the like	cal certification and waiver issuance will consider the lihood for worsening or recurrence, the written g provider or specialist (as applicable), and the results
8	d. Mariner applicants with	neurologic conditions should:
9 10		g with their treating provider and with the provider cal certificate examination:
11 12	(a) Their medical convessel;	ndition and the limitations of medical care aboard the
13	(b) The safety sensiti	ve nature of their merchant mariner credential;
14 15	(c) How/whether the service aboard a	medical condition may affect, or be affected by vessel;
16 17 18	medical certificat	tion that the treating provider/provider review the e examination and review the guidance in this viding their assessment for medical certification.
19 20		sufficient information on any of their medical bject to further review. This includes:
21	(a) The Treating Pr	ovider's Assessment; and
22	(b) Recommended I	Evaluation Data
23	3. <u>Guidance to the Treating Pro</u>	widers.
24	a. <u>Treating Provider's Asse</u>	ssment.
25		ssessment should detail a full evaluation of the
26	condition as follows:	
27	(1) Pertinent medical example.	amination and physical evaluation data;
28	(2) The history of the co	ndition;
29		dition, to include severity, stability, symptoms,
30		g complications, and whether the applicant has
31		reatment, intervention or hospitalization within the
32	past 5 years;	

1	(4) Treatment compliance and efficacy;
2 3	(5) An assessment of the applicant's risk for future adverse neurologic events, syncope, sudden incapacitation, or debilitating complication; and
4	(6) Reports of any objective testing and standard evaluation tools that were
5	performed to aid in their assessment; and
6	(7) The extent to which the applicant's medical condition is likely to affect, or
7	be affected by, service aboard the vessel or service at sea.
8	(8) In some cases, the Coast Guard may request that the applicant submit
9	documentation from a specialist such as a neurologist, sleep specialist or
10	neurosurgeon, for example.
11	b. <u>Recommended Evaluation Data</u> .
12	(1) Objective testing results and supporting documentation are requested to
13	better assess the severity of the condition, the presence of adequate
14	functional capacity; and the presence or absence of impairment. This
15	information assists the evaluators in determining whether the mariner is
16	able to perform routine and emergency duties without risk of sudden
17	incapacitation.
18	(2) The treating provider should submit objective testing and supporting
19	documentation as appropriate for the specifics of the mariner applicant's
20	medical condition. Generally, the type and manner of evaluation data or
21	objective testing submitted will be left to the discretion of the treating
22	provider or specialist.
23 24 25 26 27	(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.
28 29 30	(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.
31	(5) The Coast Guard may request additional testing, studies, or specialist
32	evaluation, on a case-by-case basis, if the mariner applicant's medical
33	condition is determined to be of significant concern. Examples of
34	Recommended Evaluation Data for neurologic conditions include, but are
35	not limited to:
36	(a) Electroencephalogram;

1	(b) Polysomnogram;
2	(c) Positive airway pressure therapy logs; and
3	(d) Neuropsychological/neurocognitive testing.
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1 **B.** Chronic, Progressive Conditions. 2 1. Guidance to Mariner Applicants. a. Examples include, but are not limited to, multiple sclerosis, Alzheimer's 3 disease, and Parkinson's disease. In some cases, chronic, progressive 4 neurologic conditions may be deemed too high risk for medical certification. 5 This would include conditions with life-threatening reactions and impairing 6 complications, as well as conditions that put the individual at high risk of 7 becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate 8 under the authority of the credential. 9 b. Chronic, progressive conditions that are determined to pose a low risk of 10 sudden incapacitation or debilitating complication may be considered for a 11 waiver, or may not require any waiver or limitation. 12 c. The evaluation for medical certification and waiver issuance will consider the 13 level of stability, the likelihood for worsening or recurrence, the written 14 assessment of the treating provider or specialist (as applicable), and the results 15 of appropriate testing. 16 d. Mariner applicants with chronic, progressive conditions should: 17 (1) Discuss the following with their treating provider, and the provider 18 performing the medical certificate examination: 19 (a) Their medical condition and the limitations of medical care aboard the 20 vessel; 21 (b) The safety sensitive nature of their merchant mariner credential; 22 (c) How/whether the medical condition may affect, or be affected by 23 service aboard a vessel or by service at sea; and 24 (d) The recommendation that the treating provider/provider performing 25 the medical certificate examination review the guidance in this Manual 26 when providing their assessment for medical certification. 27 (2) Make sure to submit sufficient information on any of their medical 28 conditions that are subject to further review. This includes: 29 (a) The Treating Provider's Assessment; and 30 (b) Recommended Evaluation Data. 31 32 2. Guidance to Treating Providers. a. Treating Provider's Assessment. 33

1 2	The treating provider's assessment should detail a full evaluation of the condition as follows:
3	(1) Pertinent medical examination and physical evaluation data;
4	(2) The history of the condition;
5 6 7 8	(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 5 years;
9	(4) Discuss treatment compliance and efficacy;
10 11 12	 (5) Include an assessment of the applicant's risk for future adverse neurologic events, syncope, impairment sudden incapacitation debilitating complication;
13 14	(6) Include reports of objective testing and standard evaluation data used to support their assessment; and
15 16	(7) Discuss 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.
17 18 19	(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a neurologist or neurosurgeon, for example.
20	b. <u>Recommended Evaluation Data</u> .
21 22 23 24 25 26	(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
27 28 29 30 31	(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.
32 33 34 35	(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.

1 2 3	(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 their assessment.
4 5 6	(5) Examples of recommended evaluation data for chronic, progressive neurologic conditions may include, but are not limited to neuropsychological/neurocognitive testing.
7	3. <u>Medical Certification Evaluation</u> .
8	a. <u>Certification Determinations</u> .
9 10 11	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:
12	(1) The severity of the condition;
13	(2) The presence of symptoms or impairing complications;
14	(3) The stability of the condition;
15	(4) The need for access to medical care;
16	(5) The applicant's ability to perform routine and emergency duties;
17	(6) The risk for sudden incapacitation or debilitating complication;
18 19	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
20	(8) The written assessment of the treating provider; and
21	(9) The results of objective testing and standard evaluation data.
22	b. <u>Medical Waivers</u> .
23	(1) Mariner applicants whose condition does not meet the standard may be
24	approved for a medical waiver if objective medical evidence indicates
25	that the condition is sufficiently controlled to pose no significant risk to
26	maritime and public safety.
27	(2) The evaluation will consider whether there are extenuating circumstances
28	that warrant special consideration for issuance of a medical waiver.
29 30	(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
31	c. <u>Disqualification</u> .

1 2	 Mariner applicants whose conditions are unstable or at risk for rapid deterioration may be found unqualified;
3 4	(2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
5 6	(3) Mariner applicants with impaired cognitive ability, judgment or reaction time may be found unqualified;
7 8 9	 (4) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
10 11	(5) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified; and
12 13 14	(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.
15	4. Guidance to Designated Medical Examiners (DMEs).
16	a. <u>Documentation</u> .
17 18	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
19	(1) An evaluation from the treating provider and/or specialist; and
20	(2) Any appropriate recommended evaluation data.
21	b. <u>Approval</u> .
22	(1) The DME may approve issuance of the medical certificate if their
23	evaluation finds that the applicant meets all of the following:
24	(a) Favorable recommendation from the treating provider;
25	(b) Condition is asymptomatic and without recent need for emergency
26	care, major intervention, hospitalization or surgery;
27	(c) Condition has been stable and the assessment indicates low likelihood
28	of sudden exacerbation, syncope or adverse event;
29	(d) Documentation supports no impairment of cognitive ability, judgment
30	or reaction time; and

1 2 3	 (e) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
4 5	(2) The DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.
6	c. <u>Deferral</u> .
7 8	(1) The DME Must Defer the decision to the Coast Guard if any of the following:
9 10	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
11 12	(b) The applicant's condition is symptomatic, unstable, or suggestive of high risk for progression;
13 14	 (c) The applicant's evaluation and/or medications indicate risk of impaired cognitive ability, judgment or reaction time;
15 16	(d) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
17 18	(e) The applicant has other symptoms or findings that suggest a significant risk for syncope, collapse or other adverse neurologic event.
19 20 21 22	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, CG-719K.
23	d. <u>Education</u> .
24	The DME should provide education to mariner applicants on how their
25	condition may affect, or be affected by service at sea.
26	e. <u>Referral</u> .
27	The DME should refer mariner applicants to their treating provider for
28	follow-up of any abnormal findings discovered during the examination or
29	during screening.
30	

1	C. Non-progressive Conditions.
2	1. Guidance to Mariner Applicants.
3 4 5 6 7 8 9	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 the 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, and vertigo.
11 12 13	b. Non-progressive conditions that are determined to pose a low risk of sudden incapacitation or debilitating complication may be considered for a waiver, or may not require any waiver or limitation.
14 15 16 17 18	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.
19	d. Mariner applicants with non- progressive should:
20 21	(1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
22 23	(a) Their medical condition and the limitations of medical care aboard the vessel;
24	(b) The safety sensitive nature of their merchant mariner credential;
25 26	(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
27	(d) The recommendation that the treating provider/provider performing
28 29	the medical certificate examination review the guidance of this manual when providing their assessment for medical certification.
30 31	(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
32	(a) The Treating Provider's Assessment ; and
33	(b) Recommended Evaluation Data.
34	2. <u>Guidance to Treating Providers</u> .

1	a.	Treating Provider's Assessment.
2 3		The treating provider's assessment should detail a full evaluation of the condition as follows:
4		(1) Pertinent medical examination and physical evaluation data;
5		(2) The history of the condition;
6 7 8		(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
9 10		past 5 years;(4) Treatment efficacy and compliance;
11 12		(5) An assessment of the applicant's risk for future adverse neurologic events, syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		(6) Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		(7) 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.
17 18 19		(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a neurologist or neurosurgeon, for example.
20	b.	Recommended Evaluation Data.
21 22 23 24 25 26		(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
27 28 29 30 31		(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.
32 33 34 35		(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.

1 2 3	(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 their assessment.
4 5 6	(5) Examples of recommended evaluation data for non-progressive neurologic conditions include, but are not limited to neuropsychological/neurocognitive testing.
7	3. <u>Medical Certification Evaluation</u> .
8	a. <u>Certification Determinations</u> .
9 10 11	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:
12	(a) The severity of the condition;
13	(b) The presence of symptoms or impairing conditions;
14	(c) The stability of the condition;
15	(d) The need for access to medical care;
16	(e) The applicant's ability to perform routine and emergency duties;
17	(f) The risk for sudden incapacitation or debilitating complication;
18 19	(g) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
20	(h) The written assessment of the treating provider; and
21	(i) The results of objective testing and standard evaluation data.
22	b. <u>Medical Waivers</u> .
23	(1) Mariner applicants whose condition does not meet the standard may be
24	approved for a medical waiver if objective medical evidence indicates that
25	the condition is sufficiently controlled to pose no significant risk to
26	maritime and public safety.
27	(2) The evaluation will consider whether there are extenuating circumstances
28	that warrant special consideration for issuance of a medical waiver.
29	(3) If approved, waivers and limitations may be applied to the credential
30	and/or medical certificate, on a case-by-case basis.
31	c. <u>Disqualification</u> .

1 2	 Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
3 4	(2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
5 6	(3) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
7 8	(4) Mariner applicants with impaired cognitive ability, judgment or reaction time may be found unqualified;
9 10 11	(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
12 13	(6) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified.
14	4. Guidance to Designated Medical Examiners (DMEs).
15	a. <u>Documentation</u> .
16 17	(1) The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
18	(a) An evaluation from the treating provider and/or specialist; and
19	(b) Any appropriate recommended evaluation data.
20	b. <u>Approval</u> .
21 22	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
23	(a) Favorable recommendation from the treating provider;
24 25	 (b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
26 27	 (c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse event;
28 29	(d) Documentation supports no impairment of cognitive ability, judgment or reaction time; and
30 31	(e) Documentation supports that the applicant has the functional capacity and/or physical ability to perform routine and emergency duties.

1 2 3	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K
4	c. <u>Deferral</u> .
5 6	(1) The DME must defer the decision to the Coast Guard if any of the following apply:
7 8	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
9 10	(b) The applicant's condition is symptomatic, unstable, or suggestive of high risk for impairment;
11 12	 (c) The applicant's evaluation and/or medications indicate risk of impaired cognitive ability, judgment or reaction time;
13 14	(d) The applicant's functional capacity and/or physical ability to perform routine and emergency duties;
15 16	(e) The applicant has other symptoms or findings that suggest a significant risk for syncope, collapse or other adverse neurologic event; or
17 18	(f) The applicant's condition requires treatment with controlled substances or impairing medications.
19 20 21 22	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, CG-719K.
23	d. <u>Education</u> .
24	1) <u>The DME Should Provide</u> :
25 26	The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
27	e. <u>Referral</u> .
28	The DME should refer mariner applicants to their treating provider for
29	follow-up of any abnormal findings discovered during the examination or
30	during screening.
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D. Intracranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System Infection.

3 1. <u>Guidance to Mariner Applicants</u>.

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4	a.	In some cases, intracranial surgery, brain injury, brain tumors, or central
5		nervous system (CNS) infection may be deemed too high risk for medical
6		certification. This would include conditions with life-threatening reactions, as
7		well as conditions that put the individual at high risk of becoming unstable,
8		unconscious, incapacitated, or otherwise unsafe to operate under the authority
9		of the credential.

- b. Intracranial surgery, brain injury, brain tumors or CNS infections that are
 determined to pose a low risk of sudden incapacitation 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 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
- 32 (b) **Recommended Evaluation Data**.
- 33 2. <u>Guidance to Treating Providers</u>.

1	a.	Treating Provider's Assessment.
2 3		The treating provider's assessment should detail a full evaluation of the condition as follows:
4		(1) Pertinent medical examination and physical evaluation data;
5		(2) The history of the condition;
6		(3) The status of the condition, to include severity, stability, symptoms,
7		presence of impairing complications, and whether the applicant has
8		required emergency treatment, intervention or hospitalization within the
9		past 5 years;
10		(4) Treatment efficacy and compliance;
11		(5) An assessment of the applicant's risk for future adverse neurologic events,
12		syncope, impairment, sudden incapacitation, or debilitating complication;
10		(C) Denote of this distingtion of the latter latter latter latter and
13 14		(6) Reports of objective testing and standard evaluation data used to support their assessment; and
14		then assessment, and
15		(7) The extent to which the applicant's medical condition is likely to affect, or
16		be affected by, service aboard the vessel or service at sea.
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17 18		(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a neurologist or neurosurgeon, for
18 19		example.
17		example.
20	b.	Recommended Evaluation Data.
21		(1) Objective testing and supporting documentation may be requested to
22		better assess the severity of the condition, the applicant's functional
23		capacity; and the presence or absence of impairment. This information
24		assists the evaluators in determining whether the mariner is able to
25		perform routine and emergency duties without risk of sudden
26		incapacitation.
27		(2) The treating provider should submit objective testing and supporting
28		documentation as appropriate for the specifics of the mariner applicant's
29		medical condition. Generally, the type and manner of evaluation data or
30		objective testing submitted will be left to the discretion of the treating
31		provider or specialist.
32		(3) If the applicant has undergone prior testing, and the treating physician
33		feels strongly that further testing is not clinically indicated, then the
34		provider should include a statement to that effect in their assessment,
35		along with the results of previously performed testing.

1 2 3	(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 their assessment.
4 5 6	(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.
7	3. <u>Medical Certification Evaluation</u> .
8	a. <u>Certification Determinations</u> .
9 10 11	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:
12	(1) The severity of the condition;
13	(2) The presence of symptoms or impairing conditions;
14	(3) The stability of the condition;
15	(4) The need for access to medical care;
16	(5) The applicant's ability to perform routine and emergency duties;
17	(6) The risk for sudden incapacitation or debilitating complication;
18 19	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
20	(8) The written assessment of the treating provider; and
21	(9) The results of objective testing and standard evaluation data.
22	b. <u>Medical Waivers</u> .
23	(1) Mariner applicants whose condition does not meet the standard may be
24	approved for a medical waiver if objective medical evidence indicates that
25	the condition is sufficiently controlled to pose no significant risk to
26	maritime and public safety.
27	(2) The evaluation will consider whether there are extenuating circumstances
28	that warrant special consideration for issuance of a medical waiver.
29	(3) If approved, waivers and limitations may be applied to the credential
30	and/or medical certificate, on a case-by-case basis.
31	c. <u>Disqualification</u> .

1 2	 Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
3 4	(2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
5 6	(3) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
7 8	(4) Mariner applicants with impaired cognitive ability, judgment or reaction time may be found unqualified; and
9 10 11	(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
12 13	(6) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified.
14	4. Guidance to Designated Medical Examiners(DMEs).
15	a. <u>Documentation</u> .
16 17	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
18	(1) An evaluation from the treating provider and/or specialist; and
19	(2) Any appropriate recommended evaluation data.
20	b. <u>Approval</u> .
21 22 23	The DME May Not Approve issuance of the medical certificate if their evaluation finds that the applicant has a history of intracranial surgery, brain injury, brain tumor or CNS infection conditions.
24	c. <u>Deferral</u> .
25 26 27	(1) The DME Must Defer the decision to the Coast Guard if the applicant has a history of intracranial surgery, brain injury, brain tumor, or CNS infection conditions.
28 29 30	(2) The DME's deferral should address the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
31	d. <u>Education</u> .

- 1 The **DME should provide** education to mariner applicants on how their 2 condition may affect, or be affected by service at sea.
 - e. <u>Referral.</u>

The **DME should refer mariner applicants** to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

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1	E.	Sei	izuı	re or Convulsive Disorders.
2		1.	<u>G</u>	uidance to Mariner Applicants.
3 4 5 6 7 8 9 10 11 12			a.	Examples include, but are not limited to, unprovoked seizures, epilepsy, convulsions, provoked seizures and single-seizure events. 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 Requiring Special Consideration. This is because seizure conditions and convulsive disorders are generally deemed too high risk for medical certification because they are conditions with life-threatening reactions and impairing complications, as well as put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of the credential.
13 14 15 16 17			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. Seizure conditions that are determined to pose a low risk of sudden incapacitation or debilitating complication may be considered for a waiver, or may not require any waiver or limitation.
18 19 20 21			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.
22			d.	Mariner applicants with seizure or convulsive disorder disorders should:
23 24				(1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
25 26				(a) Their medical condition and the limitations of medical care aboard the vessel;
27				(b) The safety sensitive nature of their merchant mariner credential;
28 29				(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
30 31 32				(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.
33 34				(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
35				(a) The Treating Provider's Assessment; and

1	(b) Recommended Evaluation Data.
2	2. <u>Guidance to Treating Providers</u> .
3	a. <u>Treating Provider's Assessment</u> .
4 5	The treating provider's assessment should detail a full evaluation of the condition as follows:
6	(1) Pertinent medical examination and physical evaluation data;
7	(2) The history of the condition;
8 9 10 11	(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 5 years;
12	(4) Treatment efficacy and compliance;
13 14	(5) An assessment of the applicant's risk for future adverse neurologic events, syncope, sudden incapacitation, or debilitating complication;
15 16	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
17 18	(7) 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.
19 20 21	(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a neurologist or neurosurgeon, for example.
22	b. <u>Recommended Evaluation Data</u> .
23 24 25 26 27 28	(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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
29 30 31 32 33	(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.

1 2 3 4	(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.
5 6 7	(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 their assessment.
8 9 10	(5) Examples of recommended evaluation data for seizure or convulsive disorder include, but are not limited to Report of EEG and/or neuroimaging studies in certain cases.
11	3. <u>Medical Certification Evaluation</u> .
12	a. <u>Certification Determinations</u> .
13	Certification determinations will be made on a case-by-case basis.
14	Information considered during the evaluation for issuance of a medical
15	certificate will include, but is not limited to:
16	(1) The severity of the condition;
17	(2) The presence of symptoms or impairing conditions;
18	(3) The stability of the condition;
19	(4) The need for access to medical care;
20	(5) The applicant's ability to perform routine and emergency duties;
21	(6) The risk for sudden incapacitation or debilitating complication;
22	(7) The risk of impaired cognitive ability, judgment or reaction time related to
23	the condition or associated medications;
24	(8) The written assessment of the treating provider; and
25	(9) The results of objective testing and standard evaluation data.
26	b. Medical Waivers.
27	(1) Mariner applicants whose condition does not meet the standard may be
28	approved for a medical waiver if objective medical evidence indicates that
29	the condition is sufficiently controlled to pose no significant risk to
30	maritime and public safety.

1 2 3		(2) The criteria for consideration for a medical waiver for seizures or convulsive disorder are contained in Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring Special Consideration.
4 5		(3) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
6 7		(4) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
8	c.	Disqualification.
9 10		(1) Mariner applicants whose condition does not meet the criteria for issuance of a medical waiver, may be found unqualified;
11 12		(2) Mariner applicants whose conditions are unstable or pose a risk for impairment may be found unqualified;
13 14		(3) Mariner applicants whose conditions pose a risk of recurrent seizure or sudden incapacitation may be found unqualified;
15 16		(4) Mariner applicants with other findings that indicate a significant risk of an adverse neurologic event, syncope, or collapse may be found unqualified;
17 18 19		(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
20 21		(6) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified.
22	4. <u>G</u>	uidance to Designated Medical Examiners (DMEs).
23	a.	Documentation.
24 25		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
26		(a) An evaluation from the treating provider and/or specialist; and
27		(b) Any appropriate recommended evaluation data.
28	b.	Approval.
29 30		The DME May Not Approve issuance of the medical certificate for applicants with seizure or convulsive disorders.
31	c.	Deferral.

1		(1) The DME Must Defer the decision to the Coast Guard for all applicants
2		with seizure or convulsive disorders.
3		(2) If the DME defers the certification decision to the Coast Guard, the DME
4		should discuss the reason(s) for deferral and document their
5		recommendation regarding medical certification on the Application for
6		Medical Certificate, CG-719K.
7	d.	Education.
8		The DME should provide education to mariner applicants on how their
9		condition may affect, or be affected by service at sea.
10	e.	Deferral.
11		The DME should refer mariner applicants to their treating provider for
12		follow-up of any abnormal findings discovered during the examination or
13		during screening.
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1 **F. Sleep Disorders.**

- 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.
- 6 1. <u>Guidance to Mariner Applicants</u>.

7	я	Examples include, but are not limited to, obstructive sleep apnea, central
8	u.	hypersomnias, insomnia, narcolepsy and idiopathic hypersomnia. In some
9		cases, sleep disorders may be deemed too high risk for medical certification.
10		This would include conditions such as narcolepsy and idiopathic hypersomnia
11		which are disqualifying and generally will not be approved for issuance of a
12		waiver.
13	b.	Sleep disorders that are determined to pose a low risk of impairment, sudden
14		incapacitation or debilitating complication may be considered for a waiver, or
15		may not require any waiver or limitaiton
16	c.	The evaluation for medical certification and waiver issuance will consider the
17	С.	level of stability, the likelihood for worsening or impairment, the written
18		assessment of the treating provider or specialist (as applicable), and the results
19		of appropriate testing.
20	d.	Mariner applicants with sleep disorders should:
21		(1) Discuss the following with their treating provider, and the provider
22		performing the medical certificate examination:
23		(a) Their medical condition and the limitations of medical care aboard the
24		vessel;
25		(b) The safety sensitive nature of their merchant mariner credential;
26		(c) How/whether the medical condition may affect, or be affected by
27		service aboard a vessel or by service at sea; and
28		(d) The recommendation that the treating provider/provider performing
29		the medical certificate examination review the guidance in this Manual
30		when providing their assessment for medical certification.
31		(2) Make sure to submit sufficient information on any of their medical
32		conditions that are subject to further review. This includes:
33		(a) The Treating Provider's Assessment ; and
34		(b) Recommended Evaluation Data.

1	2. <u>Guidance to Treating Providers</u> .
2	a. <u>Treating Provider's Assessment</u> .
3 4	The treating provider's assessment should detail a full evaluation of the condition as follows:
5	(1) Pertinent medical examination and physical evaluation data;
6	(2) The history of the condition;
7 8 9 10	(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 5 years;
11	(4) Ttreatment efficacy and compliance;
12 13	(5) An assessment of the applicant's prognosis and risk for impairment or future adverse neurologic events;
14 15	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
16 17	(7) 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.
18 19 20	(8) 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.
21	b. <u>Recommended Evaluation Data</u> .
22 23 24 25 26 27	 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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
28 29 30	(2) The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition.
31 32 33 34	(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.

1 2 3	(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 their assessment.
4 5	(5) Examples of recommended evaluation data for sleep disorder conditions may include, but are not limited to:
6	(a) Diagnostic polysomnogram with titration study report; and
7	(b) Positive airway pressure therapy logs.
8	3. <u>Medical Certification Evaluation</u> .
9	a. <u>Certification Determinations</u> .
10 11 12	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:
13	(1) The severity of the condition;
14	(2) The presence of symptoms or impairing conditions;
15	(3) The stability of the condition;
16	(4) The need for access to medical care;
17	(5) The applicant's ability to perform routine and emergency duties;
18	(6) The risk for sudden incapacitation or debilitating complication;
19 20	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
21	(8) The written assessment of the treating provider; and
22	(9) The results of objective testing and standard evaluation data.
23	b. Medical Waivers.
24	(1) Mariner applicants whose condition does not meet the standard may be
25	approved for a medical waiver if objective medical evidence indicates that
26	the condition is sufficiently controlled to pose no significant risk to
27	maritime and public safety.
28	(2) The evaluation will consider whether there are extenuating circumstances
29	that warrant special consideration for issuance of a medical waiver;

1 2 3	(3) Obstructive Sleep Apnea - The criteria for issuance of a medical waiver for obstructive sleep apnea are provided in Paragraph H of this Chapter, Medical Waivers for Applicants with Obstructive Sleep Apnea; and
4 5	(4) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
6	c. <u>Disqualification</u> .
7 8	(1) Mariner applicants whose conditions are inadequately controlled, unstable or pose a risk for impairment may be found unqualified;
9 10	(2) Mariner applicants whose conditions pose a risk of sudden incapacitation may be found unqualified;
11 12 13	(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;
14 15 16	(4) Mariner applicants with obstructive sleep apnea who do not meet the criteria for issuance of a medical waiver as outlined in Paragraph H of this Chapter, Medical Waivers for Applicants with Obstructive Sleep Apnea,
17	may be found unqualified;
18 19 20	(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
21 22	(6) Mariner applicants whose conditions are treated with controlled substances or impairing medications, may be found unqualified.
23	4. Guidance to Designated Medical Examiners (DMEs).
24	a. <u>Documentation</u> .
25 26	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
27	(a) An evaluation from the treating provider and/or specialist; and
28	(b) Any appropriate recommended evaluation data.
29	b. <u>Approval.</u>
30 31	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
32 33	(a) Favorable recommendation from the treating provider which documents appropriate treatment compliance;

1 2	(b) Condition is asymptomatic and without recent need for major intervention, hospitalization or surgery;
3 4	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse event;
5	(d) Documentation supports no cognitive impairment;
6 7	(e) Documentation supports no impairment of ability to perform routine and emergency duties; and
8 9 10 11	(f) If the mariner applicant has OSA, documentation supports that the applicant meets the criteria for issuance of a waiver as outlined in Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring Special Consideration.
12 13 14	(2) If the DME approves issuance of the medical certificate, the DME should document their rationale for recommending approval on the Application for Medical Certificate, Form CG-719K.
15	c. <u>Deferral.</u>
16 17	(1) The DME must defer the decision to the Coast Guard if their evaluation finds that the applicant meets all of the following:
18 19	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
20 21	(b) The applicant's condition is symptomatic, unstable, or suggestive of high risk for impairment;
22 23	(c) The applicant demonstrates impaired ability to perform routine and emergency duties;
24 25 26	(d) The applicant has other symptoms or findings that suggest a significant risk for impairment, syncope, collapse or other adverse neurologic event;
27 28 29 30	 (e) The mariner applicant has obstructive sleep apnea but does not meet the criteria for issuance of a waiver as outlined in Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring Special Consideration;
31	(f) The mariner applicant has narcolepsy or idiopathic hypersomnia; or
32 33	(g) The applicant's condition is treated with a controlled substance or impairing medication.

- If the DME defers the certification decision to the Coast Guard, the DME
 should discuss the reason(s) for deferral and document their
 recommendation regarding medical certification on the Application for
 Medical Certificate, CG-719K.
- 5 d. <u>Education.</u>

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- The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
 - e. <u>Referral.</u>
- The DME should refer mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening

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1	G.	Waivers for Neurologic Conditions Requiring Special Consideration.
2	a.	Medical Waivers for Applicants with a History of Seizure(s).
3 4 5 6 7		Under the regulations, seizures and convulsive disorders may be disqualifying because they pose a significant risk of sudden incapacitation (<i>See</i> 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.
8		1. Unprovoked Seizures.
9 10		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.
11 12 13		a. 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 eight years (on or off anti-epileptic drugs (AEDs)); and
14 15		1) If all AEDs have been stopped, the mariner must have been seizure-free for a minimum of eight years since cessation of medication; or
16 17		2) If still using AEDs, the mariner must have been on a stable medication regimen for a minimum of two years.
18 19		b. Mariners with a single unprovoked seizure may be considered for a waiver if the mariner has been seizure-free for a minimum of four years, off AEDs; and
20 21		1) If all medication has been stopped, the mariner must have been seizure- free for a minimum of four years since cessation of medication; or
22 23 24 25 26		2) If still requiring treatment with AEDs, the mariner's condition will be considered under the criteria for epilepsy listed in 1(a): The mariner may be considered for a waiver after they have been seizure-free for a minimum of 8 years, and on a stable medication regimen for a minimum of two years.
27		5. Provoked Seizures
28 29 30 31 32 33		Provoked seizures are those seizures precipitated by an identifiable trigger. [Note: 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 seizure, as discussed above in Section 1, Unprovoked Seizures.]
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1 2 3	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).
4 5 6 7	a. 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 one year.
8 9	b. Generally, mariners with one of the following precipitating factors will be considered low-risk for recurrence:
10	1) Lidocaine-induced seizure during a dental appointment;
11 12	 Concussive seizure, loss of consciousness ≤30 minutes with no penetrating injury;
13	3) Seizure due to syncope not likely to recur;
14	4) Seizure from an acute metabolic derangement not likely to recur;
15	5) Severe dehydration;
16	6) Hyperthermia; or
17	7) Drug reaction or withdrawal.
18 19 20	c. 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 eight years (on or off AEDs); and
21 22	1) If all medication has been stopped, the mariner must have been seizure- free for a minimum of eight years since cessation of medication; or
23 24	2) If still using AEDs, the mariner must have been on a stable medication regimen for a minimum of two years.
25 26 27	d. 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:
28 29	 Head injury with loss of consciousness or amnesia ≥30 minutes or penetrating head injury;
30	2) Intracerebral hemorrhage of any etiology, including stroke and trauma;
31	3) Brain infection, such as encephalitis, meningitis, abscess, or cysticercosis;
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1	4) Stroke;
2	5) Intracranial hemorrhage;
3	6) Post-operative brain surgery with significant brain hemorrhage; and
4	7) Brain tumor.
5 6 7 8 9	e. 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 four years, provided that objective evidence supports extremely low risk of seizure recurrence.

1	H.	Medical Waivers for Applicants with Obstructive Sleep Apnea.	
2 3 4 5	1.	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	
	2	compliance, and an assessment for symptoms of daytime sleepiness.	
6 7 8	2.	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,	
9	3.	Other submission requirements as follows:	
10 11 12 13		a) 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 three-month period.	
14 15 16 17		 b) 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 four hours per night (or per major sleep period) on at least 70% of all nights (or major sleep periods). 	
18 19 20		c) 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.	
21		d) If the condition is being treated with an oral appliance, the applicant should	
22		submit documentation from the treating provider that specifies the type of	
23 24		appliance prescribed and provides objective documentation of treatment efficacy, such as a polysomnogram performed while utilizing the appliance, unless	
24 25		previously submitted to the Coast Guard.	
26 27 28 29 30		e) 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.	
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1 CHAPTER 20. OPHTHAMOLOGIC CONDITIONS

2 A. Conditions of Concern.

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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, and macular degeneration.

7 **B.** Guidance to Mariner Applicants.

- 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.
- Ophthalmologic conditions that are determined to pose a low risk of impairment may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 18 4. Mariner applicants with ophthalmologic conditions should:
- a. Discuss the following with their treating provider, and the provider performing the
 medical certificate examination:
- 21 (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:
- 30 (1) The **Treating Provider's Assessment**; and
- 31 (2) **Recommended Evaluation Data**.

1	C. G	uida	nce to Treating Providers.
2	1.	Tr	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	The extent to which the applicant has, or is at significant risk for visual impairment;
11 12 13		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;
14		f.	Treatment compliance and efficacy;
15 16		g.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
17 18		h.	Reports of objective testing and standard evaluation data used to support their assessment; and
19 20		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.
21 22		j.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a ophthalmologist, for example.
23	2.	<u>Re</u>	commended Evaluation Data:
24 25 26 27 28		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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
29 30 31 32		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.

1 2 3 4		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.
5 6		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.
7	D. M	ledio	cal Certification Evaluation.
8 9	1.		etailed information on the merchant mariner vision standards and policy are contained Chapter 5 of this Manual, Vision and Hearing Standards.
10	2.	<u>Ce</u>	ertification Determinations.
11 12 13		co	ertification determinations will be made on a case-by-case basis. Information nsidered during the evaluation for issuance of a medical certificate will include, but is t limited to:
14		a.	The degree of visual impairment;
15		b.	The severity of the condition;
16		c.	The presence of symptoms or impairing complications;
17		d.	The stability of the condition;
18		e.	The need for access to medical care;
19		f.	The applicant's ability to perform routine and emergency duties;
20		g.	The risk for sudden incapacitation or debilitating complication;
21 22		h.	The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
23		i.	The written assessment of the treating provider; and
24		j.	The results of objective testing and standard evaluation data.
25	3.	M	edical Waivers.
26 27 28		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.
29 30		b.	The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.

1 2		c.	If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
3	4.	Di	squalification.
4 5		a.	Mariner applicants who do not meet the mariner vision and/or color vision standards, may be found unqualified;
6 7 8		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;
9 10		c.	Mariner applicants with other findings that indicate a significant risk of debilitating complication, or impairment may be found unqualified;
11 12		d.	Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified; and
13 14		e.	Mariner applicants who do not have the functional capacity and/or physical ability necessary to perform routing and emergency duties may be found unqualified.
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16	E. Gı	ıida	ance to Designated Medical Examiners (DMEs).
17	1.	Do	ocumentation.
18 19			e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
20		a.	An evaluation from the treating provider and/or specialist; and
21		b.	Any appropriate recommended evaluation data.
22	2.	<u>A</u> [<u>pproval</u> .
23 24		a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
25 26			 Documentation supports that applicant meets the merchant mariner vision standards;
27 28			(2) The applicant demonstrates satisfactory color vision when tested by any of the means specified in the 46 CFR 10.305;
29			(3) Favorable recommendation from the treating provider;
30 31			(4) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;

1 2		(5) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation or impairing complications; and
3 4		(6) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
5 6 7		(7) If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
8	3.	Deferral.
9		a. The DME Must Defer the decision to the Coast Guard if any of the following apply:
10		(1) The applicant does not meet the merchant mariner vision standards;
11		(2) The applicant has monocular vision;
12 13		(3) The applicant does not demonstrate satisfactory color vision when tested by any of the means specified in the 46 CFR 10.305;
14 15		(4) Unfavorable recommendation or insufficient documentation from the treating provider;
16 17		(5) The applicant has evidence of instability, or impairing symptoms or complications; or
18 19		(6) The applicant's evaluation suggests impaired ability to perform routine and emergency duties.
20 21 22		b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
23	4.	<u>Education</u>
24 25		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
26	5.	Referral.
27 28		The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.
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1 CHAPTER 21. ORGAN TRANSPLANT

2 A. Conditions of Concern.

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Organ transplant conditions that are life-threatening, impairing, or that pose a risk of sudden incapacitation or debilitating complication are subject to further review, and may be determined disqualifying. Examples include, but are not limited to, transplanted organs that are associated with complications such as organ failure or rejection.

7 **B.** Guidance to Mariner Applicants.

- 8 1. In some cases, transplant conditions may be deemed too high risk for medical 9 certification. This would include conditions with life-threatening reactions or impairing 10 complications, as well as conditions that put the individual at high risk of becoming 11 unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority 12 of the credential.
- Transplant conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 18 4. Mariner applicants with a history of organ transplant should:
- 19a. Discuss the following with their treating provider, and the provider performing the20medical certificate examination;
- 21 (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:
- 30 (1) The **Treating Provider's Assessment**; and
- 31 (2) **Recommended Evaluation Data**.

1	C. G	uida	nce to Treating Providers.
2	1.	Tr	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a transplant specialist, for example.
19	2.	<u>Re</u>	commended Evaluation Data:
20 21 22 23 24		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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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. If the treating provider seeks to demonstrate the applicant's fitness by alternate 1 means, then the provider should include a statement to that effect in their assessment. 2
- **D.** Medical Certification Evaluation. 3
- 1. Certification Determinations. 4
- Certification determinations will be made on a case-by-case basis. Information 5 considered during the evaluation for issuance of a medical certificate will include, but is 6 not limited to: 7
- a. The severity of the condition; 8
- b. The presence of symptoms or impairing complications; 9
- c. The stability of the condition; 10
- d. The need for access to medical care; 11
- e. The applicant's ability to perform routine and emergency duties; 12
- f. The risk for sudden incapacitation or debilitating complication; 13
- The risk of impaired cognitive ability, judgment or reaction time related to the 14 g. condition or associated medications; 15
- h. The written assessment of the treating provider; and 16
- The results of objective testing and standard evaluation data. i. 17
- 2. Medical Waivers. 18

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- a. Mariner applicants whose condition does not meet the standard may be approved for 19 a medical waiver if objective medical evidence indicates that the condition is 20 sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant 22 special consideration for issuance of a medical waiver. 23
- c. Waivers for cardiac transplant are addressed in Sub-paragraph G.3 of Chapter 12 of 24 this Manual, Waivers for Cardiovascular Conditions Requiring Special 25 **Consideration** - Heart Transplant. 26
- d. If approved, waivers and limitations may be applied to the credential and/or medical 27 certificate, on a case-by-case basis. 28
- 3. Disqualification. 29

1 2	:	a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
3 4	1	b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; and
5 6 7		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.
8	E. Gui	dance to Designated Medical Examiners (DMEs).
9	1.	Documentation.
10 11		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
12	:	a. An evaluation from the treating provider and/or specialist; and
13	1	b. Any appropriate recommended evaluation data.
14	2.	<u>Approval</u> .
15 16		DME's may not approve issuance of the medical certificate for mariner applicants with a history of organ transplant.
17	3.	Deferral.
18 19	:	a. The DME must defer the decision to the Coast Guard for mariner applicants with history of organ transplant.
20		b. The DME's deferral should discuss the reason(s) for deferral and document their
21 22		recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
23	4.	Education
24 25		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
26	5.	Referral.
27 28		The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.
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1 CHAPTER 22. PREGNANCY

2 A. Conditions of Concern.

- 3 **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.

6 **B.** Guidance to Mariner Applicants.

- 7 Mariner applicants who are pregnant should:
- B 1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
- 10 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.
- Make sure to submit sufficient information on any of their medical conditions that are
 subject to further review. This includes:
- 19 a. The **Treating Provider's Assessment**; and
- 20 b. Recommended Evaluation Data.
- 21 C. Guidance to Treating Providers.
- 22 1. <u>Treating Provider's Assessment</u>.
- The treating provider's assessment should detail a full evaluation of the condition as
 follows:
- 25 a. Pertinent medical examination and physical evaluation data;
- 26 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;

1	d.	Treatment compliance and efficacy;
2 3	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
4 5	f.	Reports of objective testing and standard evaluation data used to support their assessment; and
6 7	g.	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.
8 9	h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a obstetrician, for example.
10	2. <u>Re</u>	commended Evaluation Data:
11 12 13 14 15	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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
16 17 18 19	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.
20 21 22 23	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.
24 25	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.
26 27	e.	Examples of recommended evaluation data for pregnancy include, but are not limited to an obstetrician's assessment.
28	D. Medic	al Certification Evaluation.
29	1. <u>Cer</u>	rtification Determinations.
30 31 32	cor	rtification determinations will be made on a case-by-case basis. Information is idered during the evaluation for issuance of a medical certificate will include, but is limited to:
33	a.	The severity of the condition;

1		b.	The presence of symptoms or impairing complications;
2		c.	The stability of the condition;
3		d.	The need for access to medical care;
4		e.	The applicant's ability to perform routine and emergency duties;
5		f.	The risk for sudden incapacitation or debilitating complication;
6 7		g.	The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
8		h.	The written assessment of the treating provider; and
9		i.	The results of objective testing and standard evaluation data.
10	2.	Me	edical Waivers.
11 12 13		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.
14 15		b.	The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
16 17		c.	If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
18	3.	Dis	squalification.
19 20		a.	Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
21 22		b.	Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; and
23 24		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.
25	E. Gu	ida	nce to Designated Medical Examiners (DMEs).
26	1.	Do	ocumentation.
27 28			e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
29		a.	An evaluation from the treating provider and/or specialist; and

1		b.	Any appropriate recommended evaluation data.
2	2.	<u>A</u> p	oproval.
3 4		a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
5			(1) Favorable recommendation from the treating provider;
6 7			(2) Condition is asymptomatic and without recent need for emergency intervention, hospitalization or surgery;
8 9			(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
10 11			(4) Documentation supports adequate physical ability to perform routine and emergency duties.
12 13 14		b.	If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
15	3.	De	eferral.
16		a.	The DME must defer the decision to the Coast Guard if any of the following apply:
17 18			(1) Unfavorable recommendation or insufficient documentation from the treating provider;
19 20			(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
21 22			(3) The applicant's exercise capacity suggests impaired ability to perform routine and emergency duties; or
23 24			(4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
25 26 27		b.	If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
28	4.	Ed	lucation
29 30			the DME should provide education to mariner applicants on how their condition may fect, or be affected by service at sea.
31	5.	Re	eferral.

- 1 The DME should refer_mariner applicants to their treating provider for follow-up of any
- 2 abnormal findings discovered during the examination or during screening.
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1 CHAPTER 23. PSYCHIATRIC OR MENTAL HEALTH CONDITIONS

2 **A. Introduction.**

3	1.	Psychiatric Conditions of Concern.
4 5		a. Psychiatric or mental health conditions that pose a risk of sudden incapacitation, debilitating complication or other impairment are subject to
6		further review, and may be determined disqualifying. Examples include, but
7		are not limited to mental health disorders requiring treatment with controlled
8		substances or impairing medication; alcohol and substance abuse/dependence
9		disorders, and conditions with a history of, or at significant risk for psychosis,
10		suicidal ideation, homicidal ideation, or hospitalization.
11		b. Psychotic disorders are disqualifying and generally will not be approved for
12		issuance of a waiver.
13		c. A current clinical diagnosis of alcohol or substance abuse/dependence, which
14		is not in remission, is disqualifying and generally will not be approved for
15		issuance of a waiver.
16		d. General classes of psychiatric or mental health conditions that are subject to
17		further review include, but are not limited to:
18		(1) Mood Disorders;
19		(2) Anxiety Disorders;
20		(3) Attention Deficit/Hyperactivity Disorder;
21		(4) Substance Abuse/Dependence Disorders; and
22		(5) Schizophrenia/Psychotic Disorders.
23	2.	Guidance to Mariner Applicants.
24		a. In some cases, psychiatric or mental health conditions may be deemed too
25		high risk for medical certification. This would include conditions treated with
26		impairing medications and conditions associated with impairing signs and
27		symptoms, as well as conditions that put the individual at high risk of
28		becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate
29		under the authority of the credential.
30		b. Psychiatric or mental health conditions that are determined to pose a low risk
31		of sudden incapacitation may be considered for a waiver, or may not require
32		any waiver or limitation.

1 2 3 4	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.
5	d. Mariner applicants with neurologic conditions should:
6 7	(1) Discuss the following with their treating provider and with the provider performing the medical certificate examination:
8 9	(a) Their medical condition and the limitations of medical care aboard the vessel;
10	(b) The safety sensitive nature of their merchant mariner credential;
11 12	 (c) How/whether the medical condition may affect, or be affected by service aboard a vessel;
13 14 15	(d) The recommendation that the treating provider/provider perform the medical certificate examination and review guidance in this Manual when providing their assessment for medical certification.
16 17	(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
18	(a) The Treating Provider's Assessment ; and
19	(b) Recommended Evaluation Data
20	3. <u>Guidance to the Treating Providers</u> .
21	a. <u>Treating Provider's Assessment</u> .
22 23	The treating provider's assessment should detail a full evaluation of the condition as follows:
24	(1) Pertinent medical examination and physical evaluation data;
25	(2) The history of the condition;
26 27 28 29	(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;
30	(4) Treatment compliance and efficacy;

1 2 3	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, sudden incapacitation, or debilitating complication;
4 5	(6) Reports of any objective testing and standard evaluation tools that were performed to aid in their assessment; and
6 7	(7) 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.
8 9 10	(8) 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.
11	b. <u>Recommended Evaluation Data</u> .
12 13 14 15 16 17	(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.
18 19 20 21 22	(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.
23 24 25 26	(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.
27 28 29	(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 their assessment.
30 31 32	(5) Examples of recommended evaluation data that may be requested for select psychiatric or mental health conditions include, but are not limited to:
33	(a) Comprehensive evaluation from a psychiatrist;
34	(b) Comprehensive evaluation from substance abuse professional; and
35	(c) Neuropsychological/neurocognitive testing.

1	В.	Mood	Disorders.
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2	1.	Guidance to Mariner Applicants.
3 4 5		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
6 7		signs and symptoms, as well as conditions with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
8 9 10		 Mood disorders 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.
11 12 13 14		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.
15		d. Mariner applicants with mood disorders should:
16 17		(1) Discuss the following with their treating provider, and the provider performing the medical certificate examination:
18 19		(a) Their medical condition and the limitations of medical care aboard the vessel;
20		(b) The safety sensitive nature of their merchant mariner credential;
21 22		(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
23 24 25		(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.
26 27		(2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
28		(a) The Treating Provider's Assessment; and
29		(b) Recommended Evaluation Data.
30	2.	Guidance to Treating Providers.
31		a. <u>Treating Provider's Assessment</u> .
32 33		The treating provider's assessment should detail a full evaluation of the condition as follows:

1	(1) Pertinent medical examination and physical evaluation data;
2	(2) The history of the condition;
3 4 5 6	(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;
7	(4) Treatment compliance and efficacy;
8 9 10	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, sudden incapacitation debilitating complication;
11 12	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
13 14	(7) 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.
15 16	(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a psychiatrist, for example.
17	b. <u>Recommended Evaluation Data</u> .
18 19 20 21 22 23	(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.
24 25 26 27 28	(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.
29 30 31 32	(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.
33 34 35	(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 their assessment.

1 2	(5) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
3 4	 (a) Full mental health evaluation from the treating provider/treating mental health specialist; and
5 6 7 8	(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 the Medication Enclosure for further guidance.
9	3. <u>Medical Certification Evaluation</u> .
10	a. <u>Certification Determinations</u> .
11 12 13	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:
14	(1) The severity of the condition;
15	(2) The presence of symptoms;
16	(3) The stability of the condition;
17	(4) The need for access to medical care;
18	(5) The applicant's ability to perform routine and emergency duties;
19	(6) The risk for sudden incapacitation or debilitating complication;
20 21	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
22	(8) The written assessment of the treating provider; and
23	(9) The results of objective testing and standard evaluation data.
24	b. Medical Waivers.
25 26 27 28	(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.
29 30	(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.

1 2	(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
3	c. <u>Disqualification</u> .
4 5	 Mariner applicants with unstable conditions or impairing symptoms/complications may be found unqualified;
6 7	(2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
8 9	(3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
10 11	(4) Mariner applicants with risk of impaired cognitive ability, judgment or reaction time may be found unqualified;
12 13 14	(5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified; and
15 16	(6) Mariner applicants whose condition impairs their ability to perform routine and emergency duties may be found unqualified.
17	4. Guidance to Designated Medical Examiners (DMEs).
18	a. <u>Documentation</u> .
19 20	The DME should ensure that the applicant has provided adequate
	documentation for the condition, to include:
21	(1) An evaluation from the treating provider and/or specialist; and
21 22	
	(1) An evaluation from the treating provider and/or specialist; and
22	(1) An evaluation from the treating provider and/or specialist; and(2) Any appropriate recommended evaluation data.
22 23 24	 (1) An evaluation from the treating provider and/or specialist; and (2) Any appropriate recommended evaluation data. b. <u>Approval.</u> (1) The DMF may approve issuance of the medical certificate if their
22 23 24 25	 An evaluation from the treating provider and/or specialist; and Any appropriate recommended evaluation data. <u>Approval.</u> The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

1 2	(d) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
3 4 5	(e) Mariner applicant has no risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications may be found unqualified; and
6 7	(f) Documentation supports no impairment of ability to perform routine and emergency duties.
8 9 10 11	(2) If the DME approves the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
12	
13	c. <u>Deferral.</u>
14 15	(1) The DME must defer the decision to the Coast Guard if any of the following:
16 17	 (a) Unfavorable recommendation or insufficient documentation from the treating provider;
18 19	 (b) The applicant has evidence of instability, or impairing symptoms/ complications;
20 21	(c) The applicant has other symptoms or findings that suggest a significant risk of an sudden incapacitation or debilitating complication;
22 23	(d) The applicant has a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
24 25	(e) The applicant has required emergency treatment or hospitalization in the past 6 years;
26 27	(f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
28 29	(g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; and
30 31	(h) The applicant's examination suggests impaired ability to perform routine and emergency duties
32 33	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their

recommendation regarding medical certification on the Application for 1 Medical Certificate, Form CG-719K. 2 3 d. Education. 4 The DME should provide education to mariner applicants on how their 5 condition may affect, or be affected by service at sea. 6 e. Referral. 7 The DME should refer mariner applicants to their treating provider for 8 follow-up of any abnormal findings discovered during the examination or 9 during screening. 10

1 C. Anxiety Disorders.

2	1.	Guidance to Mariner Applicants.
3		a. In some cases, anxiety disorders may be deemed too high risk for medical
4		certification. This would include anxiety disorders that are treated with
5		controlled substances or impairing medications, associated with impairing
6		signs and symptoms, or associated with a history of, or at significant risk for
7		psychosis, suicidal ideation, homicidal ideation, or hospitalization.
8		b. Anxiety disorders that are determined to pose a low risk of sudden
9		incapacitation or impairment may be considered for a waiver, or may not
10		require any waiver or restriction.
11		c. The evaluation for medical certification and waiver issuance will consider the
12		level of stability, the likelihood for worsening or recurrence, the written
13		assessment of the treating provider or specialist (as applicable), and the results
14		of appropriate testing.
15		d. Mariner applicants with anxiety disorders should:
16		(1) Discuss the following with their treating provider, and the provider
17		performing the medical certificate examination:
18		(a) Their medical condition and the limitations of medical care aboard the
19		vessel;
20		(b) The safety sensitive nature of their merchant mariner credential;
21		(c) How/whether the medical condition may affect, or be affected by
22		service aboard a vessel or by service at sea; and
23		(d) The recommendation that the treating provider/provider performing
24		the medical certificate examination review the guidance in this Manual
25		when providing their assessment for medical certification.
26		(2) Make sure to submit sufficient information on any of their medical
27		conditions that are subject to further review. This includes:
28		(a) The Treating Provider's Assessment ; and
29		(b) Recommended Evaluation Data.
30	2.	Guidance to Treating Providers.
31		a. <u>Treating Provider's Assessment</u> .
32		The treating provider's assessment should detail a full evaluation of the
33		condition as follows:

1	(1) Pertinent medical examination and physical evaluation data;
2	(2) The history of the condition;
3 4 5 6	(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 5 years;
7	(4) Treatment efficacy and compliance;
8 9 10	(5) An assessment of the applicant's risk for future adverse cardiac events, malignant arrhythmia, syncope, sudden incapacitation or debilitating complication;
11 12	(6) Reports of objective testing and standard evaluation data used to support their assessment; and
13 14	(7) 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.
15 16	(8) In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a psychiatrist, for example.
17	b. <u>Recommended Evaluation Data</u> .
18 19 20 21 22 23	(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.
24 25 26 27 28	(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.
29 30 31 32	(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.
33 34 35	(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 their assessment.

1 2	(5) Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
3 4	(a) Full mental health evaluation from the treating provider/treating mental health specialist; and
5 6 7 8	(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 the Medication Enclosure for further guidance.
9	3. <u>Medical Certification Evaluation</u> .
10 11 12	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:
13	(1) The severity of the condition;
14	(2) The presence of symptoms;
15	(3) The stability of the condition;
16	(4) The need for access to medical care;
17	(5) The applicant's ability to perform routine and emergency duties;
18	(6) The risk for sudden incapacitation or debilitating complication;
19 20	(7) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
21	(8) The written assessment of the treating provider; and
22	(9) The results of objective testing and standard evaluation data.
23	b. <u>Medical Waivers</u> .
24 25 26 27	(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.
28 29	(2) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
30 31	(3) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.

1	c. <u>Disqualification</u> .
2 3	 Mariner applicants with unstable conditions or impairing symptoms/complications may be found unqualified;
4 5	(2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified;
6 7	(3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication may be found unqualified;
8 9	(4) Mariner applicants with risk of impaired cognitive ability, judgment or reaction time may be found unqualified;
10 11 12	(5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified;
13 14 15	(6) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified; and
16 17	(7) Mariner applicants whose condition impairs their ability to perform routine and emergency duties may be found unqualified.
18	4. Guidance to Designated Medical Examiners (DMEs).
19	a. <u>Documentation</u> .
20 21	The DME should ensure that the applicant has provided adequate
	documentation for the condition, to include:
22	(a) An evaluation from the treating provider and/or specialist; and
22 23	
	(a) An evaluation from the treating provider and/or specialist; and
23	(a) An evaluation from the treating provider and/or specialist; and(b) Any appropriate recommended evaluation data.
23 24 25	 (a) An evaluation from the treating provider and/or specialist; and (b) Any appropriate recommended evaluation data. b. <u>Approval.</u> (1) The DME may approve issuance of the medical certificate if their
23 24 25 26	 (a) An evaluation from the treating provider and/or specialist; and (b) Any appropriate recommended evaluation data. b. <u>Approval.</u> (1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

1 2	(d) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
3 4 5	(e) Mariner applicant has no risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications may be found unqualified; and
6 7	(f) Documentation supports adequate physical ability to perform routine and emergency duties.
8 9 10 11	(2) If the DME approves the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
12 13	c. Deferral.
14 15	(1) The DME must defer the decision to the Coast Guard if any of the following:
16 17	(a) Unfavorable recommendation or insufficient documentation from the treating provider;
18 19	 (b) The applicant has evidence of instability, or impairing symptoms/ complications;
20 21	(c) The applicant has other symptoms or findings that suggest a significant risk of an sudden incapacitation or debilitating complication;
22 23	(d) The applicant has a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
24 25	(e) The applicant has required emergency treatment or hospitalization in the past 5 years;
26 27	(f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
28 29	(g) The applicant is taking controlled substances, impairing medications, or anti-psychotic medications; and
30 31	(h) The applicant's examination suggests impaired ability to perform routine and emergency duties.
32 33	(2) If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their

recommendation regarding medical certification on the Application for 1 Medical Certificate, Form CG-719K. 2 d. Education. 3 The DME should provide education to mariner applicants on how their 4 condition may affect, or be affected by service at sea. 5 e. <u>Referral.</u> 6 The DME should refer Mariner applicants to their treating provider for 7 follow-up of any abnormal findings discovered during the examination or 8 during screening. 9

1 2. Attention-Deficit/Hyperactivity Disorders (ADD/ADHD).

2	1	Guidance to Mariner Applicants.
3 4 5 6 7 8		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.
9 10 11		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.
12 13 14 15		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.
16		d. Mariner applicants with ADD/ADHD conditions should:
17 18		1. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
19 20 21		 Their medical condition and the limitations of medical care aboard the vessel; The safety sensitive nature of their merchant mariner credential;
22 23		• How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
24 25 26	•	• 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.
27 28		2. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
29		(a) The Treating Provider's Assessment; and
30		(b) Recommended Evaluation Data.
31	(3)) Guidance to Treating Providers.
32		a. <u>Treating Provider's Assessment</u> .

1 2			e treating provider's assessment should detail a full evaluation of the ndition as follows:
3		a)	Pertinent medical examination and physical evaluation data;
4		b)	The history of the condition;
5		c)	The status of the condition, to include severity, stability, symptoms,
6			presence of impairing complications, and whether the applicant has
7			required emergency treatment, intervention or hospitalization within the
8			past 5 years;
9		d)	Treatment efficacy and compliance;
10		e)	An assessment of the applicant's risk for future adverse cardiac events,
11			malignant arrhythmia, syncope, sudden incapacitation, or debilitating
12			complication;
13		f)	Reports of objective testing and standard evaluation data used to support
14			their assessment; and
15		g)	The extent to which the applicant's medical condition is likely to affect, or
16			be affected by, service aboard the vessel or service at sea.
		1 \	
17		h)	In some cases, the Coast Guard may request that the applicant submit
18			documentation from a specialist such as a psychiatrist, for example.
19	b.	Re	commended Evaluation Data.
• •		1	
20		1.	Objective testing and supporting documentation may be requested to
21			better assess the severity of the condition, and the presence or absence of
22 23			impairing symptoms or complications. This information assists the evaluators in determining whether the mariner is able to perform routine
23 24			and emergency duties without risk of sudden incapacitation or other
24 25			impairment.
23			impariment.
26		2.	The treating provider should submit objective testing and supporting
27			documentation as appropriate for the specifics of the mariner applicant's
28			medical condition. Generally, the type and manner of evaluation data or
29			objective testing submitted will be left to the discretion of the treating
30			provider or specialist.
31		3	If the applicant has undergone prior testing, and the treating physician
32		5.	feels strongly that further testing is not clinically indicated, then the
33			provider should include a statement to that effect in their assessment,
34			along with the results of previously performed testing.
ε.			are results of pre-result performed tooling.

1 2 3	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 their assessment.
4 5	5. Examples of recommended evaluation data for psychiatric or mental health conditions include, but are not limited to:
6 7	• Full mental health evaluation from the treating provider/treating mental health specialist; and
8 9 10 11	• 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 the Medication Enclosure for further guidance.
12	(4) <u>Medical Certification Evaluation</u> .
13	a. <u>Certification Determinations</u> .
14 15 16	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:
17	a) The severity of the condition;
18	b) The presence of symptoms;
19	c) The stability of the condition;
20	d) The need for access to medical care;
21	e) The applicant's ability to perform routine and emergency duties;
22	f) The risk for sudden incapacitation or debilitating complication;
23 24	g) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
25	h) The written assessment of the treating provider; and
26	i) The results of objective testing and standard evaluation data.
27	b. Medical Waivers.
28 29 30 31	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.

1 2	b) The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
3 4	c) If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
5	c. <u>Disqualification</u> .
6 7	 Mariner applicants with unstable conditions or impairing symptoms/complications may be found unqualified;
8 9	(2) Mariner applicants with a history of, or at risk for psychosis, suicidal ideation, or homicidal ideation may be found unqualified
10 11	(3) Mariner applicants who are at risk for sudden incapacitation or debilitating complication;
12 13	(4) Mariner applicants with risk of impaired cognitive ability, judgment or reaction time may be found unqualified;
14 15 16	(5) Mariner applicants whose conditions are treated with controlled substances, impairing medications, or anti-psychotic medications may be found unqualified; and
17 18	(6) Mariner applicants whose condition impairs their ability to perform routine and emergency duties may be found unqualified.
19 20 21 22	(7) If the DME disqualifies the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
23	3. Guidance to Designated Medical Examiners (DMEs).
24	a. <u>Documentation</u> .
25 26	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
27	a) An evaluation from the treating provider and/or specialist; and
28	b) Any appropriate recommended evaluation data.
29	b. <u>Approval</u> .
30 31	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
32	a) Favorable recommendation from the treating provider;

1 2	 b) Condition is asymptomatic and without recent need for major intervention, or hospitalization;
3 4	c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, or impairing complications;
5 6	 d) There is no history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
7 8 9	e) Mariner applicant has no risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications may be found unqualified; and
10 11	 f) Documentation supports adequate physical ability to perform routine and emergency duties.
12	(2) If the DME approves the certification decision to the Coast Guard, the
13	DME should discuss the reason(s) for deferral and document their
14	recommendation regarding medical certification on the Application for
15	Medical Certificate, Form CG-719K.
16	c. <u>Deferral</u> .
17	1. The DME must defer the decision to the Coast Guard if any of the
18	following:
19	a) Unfavorable recommendation or insufficient documentation from the
20	treating provider;
21	b) The applicant has evidence of instability, or impairing symptoms/
22	complications;
23	c) The applicant has other symptoms or findings that suggest a significant
23 24	risk of an sudden incapacitation or debilitating complication;
25	d) The applicant has a history of, or risk for psychosis, suicidal ideation,
25 26	d) The applicant has a history of, or risk for psychosis, suicidal ideation, or homicidal ideation;
26	of nonneldar ideation,
27	e) The applicant has required emergency treatment or hospitalization in
28	the past 6 years;
29	f) The applicant is at risk for impaired cognitive ability, judgment or
30	reaction time;
31	g) The applicant is taking controlled substances, impairing medications,
32	or anti-psychotic medications;

1 2		h) The applicant's examination suggests impaired ability to perform routine and emergency duties.
3 4 5	2.	The DME's deferral should address the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
6	d. <u>Ec</u>	lucation.
7 8		The DME should provide education to mariner applicants on how their ondition may affect, or be affected by service at sea.
9	e. <u>Re</u>	eferral.
10	Tł	ne DME should refer mariner applicants to their treating provider for
11		llow-up of any abnormal findings discovered during the examination or
12	du	uring screening.
13		

1		
2	f.	Alcohol/Substance Abuse or Dependence.
3		-
4	a.	Guidance to Mariner Applicants.
5		In some cases, alcohol/substance abuse or dependence disorders may be
6		deemed too high risk for medical certification. This would include
7		alcohol/substance abuse or dependence disorders that are treated with
8		impairing medications, associated with impairing signs and symptoms, or
9		associated with a history of, or at significant risk for psychosis, suicidal
10		ideation, homicidal ideation, or hospitalization.
11		Alcohol/substance abuse or dependence disorders that are not in remission are
12		considered disqualifying and generally will not be approved for issuance of a
13		medical waiver.
14		Alcohol/substance abuse or dependence disorders that are in remission and
15		determined to pose a low risk of sudden incapacitation or impairment may be
16		considered for a waiver, or may not require any waiver or restriction.
17		The evaluation for medical certification and waiver issuance will consider the
18		level of stability, the likelihood for worsening or recurrence, the written
19		assessment of the treating provider or specialist (as applicable), and the results
20		of appropriate testing.
21		1) Mariner applicants with alcohol/substance abuse or dependence disorders
22		should discuss the following with their treating provider, AND the
23		provider performing the medical certificate examination:
24		
25		a) Their medical condition and the limitations of medical care aboard the
26		vessel;
27		b) The sofety consider notion of their moreheast mariner and esticly
28 29		b) The safety sensitive nature of their merchant mariner credential;
30		c) How/whether the medical condition may affect, or be affected by
31		service aboard a vessel or by service at sea; and
32		
33		d) The recommendation that the treating provider/provider performing
34		the medical certificate examination review the guidance in this Manual
35		when providing their assessment for medical certification.
36		
37		2) Make sure to submit sufficient information on any of their medical
38		conditions that are subject to further review. This includes:
39 40		a) The Treating Dravid ?- A 4 1
40 41		a) The Treating Provider's Assessment ; and
41 42		b) Decommended Evaluation Data
42		b) Recommended Evaluation Data .

1	
2	b. <u>Guidance to Treating Providers</u> .
3	
4	1) <u>Treating Provider's Assessment</u> .
5	
6	The treating provider's assessment should detail a full evaluation of the
7	condition as follows:
8	
9	a) Pertinent medical examination and physical evaluation data;
10	
11	b) The history of the condition;
12	
13	c) The status of the condition, to include severity, stability, symptoms,
14	presence of impairing complications, and whether the applicant has
15	required emergency treatment, intervention or hospitalization within
16	the past 5 years;
17	
18	d) Treatment efficacy and compliance;
19	
20	e) An assessment of the applicant's risk for future adverse cardiac events,
21	malignant arrhythmia, syncope, sudden incapacitation, or debilitating
22	complication;
23	
24	f) Reports of objective testing and standard evaluation data used to
25	support their assessment; and
26	
27	g) The extent to which the applicant's medical condition is likely to
28	affect, or be affected by, service aboard the vessel or service at sea.
29	
30	In some cases, the Coast Guard may request that the applicant submit
31	documentation from a specialist such as a psychiatrist, for example.
32	
33	2) <u>Recommended Evaluation Data</u> .
34	
35	Objective testing and supporting documentation are requested to better
36	assess the severity of the condition, the applicant's functional capacity;
37	and the presence or absence of ischemia with exercise. This information
38	assists the evaluators in determining whether the mariner is able to
39	perform routine and emergency duties without risk of sudden
40	incapacitation.
41	
42	The treating provider should submit objective testing and supporting
43	documentation as appropriate for the specifics of the mariner applicant's
44	medical condition. Generally, the type and manner of evaluation data or
45	objective testing submitted will be left to the discretion of the treating
46	provider or specialist.

1	
2	If the applicant has undergone prior testing, and the treating physician
3	feels strongly that further testing is not clinically indicated, then the
4	provider should include a statement to that effect in their assessment,
5	along with the results of previously performed testing.
6	
7	If the treating provider seeks to demonstrate the applicant's fitness by
8	alternate means, then the provider should include a statement to that effect
9	in their assessment.
10	
11	Examples of recommended evaluation data for psychiatric or mental
12	health conditions include, but are not limited to:
13	
14	i. Full mental health evaluation from the treating
15	provider/treating mental health specialist;
16	
17	ii. Applicants with a diagnosis of abuse or dependence, or self-
18	reported abuse or dependence, within the last 5 years should
19	submit an evaluation from a substance abuse professional that
20	includes assessment of the applicant's suitability to return to
21	work in safety-sensitive positions; and
22	
23	iii. Applicants whose conditions are treated with controlled
24	substances, impairing medications or anti-psychotic
25	medications may be asked to submit the results of
26	neuropsychological/neurocognitive testing. See the Medication
27	Enclosure for further guidance.
28	
29	c. Medical Certification Evaluation.
30	
31	1) Certification determinations will be made on a case-by-case basis.
32	Information considered during the evaluation for issuance of a medical
33	certificate will include, but is not limited to:
34	
35	a) The severity of the condition;
36	
37	b) The presence of symptoms;
38	
39	c) The stability of the condition;
40	
41	d) The need for access to medical care;
42	
43	e) The applicant's ability to perform routine and emergency duties;
44	
45	f) The risk for sudden incapacitation or debilitating complication;
46	

1 2 3		g) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
4		h) The written assessment of the treating provider; and
5 6 7		i) The results of objective testing and standard evaluation data.
8	2)	Medical Waivers.
9 10		Mariner applicants whose condition does not meet the standard may be
11		approved for a medical waiver if objective medical evidence indicates that
12		the condition is sufficiently controlled to pose no significant risk to
12		maritime and public safety.
13		martine and public safety.
15		a) The evaluation will consider whether there are extenuating
16		circumstances that warrant special consideration for issuance of a
17		medical waiver; and
18		
19		b) If approved, waivers and limitations may be applied to the credential
20		and/or medical certificate, on a case-by-case basis.
21		
22	3)	Disqualification.
23	5)	<u></u>
24		a) Mariner applicants with alcohol/substance abuse or dependence that is
25		not in remission will be found unqualified and generally will not be
26		considered suitable for a medical waiver;
27		
28		b) Mariner applicants with unstable conditions or impairing
29		symptoms/complications may be found unqualified;
30		
31		c) Mariner applicants with a history of, or at risk for psychosis, suicidal
32		ideation, or homicidal ideation may be found unqualified;
33		
34		d) Mariner applicants who are at risk for sudden incapacitation or
35		debilitating complication;
36		
37		e) Mariner applicants with risk of impaired cognitive ability, judgment or
38		reaction time may be found unqualified;
39		
40		f) Mariner applicants whose conditions are treated with controlled
41		substances, impairing medications, or anti-psychotic medications may
42		be found unqualified; and
43		
44		g) Mariner applicants whose condition impairs their ability to perform
45		routine and emergency duties may be found unqualified.
46		

1	(3) If the DME disqualifies the certification decision to the Coast Guard, the
2	DME should discuss the reason(s) for deferral and document their
3	recommendation regarding medical certification on the Application for
4	Medical Certificate, Form CG-719K.
5	
6	d. Guidance to Designated Medical Examiners.
7	d. <u>Outduite to Designated Medical Examiner</u> s.
8	1) The DME should ensure that the applicant has provided adequate
9	documentation for the condition, to include:
10	
11	a) An evaluation from the treating provider and/or specialist; and
12	
13	b) Any appropriate recommended evaluation data.
14	
15	2) <u>The DME NOT</u> approve applicants with a history of alcohol/substance
16	abuse or dependence for certification.
17	
18	3) <u>The DME Must Defer the decision to the Coast Guard if any applicants</u>
19	have a history of alcohol/substance abuse or dependence.
20	The DME's deferral should address the reason(s) for deferral and their
21	recommendation regarding medical certification.
22 23	recommendation regarding medical certification.
23 24	4) The DME Should Provide:
25	() <u>The Divid Divide Provide</u> .
26	Education to mariner applicants on how their condition may affect, or be
27	affected by service at sea.
28	
29	5) <u>The DME Should Refer</u> :
30	
31	Mariner applicants to their treating provider for follow-up of any abnormal
32	findings discovered during the examination or during screening.
	▼

1		
2	g.	Schizophrenia/Psychotic Disorders.
3	-	
4	a.	Guidance to Mariner Applicants.
5		In most cases, schizophrenia and psychotic disorders are deemed too high risk
6		for medical certification. This would include schizophrenia and psychotic
7		disorders that are treated with impairing medications, associated with
8		impairing signs and symptoms, or associated with a history of, or at
9		significant risk for psychosis, suicidal ideation, homicidal ideation, or
10		hospitalization.
11		Schizophrenia and psychotic disorders are disqualifying and generally will not
12		be approved for issuance of a waiver, or may not require any waiver or
13		limitation.
14		The evaluation for medical certification and waiver issuance will consider the
15		level of stability, the likelihood for worsening or recurrence, the written
16		assessment of the treating provider or specialist (as applicable), and the results
17		of appropriate testing.
18		1) Mariner applicants with schizophrenia and psychotic disorders should
19		discuss the following with their treating provider, and the provider
20		performing the medical certificate examination:
21		
22		a) Their medical condition and the limitations of medical care aboard the
23 24		vessel;
24 25		b) The safety sensitive nature of their merchant mariner credential;
26		
27		c) How/whether the medical condition may affect, or be affected by
28		service aboard a vessel or by service at sea; and
29		
30		d) The recommendation that the treating provider/provider performing
31		the medical certificate examination review the guidance in this Manual
32		when providing their assessment for medical certification.
33		
34		2) Make sure to submit sufficient information on any of their medical
35		conditions that are subject to further review. This includes:
36		
37		a) The Treating Provider's Assessment ; and
38		b) December de la Friedrick en Dete
39 40		b) Recommended Evaluation Data .
40	٢	Guidance to Treating Providers
41 42	b.	Guidance to Treating Providers.
42 42		1) Tracting Provider's Assessment
43		1) <u>Treating Provider's Assessment</u> .

1	
1	The twesting marridar's access ment should detail a full evaluation of the
2	The treating provider's assessment should detail a full evaluation of the
3	condition as follows:
4) Destingut we died en winstigen op heteried en heter
5	a) Pertinent medical examination and physical evaluation data;
6	
7	b) The history of the condition;
8	a) The status of the condition to include convertor stability symptoms
9	c) The status of the condition, to include severity, stability, symptoms,
10	presence of impairing complications, and whether the applicant has
11	required emergency treatment, intervention or hospitalization within
12 13	the past 5 years;
13	d) Treatment efficacy and compliance;
14	d) Treatment efficacy and compliance.
15	e) An assessment of the applicant's prognosis and risk for future adverse
10	neurologic events;
17	neurologie events,
19	f) Reports of objective testing and standard evaluation data used to
20	support their assessment; and
21	support and association, and
22	g) The extent to which the applicant's medical condition is likely to
23	affect, or be affected by, service aboard the vessel or service at sea.
24	
25	In some cases, the Coast Guard may request that the applicant submit
26	documentation from a specialist such as a psychiatrist, for example.
27	
28 2	2) <u>Recommended Evaluation Data</u> ,
29	
30	Objective testing and supporting documentation may be requested to
31	better assess the severity of the condition, and the presence or absence of
32	impairing symptoms or complications. This information assists the
33	evaluators in determining whether the mariner is able to perform routine
34	and emergency duties without risk of sudden incapacitation or other
35	impairment.
36	
37	The treating provider should submit objective testing and supporting
38	documentation as appropriate for the specifics of the mariner applicant's
39	medical condition. Generally, the type and manner of evaluation data or
40	objective testing submitted will be left to the discretion of the treating
41	provider or specialist.
42	
43	If the applicant has undergone prior testing, and the treating physician
44	feels strongly that further testing is not clinically indicated, then the
45	provider should include a statement to that effect in their assessment,
46	along with the results of previously performed testing.

1	
2	If the treating provider seeks to demonstrate the applicant's fitness by
3	alternate means, then the provider should include a statement to that effect
4	in their assessment.
5	
6	Examples of recommended evaluation data for psychiatric or mental
7	health conditions include, but are not limited to the full mental health
8	evaluation from the treating psychiatrist.
9	evaluation nom the treating poyentation.
10	c. Medical Certification Evaluation.
11	
12	1) Certification determinations will be made on a case-by-case basis.
13	Information considered during the evaluation for issuance of a medical
14	certificate will include, but is not limited to:
15	
16	a) The severity of the condition;
17	
18	b) The presence of symptoms;
19	
20	c) The stability of the condition;
21	
22	d) The need for access to medical care;
23	
24	e) The applicant's ability to perform routine and emergency duties;
25	
26	f) The risk for sudden incapacitation or debilitating complication;
27	
28	g) The risk of impaired cognitive ability, judgment or reaction time
29	related to the condition or associated medications;
30	
31	h) The written assessment of the treating provider; and
32	
33	i) The results of objective testing and standard evaluation data.
34	
35	2) <u>Medical Waivers</u> .
36	
37	Mariner applicants whose condition does not meet the standard may be
38	approved for a medical waiver if objective medical evidence indicates that
39	the condition is sufficiently controlled to pose no significant risk to
40	maritime and public safety.
41	
42	i. The evaluation will consider whether there are extenuating
43	circumstances that warrant special consideration for issuance
44	of a medical waiver; and
45	

1	ii. If approved, waivers and limitations may be applied to the
1 2	credential and/or medical certificate, on a case-by-case basis.
3	3) <u>Disqualification</u> .
4	5) <u>Disquinicuton</u> .
5	a) Mariner applicants with schizophrenia or psychotic disorders will
6	be disqualified and generally will not be granted a medical waiver;
7	
8	b) Mariner applicants with unstable conditions or impairing
9	symptoms/complications may be found unqualified;
10	
11	c) Mariner applicants with a history of, or at risk for psychosis,
12	suicidal ideation, or homicidal ideation may be found unqualified;
13	
14	d) Mariner applicants who are at risk for sudden incapacitation or
15	debilitating complication;
16	
17	e) Mariner applicants with risk of impaired cognitive ability,
18	judgment or reaction time may be found unqualified;
19	
20	f) Mariner applicants whose conditions are treated with controlled
21	substances, impairing medications, or anti-psychotic medications
22	may be found unqualified; and
23 24	g) Mariner applicants whose condition impairs their ability to perform
24 25	routine and emergency duties may be found unqualified.
23 26	routine and emergency duties may be round unquantied.
20 27	d. Guidance to Designated Medical Examiners.
28	d. <u>Ourdance to Designated Tredical Estaminer</u> s.
29	1) The DME should ensure that the applicant has provided adequate
30	documentation for the condition, to include:
31	
32	a) An evaluation from the treating provider and/or specialist; and
33	
34	b) Any appropriate recommended evaluation data.
35	
36	2) <u>The DME May NOT approve applicants with schizophrenia or psychotic</u>
37	disorders for medical certification.
38	
39	3) <u>The DME Must Defer the decision to the Coast Guard if applicants have</u>
40	schizophrenia or psychotic disorders.
41	The DME's defense the value of the value of the value $(-)$ for the formula $(-)$
42	The DME's deferral should address the reason(s) for deferral and their recommendation regarding medical cartification
43 44	recommendation regarding medical certification.
	a) The DME Should Provide:
45 46	a) <u>The DME Should Provide</u> :
46	

Education to mariner applicants on how their condition may affect, or be affected by service at sea.

b) The DME Should Refer:

 Mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

1 CHAPTER 24. PULMONARY CONDITIONS

2 A. Conditions of Concern.

- 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.
- 9
 2. Conditions requiring use of supplemental oxygen while working are disqualifying and generally will not be approved for issuance of a waiver.

11 **B.** Guidance to Mariner Applicants.

- Some 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 the credential.
- Pulmonary conditions that are determined to pose a low risk of sudden incapacitation and that don't impair the 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.
- 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.
- 23 4. Mariner applicants with pulmonary conditions should:
- a. Discuss the following with their treating provider, and the provider performing the
 medical certificate examination:
- 26 (1) Their medical condition and the limitations of medical care aboard the vessel;
- 27 (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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1 2	b.	Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
3		(1) The Treating Provider's Assessment ; and
4		(2) Recommended Evaluation Data.
5	C. Guida	nce to Treating Providers.
6	1. <u>Tr</u>	eating Provider's Assessment.
7 8		e treating provider's assessment should detail a full evaluation of the condition as lows:
9	a.	Pertinent medical examination and physical evaluation data;
10	b.	The history of the condition;
11	с.	The status of the condition - to include severity, stability, symptoms, presence of
12 13		impairing complications, and whether the applicant has required emergency care, major intervention, hospitalization, or surgery within the past 6 years;
14	d.	Treatment compliance and efficacy;
15 16	e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
17 18	f.	Reports of objective testing and standard evaluation data used to support their assessment; and
19 20	g.	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.
21 22	h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a pulmonologist, for example.
23	2. <u>Re</u>	ecommended Evaluation Data:
24	a.	Objective testing results and supporting documentation are requested to better assess
25		the severity of the condition, the likelihood of symptom recurrence or exacerbation,
26		and the presence of adequate exercise/functional capacity. This information assists the
27 28		evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation or impairment.
29	b.	The treating provider should submit objective testing and supporting documentation
30		as appropriate for the specifics of the mariner applicant's medical condition.
31		Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist
32		be left to the discretion of the treating provider or specialist.

1 2 3 4		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.
5 6 7		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.
8 9		e.	Examples of recommended evaluation data for pulmonary conditions include, but are not limited to:
10			(1) Pulmonary function tests; and
11			(2) Cardiopulmonary exercise testing.
12	D. Me	edic	al Certification Evaluation.
13	1.	Ce	rtification Determinations.
14 15 16		coi	rtification determinations will be made on a case-by-case basis. Information nsidered during the evaluation for issuance of a medical certificate will include, but is t limited to:
17		a.	The severity of the condition;
18		b.	The presence of symptoms or impairing complications;
19		c.	The stability of the condition;
20		d.	The need for access to medical care;
21		e.	The applicant's ability to perform routine and emergency duties;
22		f.	The risk for sudden incapacitation or debilitating complication;
23 24		g.	The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
25		h.	The written assessment of the treating provider; and
26		i.	The results of objective testing and standard evaluation data.
27	2.	Me	edical Waivers.
28		a.	Mariner applicants whose condition does not meet the standard may be approved for a modical waiver if objective modical evidence indicates that the condition is
29 30			a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.

1 2		b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
3 4		c. If approved, waivers and limitations may be applied to the credential and/or medical certificate, on a case-by-case basis.
5	3.	Disqualification.
6 7		1 Mariner applicants with severe symptoms or frequent exacerbations may be found unqualified.
8 9		2 Mariner applicants with findings that indicate a significant risk of an adverse event, syncope, collapse, impairment, or sudden death may be found unqualified.
10 11 12		3 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.
13 14		4 Mariner applicants who require supplemental oxygen while working may be found unqualified and likely will not be considered suitable for a medical waiver.
15	E. Gui	idance to Designated Medical Examiners (DMEs).
16	1.	Documentation.
17 18		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
19		a. An evaluation from the treating provider and/or specialist; and
20		b. Any appropriate recommended evaluation data.
21	2.	<u>Approval</u> .
22 23		a. The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
24		(1) Favorable recommendation from the treating provider;
25 26		(2) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
27 28		(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
29 30		(4) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.

- b. If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
- 4 3. <u>Deferral</u>.

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- a. **The DME must defer the decision** to the Coast Guard 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;
- 12 (4) The applicant requires supplemental oxygen while working; and
- (5) 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 DME defers the certification decision to the Coast Guard, the DME should
 discuss the reason(s) for deferral and document their recommendation regarding
 medical certification on the Application for Medical Certificate, Form CG-719K.
- 18 4. <u>Education</u>
- 19 **The DME should provide education** to mariner applicants on how their condition may 20 affect, or be affected by service at sea.
- 21 5. <u>Referral.</u>
- The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

1 CHAPTER 25. SKIN CONDITIONS

2 A. Conditions of Concern.

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3 Skin disorders that are life-threatening, impairing, or that pose a risk of sudden incapacitation

- 4 or debilitating complication are subject to further review, and may be determined
- 5 disqualifying. Examples include, but are not limited to skin disorders associated with
- 6 systemic complications, or skin disorders that interfere with wear of protective equipment, or
- 7 impair the individual's ability to safely perform shipboard functions or meet the mental and
- 8 physical demands that would reasonably arise during an emergency response.

9 **B.** Guidance to Mariner Applicants.

- In some cases, skin disorders 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 the credential.
- Skin disorders that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any waiver or limitation.
- 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.
- 19 4. Mariner applicants with allergic conditions should:
- 20a. Discuss the following with their treating provider, and the provider performing the21medical 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:
- 31 (1) The **Treating Provider's Assessment**; and
- 32 (2) **Recommended Evaluation Data**.

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1	C. G	uida	ince to Treating Providers.
2	1.	<u>Tr</u>	eating Provider's Assessment.
3 4			e treating provider's assessment should detail a full evaluation of the condition as lows:
5		a.	Pertinent medical examination and physical evaluation data;
6		b.	The history of the condition;
7 8 9		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;
10		d.	Treatment compliance and efficacy;
11 12		e.	An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
13 14		f.	Reports of objective testing and standard evaluation data used to support their assessment; and
15 16		g.	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.
17 18		h.	In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a dermatologist, for example.
19	2.	. <u>Re</u>	commended Evaluation Data:
20 21 22 23 24		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 the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
25 26 27 28		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.
29 30 31 32		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.

- 1d. If the treating provider seeks to demonstrate the applicant's fitness by alternate2means, then the provider should include a statement to that effect in their assessment.
- 3 **D. Medical Certification Evaluation.**
- 4 1. <u>Certification Determinations.</u>
- 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:
- 8 a. The severity of the condition;
- 9 b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- 11 d. The need for access to medical care;
- 12 e. The applicant's ability to perform routine and emergency duties;
- 13 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;
- 16 h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data.
- 18 2. <u>Medical Waivers.</u>
- 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.
- 26 3. <u>Disqualification.</u>
- 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; and

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1 2			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.
3	E.	G	uida	nce to Designated Medical Examiners (DMEs).
4		1.	Do	ocumentation.
5 6				e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
7			a.	An evaluation from the treating provider and/or specialist; and
8			b.	Any appropriate recommended evaluation data.
9		2.	<u>Ap</u>	pproval.
10 11			a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
12				(1) Favorable recommendation from the treating provider;
13 14				(2) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization or surgery;
15 16				(3) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or impairing complications; and
17 18				(4) Documentation supports that the applicant has the functional capacity and physical ability necessary to perform routine and emergency duties.
19 20 21			b.	If the DME approves issuance of the medical certificate, the DME should document the rationale for approving issuance of the medical certificate on the Application for Medical Certificate, Form CG-719K.
22		3.	De	oferral.
23			a.	The DME Must Defer the decision to the Coast Guard if any of the following apply:
24 25				(1) Unfavorable recommendation or insufficient documentation from the treating provider;
26 27				(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
28 29 30				(3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency dutie suggests impaired ability to perform routine and emergency duties; or

- (4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
- b. If the DME defers the certification decision to the Coast Guard, the DME should discuss the reason(s) for deferral and document their recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
- 6 4. <u>Education</u>

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- The DME should provide education to mariner applicants on how their condition may
 affect, or be affected by service at sea.
- 9 5. <u>Referral.</u>
- 10 The DME should refer_mariner applicants to their treating provider for follow-up of any 11 abnormal findings discovered during the examination or during screening.