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XX MONTH 2017

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Subject: MERCHANT MARINER MEDICAL EVALUATION

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(a) International Convention on Standards of Training, Certification and Ref: Watchkeeping for Seafarers, 1978, as amended (STCW)

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(b) Title 46 United States Code (U.S.C.), Subtitle II, Part E

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(c) Title 46, Code of Federal Regulations (CFR), Part 10, Subpart C

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(d) Title 46 CFR Parts 401 and 402

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(e) 80 Federal Register (FR) 8586, February 18, 2015

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1. PURPOSE. This Manual provides guidance for evaluating the physical and medical condition of applicants for merchant mariner medical certificates. The guidance in this Manual should assist medical practitioners, the maritime industry, individual mariners, and Coast Guard personnel in evaluating a mariner applicant's physical and medical status to meet the requirements of references (a) through (d). This guidance is not a substitute for applicable legal requirements.

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24 25 a. Since Navigation and Vessel Inspection Circular (NVIC) 04-08 was published in 2008, Coast Guard practices with respect to the physical and medical evaluation process have evolved considerably, consistent with developments and advancements in modern medical practices. This Manual replaces NVIC 04-08, NVIC 01-14, and Part A of the Marine Safety Manual (MSM) Volume III, Chapter 4, and puts current Coast Guard practices into writing, making them transparent and promoting their consistent application.

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b. The guidance in this Manual applies to applicants for the merchant mariner medical certificate. Chapter 3 specifically details the standards that apply to applicants for each of the various types of credentials that require a medical certificate.

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2. ACTION. The Commanding Officer, National Maritime Center (NMC), must make this information available to ensure medical personnel who conduct examinations of applicants for merchant mariner medical certificates, and Coast Guard personnel who review applications for credentials, evaluate applicants in accordance with the contents of this Manual. Officers in Charge, Marine Inspection (OCMIs) should bring this manual to the attention of the maritime industry within their zones. Internet release is authorized.

DISTRIBUTION - SDL No. 168

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DRAFT Merchant Mariner Medical Manual

- 1 3. <u>DIRECTIVES AFFECTED</u>. 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.

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4. BACKGROUND.

- a. Reference (a) requires each party to establish standards of medical fitness for seafarers.
- 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
- mariners be physically able to perform their duties, using terms such as "general physical
- 15 condition," "good health" and "of sound health." Reference (d) contains special
- requirements for registration as a Great Lakes Pilot, including the requirement to "pass a
- physical examination given by a licensed medical doctor." With the exception of hearing,
- visual acuity, and color vision, none of these references contains specific standards for
- determining whether mariners are physically and medically qualified.
- 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
- 22 applicants are evaluated, and the medical tests and other information needed to make
- 23 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
- 26 determining whether medical certificates should be issued.
- c. NVIC 04-08 detailed medical conditions that were subject to further review, and the
- recommended data for evaluating each condition to determine fitness for certification. It
- also detailed physical ability guidelines and acceptable vision and hearing standards.
- This was necessary to reduce the subjectivity of the physical and medical evaluation
- 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
- mariners encountered as to the appropriate physical and medical information needed to
- process their applications. This Manual provides more detail on medical conditions
- subject to further review and the recommended evaluation data for evaluating those
- 36 conditions.

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

5. DISCUSSION.

- a. This Manual is a resource to assist mariner applicants in understanding how the Coast 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 in performing examinations of applicants. It provides guidance on conditions that are subject to further review for issuance of the medical certificate and the recommended supplemental medical tests and evaluations. Medical practitioners should provide comments and recommendations with regard to the ability of applicants to meet the standards. The final determination regarding issuance of the medical certificate lies with 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 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.
- c. This Manual has been developed by the Coast Guard in consultation with the experienced maritime community medical practitioners and industry stakeholders comprising the Merchant Mariner Medical Advisory Committee (MEDMAC). This Manual reflects a synthesis of their recommendations, the medical requirements in references (a) through (d), and the recommendations of other federal transportation mode authorities as to appropriate physical and medical standards. The public was afforded opportunity to 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. The public was also afforded opportunity to comment on drafts of the policies contained in this Manual and its predecessor, NVIC 04-08. *See* 80 FR 8586 (February 18, 2015) [Diabetes, cardiomyopathy and sleep disorders], 80 FR 4582 (January 28, 2015) [Medications], 78 FR 17917 (March 25, 2013) [Seizures], and 77 FR 55174 (September 7, 2012) [Implantable Cardioverter Defibrillators].

- d. Chapter 1 of this Manual provides guidance on the medical review process for the issuance of medical certificates. This chapter additionally discusses limitations, waivers and/or other conditions of issuance that may be placed on the medical certificate or credential. 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 per 46 CFR part 10, subpart C.
- 7 e. Chapter 2 describes the contents of the medical certificate and discusses key terms and 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).
- g. Chapter 4 provides guidance on the general medical examination.
- 12 h. Chapter 5 provides guidance on evaluating vision and hearing.

- i. Chapter 6 provides guidance for determining whether mariner applicants are physically able to perform their duties.
- j. Chapter 7 provides guidance on the evaluation of mariner applicants who take certain
 medications.
 - k. Chapters 8 through 25 contain guidance on medical conditions that are subject to further review, and the supplemental information that should be submitted to facilitate the review. The list of conditions is non-exhaustive, and not all of the medical conditions listed will require a waiver.
 - 1. Applicants for the medical certificate must utilize the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form CG-719K/E, as appropriate for the credential held or sought. The forms are publicly available on the Coast Guard website at: http://www.uscg.mil/forms/cg/CG_719K.pdf and 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 page of the form, where requested.
 - m. Some individuals may have conditions or limitations that are not listed but which would render them incapable of performing their duties. Others with a listed condition or limitation may be capable of working at sea without posing a risk to the ship, their shipmates, or themselves. While each applicant is evaluated individually, the conditions described in this Manual are those which may be subject to further review, in accordance with Chapter 1, before a medical certificate will be issued.
 - n. In situations where the applicant does not meet the standards specified in references (a) through (d), as supplemented by the guidance contained herein, waivers, limitations, and/or restrictions may be considered by the Coast Guard. The supplemental medical records, consultations, and test results listed in Chapters 8 through 25, Medical

1 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. thing 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 itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally binding requirements on any party outside the Coast Guard. 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 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 approaches may contact the NMC Medical Evaluations Branch, which is responsible for implementing this guidance. Contact information for the NMC Medical Evaluations 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 (Jan 25, 2007).
- 7. 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.
 - a. After reviewing comments from the public, medical appeal complaints, and recommendations from the Merchant Mariner Medical Advisory Committee (MEDMAC) regarding the vague and sometimes confusing guidance contained in NVIC 04-08, the 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 NVIC 04-08 and requested public comment on proposed policy clarifications for the issuance of medical waivers for the conditions of diabetes mellitus, cardiomyopathy and sleep disorders. Comments received in response to reference (e) were used to revise the 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

- different guidance documents. With the implementation of a Designated Medical Examiner (DME) program, in accordance with 46 U.S.C. 7509, it is important that the applicable guidance be contained in a single document so that DMEs can be sure that their medical certification decisions are made in accordance with Coast Guard policies and procedures.
- d. The material was reorganized into a manual format instead of a NVIC to improve utility and ease of use for the regulated community and others who reference the document.

 Additionally, with a Commandant Instruction Manual, the name and number of the document does not change with every future issuance of the document, reducing the risk of confusion.
- e. Most of the Guidance on the Issuance of Medical Certificates, NVIC 01-14, discussed implementation and transition provisions for moving to issuance of separate medical certificates. That information is no longer relevant and has been removed.
 - (1) Material was added that provides detailed processing direction to the NMC so that Coast Guard personnel will have a standardized process for dealing with a number of situations that recur regularly.
 - (2) Information was added to provide more detail on the interplay between medical certificates for pilots and the requirement for annual pilot physicals.
- f. In accordance with 46 CFR 10.304(a), information was added to provide guidance and clarity on the conduct of the merchant mariner general medical examination.

21 8. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. The development of this Manual and the general policies contained within it have been thoroughly reviewed by the originating office and are categorically excluded under current USCG categorical exclusion (CE) #33 from further environmental analysis, in accordance with Section 2.B.2, and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series).
- b. This directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Manual must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), Council on Environmental Policy NEPA regulations at 40 CFR Parts 1500-1508, DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates.
- 9. <u>DISTRIBUTION</u>. No paper distribution will be made of this Manual. An electronic version will be located on the following web sites: http://www.uscg.mil/nmc/ and http://www.uscg.mil/directives/listing_cim.asp?id=16000-16999.

1 10. RECORDS MANAGEMENT CONSIDERATIONS. This Manual has been evaluated for 2 potential records management impacts. The development of this Manual has been thoroughly 3 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. FORMS/REPORTS. The forms referenced in this Manual are available from USCG 10 Electronic Forms on the Standard Workstation, or on the Internet at http://www.uscg.mil/nmc 11 or http://www.uscg.mil/forms/; on the Coast Guard Portal at https://cgportal2.uscg.mil/library/forms/SitePages/Home.aspx; and available to the public at 12 http://www.uscg.mil/forms/cg/CG 719K.pdf, and 13 http://www.uscg.mil/forms/cg/CG 719KE.pdf. 14 12. <u>REQUESTS FOR CHANGES</u>. This Manual will be posted on the internet at 15 http://www.uscg.mil/directives/listing_cim.asp?id=16000-16999. It will also be posted on 16 the NMC website at http://www.uscg.mil/nmc/. Changes will be issued as necessary. All 17 requests for changes should be directed to the Office of Merchant Mariner Credentialing 18 (CG-MMC), at (202) 372-2357, or MMCPolicy@uscg.mil. 19 13. QUESTIONS. All questions regarding implementation of this Manual should be directed to 20 the NMC Medical Evaluations Division at iasknine@uscg.mil. The NMC can also be 21 telephonically contacted at: 1-888-I-ASK-NMC. 22 23 24

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CHAPTER 1. GUIDANCE ON THE ISSUANCE OF MEDICAL CERTIFCATES

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2.	Α	Intra	ndm	ction.

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- 3 1. Chapter 1 provides guidance for the issuance of medical certificates under the regulations 4 in Title 46 CFR, part 10, subpart C—Medical Certification (Reference (c)) and the 5 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) (Reference (a)). 6
- 7 2. Topics covered in Chapter 1 include the medical review process, to include waivers, limitations and other conditions of issuance that may be placed on the medical certificate 8 9 or credential.
- 3. As discussed in Paragraph D of this Chapter, the Coast Guard will not enforce the 10 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 13 of this Manual, The Medical Certificate. Key terms related to medical certificates are 14 also defined in Chapter 2. 15
 - 5. Substantive medical qualification guidance follows in this Manual.

17 B. Background.

- 1. STCW Regulation I/9 and Section A-I/9 of the STCW Code set forth minimum standards 18 for the medical certification of seafarers. Specifically, the STCW Convention and Code 19 require that seafarers: 20
 - 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 30 31 the ability to effectively and safely perform routine and emergency duties on board; 32 and

- 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 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 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 impose Convention requirements on all vessels—even those from a non-ratifying government—when calling on their ports. As a result, U.S. vessels visiting foreign ports that cannot demonstrate compliance with the MLC may be at risk of port state control actions, including detention, when operating in the port of a ratifying nation. The MLC does provide that medical certificates meeting STCW requirements also satisfy the MLC requirement. Medical certificates issued under reference (c) meet the requirements of 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.

- 1. 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.
- 2. When individuals submit an application for a medical certificate, the Coast Guard will thoroughly review the application to determine if the applicant has any of the medical conditions listed in Chapters 8 through 25, or any other conditions that may create a risk 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 information is needed. Mariner applicants should then schedule additional appointments, receive test results, or meet other requirements as soon as possible to prevent unnecessary delays (See 46 CFR 10.303(a)).
 - 3. The NMC will reevaluate all medical and physical conditions requiring further review (*see* Chapters 8 through 25) prior to making a fitness determination. The NMC will

- 1 consider the applicant's completed application, as well as all supporting documentation, 2 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.
 - 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:
 - (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.

- 1. Coast Guard Procedures.
 - 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.
- d. No fees will be charged for medical certificates.

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		(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.

1 2 3		(b) Mariners holding pilot endorsements should consult Chapter 3 of this Manual to ensure compliance with all applicable requirements for medical certification.
4	3.	Company and Vessel Operator Procedures.
5 6		In order to avoid foreign port state control actions and to comply with 46 CFR 15.401, companies and vessel operators should:
7 8 9		a. Ensure that all seafarers employed by the company or operator carry a valid medical certificate when operating under the authority of their MMC on vessels subject to the STCW; or when engaged on a vessel calling on a port in a country ratifying the MLC.
10 11 12 13		b. Determine whether employed mariners have a valid medical certificate in accordance with 46 CFR 15.401(c). During the transition period, not all mariners will have a medical certificate, as implementation of the medical certificate provisions will be transitioned in accordance with Paragraph D.1.f of this Chapter.
14	4.	Enforcement Posture:
15 16		Title 46 CFR 15.401(c) requires that all mariners who must hold an MMC must also hold a valid medical certificate in order to serve under the authority of their MMC.
17 18 19		a. Each mariner holding an STCW endorsement has been issued a medical certificate and must have a valid medical certificate in order to serve under the authority of their STCW endorsement on an international voyage.
20 21		b. There are several exceptions to the requirement of 15.401(c) to hold a medical certificate. These exceptions are described in Paragraph J of this Chapter.
22 23 24		c. Most entry level mariners will be issued an MMC endorsed as food handler. However, in order to serve as a food handler, entry-level mariners must hold a valid medical certificate endorsed for food handlers.
25	E. M	edical Waivers.
26 27 28 29 30	1.	The Coast Guard may grant a waiver if a mariner applicant does not possess the vision, hearing, or general physical condition necessary; and extenuating circumstances warrant special consideration (<i>See</i> 46 CFR 10.303(a)). Chapters 8 through 25 of this Manual contain guidance on specific medical conditions and factors to consider in determining whether a waiver is warranted.
31 32 33 34 35	2.	An applicant may submit additional correspondence, records, and reports to the Coast Guard in support of a waiver. In this regard, recommendations made on behalf of their employees from agencies of the Federal Government operating government vessels, as well as owners and operators of private vessels will be given full consideration (<i>See</i> 46 CFR 10.303(a)).

- 3. In general, the Coast Guard will not approve medical waivers when an applicant does not meet the applicable medical standards, unless objective medical evidence indicates that the condition is sufficiently controlled and the effects of medication pose no significant risk to maritime and public safety. The Coast Guard retains final administrative authority for the issuance of medical waivers (*See* 46 CFR 10.303(b)).
 - 4. The Coast Guard may grant medical waivers with specific restrictions or limitations to which the applicant must adhere. This may include constraints such as more frequent monitoring of the mariner's medical conditions, submission of medical exams and /or tests at varying intervals to track the ongoing status of the medical condition, or operational limitations (*See* 46 CFR 10.303(c), (d) and (e)).
 - 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 "restriction" and "limitation" to be synonymous. The terms are used throughout Title 46 CFR, chapter I, subchapter B, without assigning a particular meaning or distinguishing between the terms. Both terms are considered constraints on the authority granted by a 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 practice to use the term "operational limitation" on a constraint that limits the actual operating authority of a credential (e.g., daylight hours only) while "restriction" is used to describe a more general constraint such as annual reporting requirements or specialized testing.

F. Operational Limitations.

- 1. The Coast Guard may place an operational limitation on the mariner's medical certificate (See 46 CFR 10.303(d)).
- 2. An operational limitation is a specific constraint placed upon the medical certificate that reduces the mariner's ability to serve under the full authority of his or her credential.

 Examples of common operational limitations include, but are not limited to:
- a. Daylight operations only: May be applied to deck department mariners unable to pass the color vision standards in 46 CFR 10.305(a).
 - b. Limitations requiring the use of corrective lenses: May be applied to mariners with vision deficiencies (*See* 46 CFR 10.305(d)).
 - c. Restrictions regarding impaired hearing, requiring the use of hearing aids with spare batteries kept onboard at all times: Will 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)).

- 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.
- 8. 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.
 - f. No Bridge Watchkeeping: May be applied to mariners who fulfill the requirements for general shipboard service but not necessarily for the bridge.
 - 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.
 - h. Service in Deck/Engine/Steward Department only. May be applied to mariners who meet the criteria for only one of the shipboard departments.
 - 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.
 - 3. The Coast Guard may impose other limitations, as appropriate, depending on the specific medical condition and its impact on the mariner's ability to perform routine and emergency duties.

19 G. **Restrictions.**

1. Time Restrictions.

- 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 (See 46 CFR 10.301(b)(1)).
- 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).

2. Geographical Restrictions.

a. Geographical restrictions may reduce the waters upon which a mariner may operate a vessel. These restrictions may include "Near Coastal Waters only," "Inland Waters only," or other appropriate route restrictions depending on the medical condition and condition status.

b. Other geographical restrictions, such as "25 NM from Harbor of Safe Refuge," etc., may be applied as appropriate, depending on the medical condition and the need for surveillance and/or availability to obtain medical assistance.

3. Medical Restrictions.

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- 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: "Special equipment required while sleeping."
 - b. For mariners with conditions requiring medications to ensure safe functioning and provide for any emergency needs, the following restriction will be applied: "Must carry self-administered medications."
 - c. Other medical restrictions may be applied as appropriate, depending on the specific medical condition and its impact on the mariner's ability to perform routine and emergency duties.

H. Processing of Mariners with Existing Waivers.

- 1. Mariners who hold waivers previously granted by the Coast Guard present a unique situation when the current reviewer believes a waiver is not warranted, or the restrictions on the prior waiver should be increased. Mariners rely on the determinations made by the 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 different reviewers.
- 2. If a mariner has a waiver previously granted by the Coast Guard, the prior waiver should be honored and the conditions retained in the new waiver unless one of the following conditions exist:
 - a. Failure to comply with the terms of the prior waiver; including any requirements for providing additional medical information;
 - b. Material change in the mariner's condition (see Paragraph H.3 of this Chapter);
- c. A bona fide change in duly promulgated policy or regulations; or
- d. The prior waiver was issued in clear error, contrary to duly promulgated policy in effect at the time of issuance (see Paragraph H.4 of this Chapter).
- 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 restrictive conditions placed upon it.
 - a. Examples include, but are not limited to:

- 1 (1) A mariner who was previously granted a waiver for heart disease, whose 2 condition subsequently changes because of a heart attack, need for heart surgery, 3 new test results, or because the treating physician's assessment indicate an 4 increase in risk; 5 (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 6 7 physician's treatment plan, or whose laboratory work indicates poor diabetic 8 control; or 9 (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 10 impairing medication, chronic daily use of impairing medication, or use of 11 12 impairing medication while working under the authority of the credential. b. While not possible to delineate every material change in condition that may occur, a 13 14 material change generally includes conditions or situations that increase the risk of 15 sudden incapacitation or debilitating complication, or that involve the use of medication that can impair cognitive ability, judgment or reaction time. This does not 16 17 include minor medication adjustments, minor fluctuations in lab results, or the 18 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 19 20 of impairment. 4. Clear error is not a difference of opinion between different reviewers. It is when a waiver 21 22 is granted and the policy in effect at the time clearly prohibited the waiver that was 23 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 24 25 public safety is at issue. 26 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 27 28 reporting requirements. **Standard NMC Procedures:** 29 30 1. Application for a Medical Certificate Only. 31 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 32 33 of this Manual—Medical Certification Standards. The complete application package 34 includes: (1) The Application for Medical Certificate, Form CG-719K, or the Application for 35 Medical Certificate, Short Form CG-719K/E. 36
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(2) The Application for Merchant Mariner Credential, Form CG-719B, is not

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required.

1			(3) The application will be reviewed in accordance with the guidance in this Manual.
2 3 4		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 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>Ap</u>	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>Ap</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 b. Requirements for medical certification are found in 46 CFR, part 10, subpart C 2 (sections 10.301-10.306). Guidance on certification standards are found in Chapter 3 3 of this Manual – Medical Certification Standards. 4 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 5 and Paragraph E of this Chapter. 6 7 d. If the applicant is found not qualified, process in accordance with Paragraph K of this 8 Chapter. 9 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 10 Chapter. 11 4. Application for Raise-of-Grade of MMC (See 46 CFR 10.231). 12 13 a. Complete application package includes: (1) Application for Merchant Mariner Credential, Form CG-719B. 14 (2) Application for Medical Certificate, Form CG-719K, or Application for Medical 15 Certificate, Short Form CG-719K/E, or the applicant must hold a valid medical 16 certificate (See 46 CFR 10.231(c)(3) and 46 CFR 11.201(a)). 17 b. Requirements for medical certification are found in 46 CFR, part 10, subpart C 18 19 (sections 10.301-10.306). Guidance on certification standards are found in Chapter 3 of this Manual. 20 c. If the applicant is found to have potentially disqualifying condition, conduct an 21 22 individualized assessment and consider for waiver in accordance with 46 CFR 10.303 23 and Paragraph E of this Chapter. d. If the applicant is found not qualified, process in accordance with Paragraph K of this 24 25 Chapter. 26 e. If the applicant is found qualified, issue a medical certificate. Medical certificates 27 may be time-limited, in accordance with 46 CFR 10.303 and Paragraph G.1 of this Chapter. 28 5. Application for New Endorsement¹. 29 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."

Certificate, Short 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)).
 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.
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.
d. If the mariner is found not qualified, process in accordance with Paragraph K of this Chapter.
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.
Application for Removal of Medical Restriction or Operational Limitation.
a. If the restrictions are on an MMC, see 46 CFR 10.223.
(1) An application for Merchant Mariner Credential, Form CG-719B, is required.
(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.
o. Medical Certificate Restrictions.
(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.
(2) The Application for Merchant Mariner Credential, Form CG-719B, is not required.
(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.
(4) If the mariner is found not qualified, process in accordance with Paragraph K of this Chapter.
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1 2 3			(5) 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.
4	J.	Sp	ecial Considerations for Entry Level Mariners and Staff Officers.
5 6 7 8		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 MLC requirements, should apply using the Application for Medical Certificate, Short Form CG-719K/E.
9			a. Qualified mariners will be issued a medical certificate.
10 11			b. The information blocks described in Paragraph D of Chapter 2, The Medical Certificate, will be marked either "N/A" or "N" on the certificate, as appropriate.
12			c. The medical certificate will be restricted to entry-level only .
13 14 15			d. Unless a statement regarding communicable diseases is provided, in accordance with 46 CFR 10.304(b), all medical certificates will contain a limitation stating "No food handling.
16 17 18 19		2.	Mariners applying for or holding an MMC with a national entry-level endorsement only, seeking to be qualified for lookout duties should submit the Application for Medical Certificate, Form CG-719K. Sections III (Medical Conditions), IV (Medications) and V (Physical Examination) DO NOT have to be completed.
20 21 22			a. Mariners will be evaluated on hearing and vision requirements and, if found qualified will be issued a medical certificate with the appropriate information blocks marked "Y."
23			b. Medical certificates will be restricted to entry-level only.
24 25 26			c. Unless a statement regarding communicable diseases is provided, in accordance with 46 CFR 10.304(b), all medical certificates will contain a limitation stating "No food handling."
27	K.	Pr	ocessing of Medically Disqualified Mariners.
28 29 30 31		an be	ariners who don't meet the medical qualification standards in 46 CFR part 10, subpart C, d who have been provided an individual assessment regarding eligibility for a waiver; will processed in accordance with the following directions if a waiver is not granted or the ariner is no longer compliant with an existing waiver.
32		1.	Mariners noncompliant with existing medical waiver conditions.

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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

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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		(1) 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>M</u>	dedically Disqualified Mariners 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. Reconsiderations (See 46 CFR 1.03-40).
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. Appeals (See 46 CFR 1.03-15).
28 29	 a. Appeals on reconsideration must be received within 30 days of action or decision by the NMC.
30	b. An extension may be requested in writing, and will be granted for good cause.
31 32	c. Appeals must be submitted in writing to the Commandant (CG-5PS) (<i>See</i> 46 CFR 1.03-15(c)).

1 CHAPTER 2. THE MEDICAL CERTIFICATE

2 A. Medical Certificate Overview.

- 1. The medical certificate, issued by the Coast Guard under 46 CFR part 10, subpart C, serves as proof that a mariner meets the medical and physical standards for merchant mariners. The format and information contained on the medical certificate is outlined below, along with a sample medical certificate.
 - 2. 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 CG-719K 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)).
 - 3. 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.

B. Medical Certificate Key Terms.

1. Date of Examination.

- 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>.

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)).

3. Time-Restricted Medical Certificates.

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

C. Application Procedures.

- 1. 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. Oualified 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.

- c. The medical certificate will be restricted to entry-level only or staff officer endorsements, as appropriate.
 - d. Mariners **seeking to serve as food handlers** should provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.
 - 2. Mariners applying for or holding an MMC with an entry-level endorsement only, who serve on a vessel not subject to STCW but requesting a medical certificate that satisfies the MLC, who **want to be qualified for lookout duties**, should submit an Application for Medical Certificate, Form CG-719K. Sections III (Medical Conditions), IV (Medications) and V (Physical Exam) **DO NOT** have to be completed.
 - a. Mariners will be evaluated on hearing and vision requirements and, if found qualified, will be issued a medical certificate with the appropriate blocks marked "Y." "Fit for lookout duties" will be annotated on the medical certificate.
 - b. The medical certificate will be **restricted to entry-level**.
 - c. Mariners **seeking to serve as food handlers** should provide a statement from a licensed physician, physician assistant, or nurse practitioner attesting that they are free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.
 - 3. Mariners applying for an officer endorsement (other than a staff officer endorsement), a qualified rating endorsement, or an STCW endorsement, should either hold a valid U.S.-issued medical certificate or submit an Application for Medical Certificate, Form CG-719K.
 - 4. All medical certificates will contain a limitation stating "No food handling," unless a statement is provided from a licensed physician, physician assistant, or nurse practitioner attesting that the applicant is free of communicable diseases that pose a direct threat to the health or safety of other individuals in the workplace, in accordance with 46 CFR 10.304(b). The statement may be documented in any verifiable format, including as notes on the Application for Medical Certificate, Form CG-719K, or the Application for Medical Certificate, Short Form, CG-719K/E, or on letterhead from the medical practitioner.

D. Medical Certificate Contents.

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

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2. Name (Last, first, middle); 1 3. Date of birth (day/month/year); 2 4. Gender (Male/Female); 3 5. Date of examination (day/month/year); 4 6. Hearing meets the standards in section A-I/9 (Y/N); 5 7. Visual acuity meets standards in section A-I/9 (Y/N); 6 8. Color vision meets standards in section A-I/9 (Y/N); 7 9. Fit for look-out duties (Y/N); 8 9 10. Unaided Hearing Satisfactory (Y/N); 11. No limitations or restrictions on fitness (Y/N). If "N", specify limitations or restrictions; 10 12. Is the mariner free from any medical condition likely to be aggravated by service at sea or 11 to render the seafarer unfit for such service or to endanger the health of other persons on 12 board? (Y/N); 13 14 13. Expiration dates of certificate; 14. Identification checked at examination (Y/N); 15 15. Official stamp (including name) of the issuing authority; 16 16. Signature of the authorized person; and 17 17. Mariner's signature confirming that the mariner has been informed of the contents of the 18 certificate and of the right to a review in accordance with 46 CFR 1.03-40. The medical 19 certificate is not valid until signed by the mariner. 20

1 E. Sample Medical Certificate.

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

Figure 2-1: Medical Certificate – Front Page

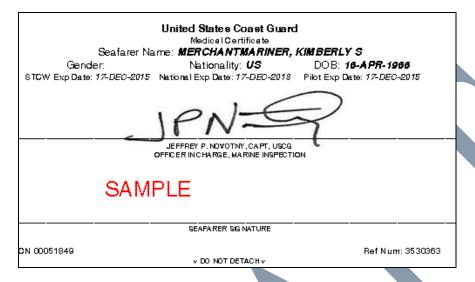


Figure 2-2: Medical Certificate – Back Page

Mariner is free from any medical of to render the seafarer unfit for suc on board.		-
Date of Examination:		17-DEC-2013
* Last Color Vision Test Date:		
* Hearing IAW STCW A-I/9:		Y
Visual Acuity IAW STCW A-I/9:		Y
Color Vision IAW STCW A-I/9:		Y
* Fit for Look-out duties:		Y
Unaided Hearing Satisfactory:		Y
* Identification Checked at Examina	ation:	Y
* No Limitations/Restrictions: Y	SAMPI	LE
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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:

1. Table Note 1- Food Handlers.

- 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 being transmitted from one person to another directly, by contact with excreta or other discharges from the body; or indirectly, via substances or inanimate objects contaminated with excreta or other discharges from an infected person." The Department of Health and Human Services periodically publishes, in the *Federal Register*, a list of infectious and communicable diseases transmissible through the food supply, and that list provides examples of communicable diseases for the purposes of 46 CFR 10.304.

Table 3-1: Medical and Physical Requirements for Mariner Endorsements

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

1 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
- 4 the Application for Medical Certificate, Short Form, CG-719K/E, as appropriate, that the
- 5 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.

- 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.

- 1. 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*
- 14 46 CFR 10.301(b)(4)).
- 2. 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
- 17 46 CFR 11.201(a)).
- 3. 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
- 20 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,
- 25 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
- 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
- Further Review.

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G. Short-term Conditions.

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

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- 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.

- 5 1. 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.
 - 2. 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.
- 3. All applicants who require a general medical exam must be physically examined. Examinations based solely on documentary review, and/or patient history review, are unacceptable (*See* Table 1 to 46 CFR 10.302(a) and 46 CFR 10.304).
- 4. Individuals who submit false information to the Coast Guard may be subject to criminal prosecution under 18 U.S.C. 1001.

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

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

J. Great Lakes Registered Pilots.

- 1. The Director, Office of Great Lakes Pilotage at Coast Guard Headquarters (Director), has designated the Application for Medical Certificate, Form CG-719K, as the required form for physical examinations, replacing the previous requirement to use Page 3 of the Application for Registration as United States Registered Pilot, Form CG-4509.
- 2. A Great Lakes Registered Pilot must be "physically competent to perform the duties of a U.S. Registered Pilot and meet the medical requirements prescribed by the Commandant" (See 46 CFR 401.210(a)(4)). The annual physical examination required by 46 CFR 402.210(a) must be reported "on the form furnished by the Director" and must be

- given by a "licensed medical doctor." 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.
 - 3. 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).



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 an important consideration in the safe operation of vessels. An illness, condition, or medication that has the potential to cause sudden incapacitation, altered sensorium, or loss of awareness could render the mariner unable to perform his or her duties or respond appropriately in an emergency situation. Such an occurrence places the vessel at risk of an accident and poses a danger to the mariner, other crewmembers, and to public and maritime safety. Additionally, in the event that a mariner experiences a medical emergency, immediate medical response may be limited to the vessel's crew, and outside help may be delayed.
 - 2. Because of these 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:
 - 3. 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. Mariner applicants who have significant medical conditions that are left undiagnosed and/or untreated are at risk for developing disease complications that may threaten their health and eventually lead to loss of medical certification. Accordingly, it is recommended that the examining medical practitioner take appropriate steps to identify and refer mariner applicants for further evaluation, as appropriate, if they are determined to be at high risk for conditions that pose a significant risk of sudden incapacitation or debilitating complication.
 - 2. The medical practitioner should also provide education to applicants about their health conditions and risk factors for disease, and discuss how those conditions and risk factors might affect, or be affected by, work in the maritime environment.
 - 3. This guidance does not preclude the issuance of a medical certificate to those whose screening indicates that they may be at risk for a medical condition, unless there is indication that the applicant may be at high risk for sudden incapacitation or debilitating complication. Examples of screening outcomes that may preclude certification include, but are not limited to:
 - a. The examiner/evaluator determines that the applicant is at significant risk for obstructive sleep apnea that is severe, symptomatic, and inadequately treated; OR
 - b. The examiner/evaluator determines that the applicant is at significant risk for diabetes mellitus that is associated with episodes of severe hypoglycemia, symptomatic hyperglycemia, or metabolic derangement; OR
 - c. The examiner/evaluator determines that the applicant is at significant risk for coronary artery disease that is symptomatic, uncontrolled, or unstable.

C. Recommendations on Screening for Obstructive Sleep Apnea (OSA).

- 1. The medical examiner should assess the mariner applicant's risk factors for OSA and then determine whether further evaluation is indicated. Risk factors for OSA include, but are not limited to:
 - a. Medical history of hypertension, diabetes, elevated blood sugars, elevated cholesterol, coronary artery disease, atrial fibrillation or stroke.
 - b. Personal history of smoking.
- c. Personal history of obesity, and /or neck circumference greater than 17 inches (male) or 16 inches (female).
- d. Personal history of sedentary lifestyle.
- e. Personal history of snoring, or observed apnea.
 - f. Personal history of accident(s) related to falling asleep while working, driving or operating a vessel.
 - g. Symptoms of non-restful sleep, fatigue, or day-time sleepiness.

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

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- 3. If the medical examiner determines that the mariner applicant is at significant risk for 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.
 - 4. 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 time-limited medical certificate to allow time to complete the evaluation.

D. Recommendations on Screening for Diabetes Mellitus.

- 1. 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:
 - a. Medical history of hypertension, abnormal cholesterol, or elevated blood sugar levels.
- b. Family history of diabetes.
- c. Personal history of obesity, sleep apnea or sedentary lifestyle.
- 22 2. If the medical examiner determines that the mariner applicant is at significant risk for diabetes, the applicant should be referred for appropriate evaluation and testing.
 - a. Further evaluation may include referral to primary care provider, internist or endocrinologist, as appropriate.
 - b. When medically indicated, office testing may include fingerstick glucose or urinalysis.
 - c. When medically indicated, diagnostic testing may include a fasting glucose level, a glycated hemoglobin level (HbA1c), or a glucose tolerance test.
- 3. If the examining provider determines that the applicant needs further evaluation for diabetes mellitus, but assesses that the applicant is **NOT** at significant risk for diabetes mellitus that is associated with episodes of severe hypoglycemia, symptomatic hyperglycemia, or metabolic derangement, then the applicant may be considered for a time-limited medical certificate to allow time to complete the evaluation.

1 E. Recommendations on Screening for Coronary Artery Disease.

- 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:
- a. Medical history of hypertension, abnormal blood sugar, diabetes, high cholesterol, sleep apnea, stroke or other vascular disease.
 - b. Family history of premature cardiovascular disease.
 - c. Personal history of smoking, obesity or sedentary lifestyle.
- 2. If the 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.
 - a. Further evaluation may include referral to a primary care provider, internist, or cardiologist, as appropriate.
 - b. When medically indicated, office testing may include resting electrocardiogram.
 - c. When medically indicated, diagnostic testing may include exercise (treadmill) stress testing, myocardial perfusion stress testing, and coronary angiography.
 - 3. If the examining 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 evaluation.

CHAPTER 5. VISION AND HEARING STANDARDS

2 A. Vision Requir	rements.
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- 1. The vision requirements for merchant mariner medical certification are contained in 46 CFR 10.305.
- 5 2. Vision Requirements for **Credentialed Deck Personnel**.
 - a. 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 20/200 in the same eye.
 - b. The horizontal field of vision should be not less than 100 degrees in each eye.
 - c. 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:
 - (1) A mariner who loses vision in one eye after already meeting this requirement, and after receiving a merchant mariner credential (MMC), may be granted a medical waiver, and/or may have operational limitations placed upon the credential, subject to the requirements of paragraphs (c), (d), and (e) of 46 CFR 10.305, as applicable.
 - (2) A mariner who already holds an MMC prior to January 1, 2017, need only meet the vision requirements of 46 CFR 10.305(a)(1) in one eye. The mariner may be granted a medical waiver, and/or may have operational limitations placed upon his or her credential, subject to the requirements of paragraphs (c), (d), and (e) of 46 CFR 10.305, as applicable.
 - d. Applicants must also 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.
 - (1) In order to meet the standard, applicants must demonstrate satisfactory color sense without the use of lenses that enhance color perception.
 - (2) Applicants seeking to demonstrate satisfactory color sense through the use of an alternative test should consider the information that follows and contact the NMC for further guidance.
 - (a) Alternative Color Vision Testing Methodologies.
 - [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	a. 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	[2] An acceptable alternative color vision test may include a formal color
33	vision evaluation conducted by an ophthalmologist or qualified
34	optometrist. The evaluation should include assessment and discussion of
35	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	(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.

2		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		with the following limitations: No watchstanding or navigating at night or during
9		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 vision
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. G	reat 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

(3) Waivers for monocular vision will not be granted to applicants for an STCW deck

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

B. Hearing Requirements.

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

3. Hearing waivers.

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

CHAPTER 6. PHYSICAL ABILITY GUIDELINES

2 A. <u>Introduction</u>.

- For the purposes of this Manual, a medical condition is considered to cause "significant
- 4 functional impairment" if it impinges upon the ability of the applicant to fully perform all of
- 5 the physical abilities listed in this chapter, or if it otherwise interferes with the ability of the
- 6 applicant to fully perform the duties and responsibilities of the requested credential. In some
- 7 cases, applicants with physical limitations who do not meet the related physical ability
- 8 guidelines contained in this chapter may be issued a credential with appropriate limitations, if
- 9 the Coast Guard finds that their physical limitations will not pose a significant risk to safety.

10 B. The Physical Ability Evaluation.

- 1. 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.
- 2. 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.
 - 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 extension, or lift a charged 1.5-inch diameter fire hose to fighting position. Rather, the medical practitioner may utilize alternative measures to satisfy him- or herself that the applicant possesses the ability to meet the Physical Ability Guidelines listed in **Table 6-1**. A description of the methods utilized by the medical practitioner should be reported on the Application for Medical Certificate, Form CG-719K or the Application for Medical Certificate, Short Form CG-719K/E, as appropriate.
 - 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.
 - d. Any prosthesis or similar device used to successfully meet the physical standards will

- 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).
 - 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.
- 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.
- 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.
 - 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.
 - 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 (iasknmc@uscg.mil), which will give full consideration to each proposal on an individual, case-by-case basis.
- 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.

C. The Practical Examination/Underway Practical Examination.

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

1 not limited to, mariner applicants who:

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- a. have physical impairments or medical conditions that could prevent normal
 movement and physical activity;
- b. have loss of limb(s) and/or restricted motion of limb(s);
- 5 c. require use of an assistive device in order to meet the physical ability requirements; or
- d. require modifications to their vessel in order to safely operate.
- 7 2. The purpose of the practical examination/underway practical examination is to determine, to the satisfaction of the Coast Guard, whether an applicant can safely carry out all duties entrusted to him/her by virtue of holding an MMC.
 - 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.
 - 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.
 - 3. Following completion of the practical examination/underway practical examination, the local Coast Guard OCMI will provide written recommendation to the Office of Merchant Mariner Credentialing regarding the mariner applicant's performance. The Coast Guard will review the recommendation to determine whether the applicant may be approved for issuance of a medical certificate with appropriate waivers and/or limitations.
- D. Components of the Practical Examination/Underway Practical Examination.
 - 1. A general list of the tasks that will be evaluated during the practical examination can be found in Paragraphs E and F of this Chapter. Additional tasks may be required as determined by the local OCMI, and may differ between OCMI zones based upon differences in operating requirements for particular zones. In some cases, an underway practical examination may be required.
- 28 2. When an underway practical examination is required, the Coast Guard will provide the applicant with notice of the specific areas that will be evaluated in advance of the scheduled demonstration. If the applicant has made modifications to his/her vessel in order to operate, then the practical examination should be conducted aboard the vessel on which the mariner seeks to operate.
- E. Operator of Uninspected Towing or Passenger Vessels (OUTV, OUPV) and Master or Mate
 of Less Than 200 Gross Tons.

- In addition to the tasks listed in the Table of Physical Abilities, a practical demonstration
- 2 may include the following elements:
- 3 1. Handling of mooring lines.
- 4 2. Ascending and descending the vessel's ladder.
- 5 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.
- 7. Rendering first aid to a person who may be unconscious or otherwise incapacitated.
- 8. Using shipboard tools to repair a mechanical breakdown.
- 9. Properly using navigation/communication equipment, if applicable.
- 14 F. <u>Deck and Engineer Officer Licenses</u>.
- In addition to the tasks listed in the Table of Physical Abilities, a practical demonstration
- may 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.
- 4. Exiting the vessel via emergency routes.
- 5. Rowing a lifeboat.
- 22 6. Wearing an emergency breathing apparatus.
- 7. Reaching, handling, grasping, and lifting lifesaving and firefighting equipment required by the vessel's COI.
- 8. Donning and properly wearing a PFD and casting ring buoys.

- 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.



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.			
I Kollfine access between levels. I Climb up and down vertical ladders.		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. See footnote 1 of this table and Chapter 5 of this Manual.			
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. See footnote 1 of this table and Chapter 5 of this Manual.			
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.			

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.



CHAPTER 7. MEDICATIONS SUBJECT TO FURTHER REVIEW

2	Α.	Definitions.

- 3 1. Acting under the authority of the credential.
- a. The definition of "acting under the authority of a credential" is found in 46 CFR 5.57. It states, in part, that:
- A person employed in the service of a vessel is considered to be acting under the authority of a credential or endorsement when the holding of such credential or endorsement is:
- 9 (1) Required by law or regulation; or
- 10 (2) Required by an employer as a condition for employment.
- b. For the purposes of this chapter, the definition of "acting under the authority of 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.
- 2. Alcohol means any form or derivative of ethyl alcohol (ethanol) (See 33 CFR 95.010).
- 3. *Controlled substance* has the same meaning assigned by 21 U.S.C. 802 and includes all substances listed on Schedules I through V, as they may be revised from time to time (*See* 21 CFR part 1308 and 33 CFR 95.010).
- 4. *Drug* means any substance (other than alcohol) that has known mind- or function-altering effects on a person, specifically including any psychoactive substance, and including, but not limited to, controlled substances (*See* 33 CFR 95.010).
- 5. *Intoxicant* means any form of alcohol, drug, or combination thereof (*See* 33 CFR 95.010).
- 23 B. Prohibitions.
- 1. Illegal Substances.
- Use of illegal or illegally obtained substances, including all illegal or illegally obtained dangerous drugs (as defined in 46 CFR 16.105), is incompatible with maritime service and will not be waived under any circumstances.
- 28 2. Intoxicants.
- 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 contrary to the provisions in 33 CFR part 95 (*See also* 46 USC 2302).

C. Important Safety Warning.

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- 2 1. 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, and the attendant shipboard duties that can arise without warning, as safety-sensitive duties that are analogous to operating hazardous machinery. As such:
 - a. Mariners are advised to discuss all medication use with their treating providers and to inform them of the safety-sensitive nature of their credential; and
 - b. Mariners are cautioned against acting under the authority of their credential while under the influence of medications that:
 - (1) can cause drowsiness;
 - (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.

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

- 1. Applicants who are required to complete a general medical exam should disclose on the Application for Medical Certificate, Form CG-719K all prescription medications, filled or taken within 30 days prior to the date that the applicant signs the application to the Coast Guard (See 46 CFR 10.302(a) and 10.304(a)).
- 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. Recommended Evaluation Data for Medications.

- 1 1. 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.
 - 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
- 9 c. For prescription medications, documentation from the treating provider on the medication dose and frequency, the status and stability of the underlying condition, and any precautions provided to the mariner regarding the medication or the condition.
- 3. The amplifying information will be reviewed to determine whether the medication and/or underlying condition—
- a. Is approved for use without a waiver;

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- 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.
- 4. See Chapter 1 of this Manual for additional information on the medical review process.
- 19 F. Medication Waivers General Information.
- 1. Mariners using certain medications will require a waiver if the medication, or the manner in which the medication is used, has the potential to pose significant risk of impairment or other safety concerns.
 - 2. In general, medication waivers are likely to be approved when circumstances indicate that there is no significant risk to maritime and public safety. For instance, if a mariner regularly uses a medication that causes drowsiness, but objective documentation supports that the mariner does not work while using the medication and will not be under the influence of the medication while working, then the mariner's use of the medication may be considered favorably for a waiver.
 - 3. Medication waivers may be granted with specific conditions to which the applicant must adhere, such as more frequent monitoring of the medication/associated medical condition(s), submission of medical exams and/or tests at varying intervals to track the ongoing status of the medical condition, or operational limitations or restrictions in the manner the mariner may serve under the MMC.

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- 4. Any operational limitations or restrictions will be reflected on the medical certificate, and may include restriction of route or trade.
- 5. Medication waivers are generally not approved for use of legally prescribed controlled substances while acting under the authority of the credential. Legally prescribed controlled substances include, but are not limited to, opioid /opiate medications, benzodiazepine medications, non-benzodiazepine sedative hypnotic medications, and barbiturate medications. Further guidance on these medications is provided in Paragraphs I (Medication Waivers Requiring Special Consideration) and J (Recommended Evaluation Data for Medication Waivers Requiring Special Consideration) of this Chapter.
- 11 6. The Coast Guard retains final authority for the issuance of medical waivers.
- G. Medications Subject to Further Review due to Risk of Impaired Cognitive Ability, Judgment, or Reaction Time.
 - 1. Medications that may impair cognitive ability, judgment, or reaction time, may be considered disqualifying for issuance of a medical certificate (*See* 46 CFR 10.304(a)). Additionally, the underlying condition requiring use of the potentially impairing medication and/or the possible side effects of these medications may result in denial of an application. Mariners and applicants who require the use of potentially impairing medications may seek consideration for a waiver in accordance with 46 CFR 10.303.
 - 2. The following is a non-exhaustive list of medications that may be deemed disqualifying due to risk of impaired cognitive ability, judgment or reaction time. Mariners who use these medications are subject to further medical review to determine whether their use of the medication is likely to impair their ability to operate safely. If the mariner's medication use is deemed disqualifying by the Coast Guard, then the Coast Guard will determine whether the mariner qualifies for a waiver under 46 CFR 10.303. Please refer to the Paragraphs E (Recommended Evaluation Data for Medications) and I (Medication Waivers Requiring Special Consideration) of this Chapter.
 - a. Anti-depressants (Medicines for Treatment of Depression).
 - Examples include, but are not limited to, citalopram (Celexa), duloxetine (Cymbalta), paroxetine (Paxil), trazodone (Desyrel), amitriptyline (Elavil) and venlafaxine (Effexor). In many cases, use of anti-depressant medications may be approved without need for a waiver. The medication and the underlying condition will be reviewed to determine whether the mariner applicant requires and/or qualifies for a waiver under 46 CFR 10.303.
- b. Anti-Motion Sickness Agents (Medicines for Treatment of Motion Sickness).
 - Intermittent use of these medications does not require a waiver; however, mariners are cautioned against acting under the authority of the credential while under the influence of anti-motion sickness agents that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.

c. Antipsychotics.

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

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

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

e. Antihistamines, Allergy Medications:

- (1) Non-sedating medications (medications without significant risk of drowsiness). Examples include loratadine (Claritin), fexofenadine (Allegra) and desloratadine (Clarinex). Use of non-sedating antihistamines does not require a waiver.
- (2) Sedating medications (medications with significant risk of drowsiness, sleepiness). Examples include, but are not limited to diphenhydramine (Benadryl, ClearQuil Nighttime Allergy Relief), cetirizine (Zyrtec), and doxylamine (Aldex AN, Clearquil Nighttime Sinus and Congestion Relief). For chronic or regular use, the medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303. Intermittent use of these medications does not require a waiver; however mariners are cautioned against acting under the authority of the credential while under the influence of anti- histamines (allergy medications) that can cause drowsiness or impairment, or that carry warnings that caution against driving or operating heavy machinery.

f. Barbiturate Medications.

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

g. Benzodiazepine Medications.

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

h. Cough and Cold Medicines.

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

i. Stimulant Medications.

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

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

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

exceptional circumstances that mitigate risk to public safety. See Paragraph I
(Medication Waivers Requiring Special Consideration) of this Chapter.

k. <u>Legally Prescribed Controlled Substances</u>.

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

l. <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.

m. Muscle Relaxants.

Examples include, but are not limited to, carisoprodol (Soma), cyclobenzaprine (Flexeril), and methocarbamol (Robaxin). The medication and the underlying condition will be reviewed to determine whether the mariner applicant qualifies for a waiver under 46 CFR 10.303. Waivers for use within 12 hours prior to, or while acting under the authority of the credential will only be approved on a case-by-case basis if the Coast Guard determines that there are exceptional circumstances that mitigate risk to public safety. See Paragraph I (Medication Waivers Requiring Special Consideration) of this Chapter.

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

- While many medications can be an important factor in enabling mariners to continue to work at sea, some have side effects that can affect safe and effective performance of routine and emergency duties and some have other complications that will increase the likelihood of illness at sea.
- 1. Medications that may impair a mariner's ability to perform routine and emergency duties.
 - a. Central nervous system depressants and/or stimulants.
 - b. Agents that increase the likelihood of sudden incapacitation.

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- 1 c. Medications that impair vision.
- Medications that may have serious adverse consequences for the user while underway,
 and may require limitations.
- a. Medications that can cause prolonged bleeding, either spontaneous or traumatic.
 Individual risk assessment of bleeding likelihood may be needed.
- b. Dangers from cessation of medication use.
- 7 c. Long-term or periodic need for antibiotics and other anti-infection agents.
- 8 d. Anti-metabolites and cancer treatments.

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- e. Medications supplied for use at individual discretion.
- 10 3. Medications that may require periodic medical monitoring.
- 11 I. <u>Medication Waivers Requiring Special Consideration.</u>
 - 1. As stated previously, medications that may impair cognitive ability, judgment or reaction time are considered disqualifying for issuance of credentials. The underlying condition, as well as the effects of the medications, may lead to denial of a medical certificate or may result in issuance of a waiver.
 - 2. Due to the documented risks of impaired cognition, judgment and reaction time associated with the use of legally prescribed controlled substances, including, but not limited to, opioid/opiate medications, benzodiazepine medications, non-benzodiazepine sedative hypnotic medications, and barbiturate medications, the Coast Guard has determined that use of these medications while acting under the authority of 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.
 - 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.
 - 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.
- b. The mariner demonstrated compliance with all terms of the prior waiver.

1 c. There were no accidents or other safety concerns related to medication, judgment, cognitive ability or reaction time, during the course of the prior waiver period(s).

- d. The mariner has been on a stable medication regimen for a minimum of 2 years, as documented by the treating physician and pharmacy records.
 - (1) Mariners who have required periodic increases in medication dosing during the preceding 2-year period would not meet this criterion.
 - (2) Mariners who have consistently or periodically supplemented their medication regimen with other disqualifying medications during the 2-year period are not likely to be considered as meeting this criterion. For example, an individual who has been on a stable dose of one opioid pain medication for 2 years, but has also periodically taken or filled prescriptions for an opioid cough medication during that same time period, would not be considered as being on a stable dose of medicine.
 - (3) Mariners whose medication dose has been decreased or tapered off, without subsequent dose increase, may be considered as meeting this criterion.
 - e. The mariner is not seeking to use, or be under the influence of, more than one medication with risk for impairment while working under the authority of the credential.
 - f. The mariner's treating physician provides written assessment that adequately addresses all information requested in Paragraph J of this Chapter (Recommended Evaluation Data for Medication Waivers Requiring Special Consideration) and that supports a determination that the mariner is at low risk for medication impairment based upon objective testing and standard evaluation tools.
 - g. When requested, formal neuropsychological/neurocognitive testing, performed as outlined in Paragraph J.2 of this Chapter, documents the absence of significant medication impairment.
- 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.
 - i. Use of methadone may not be waived under any circumstances.
- 4. The risk presented by the mariner's position may be considered in determining whether to grant a waiver. Because of the wide range of operational conditions, it is impossible to set out in advance which positions may be suitable for a waiver.
- 5. The Coast Guard retains final authority for the issuance of waivers.
- 34 6. Waivers may include restrictions and/or operational limitations on the credential.
- J. Recommended Evaluation Data for Medication Waivers Requiring Special Consideration.

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- 1 Applicants seeking consideration for a medication waiver for the use of medications that may impair cognitive ability, judgment, or reaction time while acting under the authority of the 2 3 credential 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 a. Whether the physician has familiarized him- or herself with the detailed guidelines on medical conditions and medications contained in this Manual. 6 b. Whether the physician understands the safety-sensitive nature of the credential and 7 the specialized shipboard environment. 8 9 c. A detailed discussion of the condition that requires the use of the potentially 10 impairing medication. d. A description of any known complications experienced by the mariner from the use 11 of a particular medication, level of current stability and prognosis of the underlying 12 13 condition. The physician should also provide his or her professional opinion on whether the condition is suitable for safety-sensitive work. 14 e. A description of the dosage and frequency of use of the medication (this description 15 should be very specific; "as needed" is not sufficient information). The description 16 17 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 18 documentation of the length of time that mariner has been on the medication. 19 20 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. 21 g. A statement about whether the mariner is compliant with therapy and follow-up 22 23 appointments. h. A statement about whether the mariner requires use of this medication while at work, 24 or while aboard the vessel. If the mariner requires use of the potentially impairing 25 medication while at work or while aboard the vessel, the physician should provide a 26 27 detailed explanation and rationale for the use. 28 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 29 advised, as well as any instructions discussed with the mariner for mitigating risk. 30
 - 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 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 2 3 description of the method of evaluation utilized, as well as the findings. 4 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. 5 This discussion should include the rationale for the physician's opinion. 6 7 m. A statement whether the physician has advised the mariner that it is safe to operate a 8 vessel, operate hazardous machinery and perform safety sensitive functions while 9 under the influence of this medication. 2. When specifically requested by the reviewing authority, additional amplifying 10 information, to include formal neuropsychological/neurocognitive evaluation. 11 a. In particular, mariners seeking waivers to use or be under the influence of potentially 12 impairing opioid /opiate, benzodiazepine, sedative hypnotic, and/or barbiturate 13 medications, while acting under the authority of the credential, may be asked to 14 submit the results of a formal neuropsychological/neurocognitive evaluation. 15 16 b. The Coast Guard will not normally request neuropsychological/neurocognitive testing unless the applicant meets all other requirements for waiver consideration. This is to 17 18 prevent mariners from undergoing costly testing when issuance of a waiver is 19 unlikely. c. Mariners are advised that submission of neuropsychological/neurocognitive testing 20 results does not guarantee issuance of a waiver. 21 d. When formal neuropsychological/neurocognitive evaluation is requested, the 22 assessment should include objective evaluation of the following functions, at a 23 minimum¹: 24 (1) Alertness, arousal and vigilance; 25 (2) Attention (focused, shifting and divided), processing speed, and working memory; 26 27 (3) Reaction time (choice and complex), psychomotor function, upper motor speed and coordination; 28 (4) Sensory perceptual function; 29 30 (5) Executive function: mental flexibility, adaptive problem solving, abstract reasoning, impulse control, risk taking/risk assessment, organizational ability 31

(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.

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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 9		(1) Documentation of witnessed administration of the medication in question by a licensed medical provider.
10 11		(2) Documentation of the time interval between ingestion of the medication and 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 dat that should be submitted along with the application for a medical certificate, as appropriate. The list is non-exhaustive.
24 25 26	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. Active Condition.

If not specified as "history of" in this Manual, a condition must be currently active to be subject to further review. For purposes of this Manual, "active" means that the applicant is currently under treatment for the condition, or that the applicant is currently under observation for possible worsening or recurrence of the condition, or that the condition is currently present. For all active conditions (as defined in this paragraph), the status report, evaluation report or consultation should have been completed no more than one year prior to the date the application is received by the Coast Guard. For conditions that are not active but for which the Manual indicates that a "history of" the condition should be reported (as defined in paragraph 2 below), the appropriate timeframe depends on what is medically relevant given the individual circumstances of the applicant's condition. Medical providers should contact NMC if they have any questions about how recent a status report, evaluation report or consultation should be. See 46 CFR 10.304(d).

2. History Of.

As used in this Manual, the term "history of" means a previous diagnosis or treatment of a medical condition by a healthcare provider, even once in the applicant's life, unless otherwise specified in this chapter. It includes all active and present medical conditions.

3. Significant Functional Impairment.

As used in this Manual, the term "significant functional impairment" means that the medical condition impairs the applicant's ability to fully perform the physical abilities listed in Chapter 6, Physical Ability Guidelines, or that it otherwise interferes with the ability of the applicant to fully perform the duties and responsibilities of the credential.

4. Status Reports, Evaluation Reports and Consultations.

All timeframes specified with respect to the evaluation data listed in this table are measured from the date that the application is received by the Coast Guard. For example, if the table calls for a medical test that is no more than 90 days old, the test should have been completed no more than 90 days before the date that the Application for Medical Certificate, Form CG-719K or Application for Medical Certificate, Short Form, CG-719KE is received by the Coast Guard.

5. Other Conditions.

Any medical condition or physical impairment not otherwise specified in this Manual, which may cause significant functional impairment or sudden incapacitation, or which might otherwise compromise shipboard safety, including required response in

an emergency situation, may be subject to further review. Any medical condition or 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 the health and safety of the applicant or others may be subject to further review.

6. <u>Medications</u>, Vitamins and Dietary Supplements.

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Mariners should not perform a safety sensitive function on any vessel while under the influence of any substance that may negatively impact their performance. To that end, mariners are strongly warned that some prescription medications, over-the-counter medications, vitamins, and dietary supplements, alone or in combination with other substances, may adversely affect an individual's ability to perform critical functions and place the individual at risk of sudden incapacitation. Mariners are strongly advised to seek the advice of a physician before taking any medications, vitamins, or dietary supplements.

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

7. Recommended Evaluation Data.

At the time of publication of this Manual, the evaluation data listed in this chapter is what the Coast Guard recommends should be submitted for each condition. Submission of other than the recommended evaluation data may result in processing delay.

Documentation of evaluation data specified in this chapter for all applicable medical conditions subject to further review should be submitted with each application, unless otherwise specified by the NMC. Mariners, including first class pilots and those individuals "serving as" pilots (as well as Great Lakes pilots) who are required to submit annual physical examinations to the Coast Guard, may be issued a letter by the NMC specifying the extent of the evaluation data, if any, that should be submitted to the Coast Guard for any medical conditions that have been previously reported to, and evaluated by, the NMC.

The Coast Guard will consider alternative approaches proposed by applicants regarding substitution of evaluation data for the recommended evaluation data listed in these chapters, if the alternative approach satisfies the requirements of the applicable statutes and regulations.

If you wish to discuss alternative approaches, you should contact the NMC Medical Evaluations Branch, which is responsible for implementing this guidance. All questions regarding implementation of this Manual should be directed to the NMC Medical Evaluations Branch at the following e-mail address:

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



CHAPTER 9. ALLERGIC CONDITIONS

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- Allergic 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 include, but are not limited to anaphylaxis and
- 6 angioedema.

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B. Guidance to Mariner Applicants.

- 1. In some cases, allergic conditions may be deemed too high-risk for medical certification.
- This would include conditions with life-threatening reactions and impairing
- complications, as well as conditions that put the individual at high risk of becoming
- unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority
- of the credential.
- 2. 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.
- 15 3. The evaluation for medical certification and waiver issuance will consider the level of 16 stability, the likelihood for worsening or recurrence, the written assessment of the treating 17 provider or specialist (as applicable), and the results of appropriate testing.
- 4. Mariner applicants with allergic conditions should:
- a. Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
 - (1) Their medical condition and the limitations of medical care aboard the vessel;
- 22 (2) The safety-sensitive nature of their merchant mariner credential;
- 23 (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
 - (2) **Recommended Evaluation Data**.

1 C. Guidance to Treating Providers.

- 2 1. Treating Provider's Assessment.
- The treating provider's assessment should detail a full evaluation of the condition, as follows:
 - a. Pertinent medical examination and physical evaluation data;
- 6 b. The history of the condition;

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- 7 c. The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention, or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support the assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an allergist, for example.

2. Recommended Evaluation Data.

- a. Objective testing results and supporting documentation 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.
- b. The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.

d. 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. Medical Certification Evaluation.

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- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment, or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

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

3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening reactions, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; 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. <u>Documentation</u> .
5 6	The DME should ensure that the mariner 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. Approval.
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 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. Education.

The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.

5. Referral.

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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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.

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

C. Guidance to Treating Providers.

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2.	1.	Treating F	Provider's	Assessment.
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- The treating provider's assessment should detail a full evaluation of the condition as follows:
- 5 a. Pertinent medical examination and physical evaluation data;
- 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 within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a hematologist, for example.

2. Recommended Evaluation Data:

- a. Objective testing and supporting documentation 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.
- b. The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.

d. 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. Medical Certification Evaluation.

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1.	Certification	Determinations.
1.	Columbia	Dotter initiations.

- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

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

26 3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; 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. Gui	dance to Designated Medical Examiners (DMEs).
4	1. <u>]</u>	Documentation.
5 6		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
7	ä	a. An evaluation from the treating provider and/or specialist; and
8	ŀ	b. Any appropriate recommended evaluation data.
9	2. 4	Approval.
10 11	6	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	l	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>1</u>	Deferral.
23	8	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. Education

The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.

5. Referral.

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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CHAPTER 11. CANCER OR MALIGNANT CONDITIONS

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

B. Guidance to Mariner Applicants.

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

C. Guidance to Treating Providers.

2	1	Tracting	Drovidor's	Assassment
2	1.	rreating	Provider s	Assessment.

- 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;
 - c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years:
 - d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an oncologist, for example.

2. Recommended Evaluation Data.

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

d. 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. Medical Certification Evaluation.

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1.	Cumica	шоп	Determinat	ions.

- Certification determinations will be made on a case-by case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

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

1. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; 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. G	uidance 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.	Approval.
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		(3) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications:

1 2		(4) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
3 4		(5) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
5 6 7		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.	Education
9 10		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
11	5.	Referral.
12 13		The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.
14		
15		

CHAPTER 12. CARDIOVASCULAR CONDITIONS

2 A. Introducti	on

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- a. Cardiovascular conditions known to be accompanied by sudden death, syncope, dyspnea (difficult or labored breathing), collapse, or congestive heart failure are subject to further review, and may be determined disqualifying. Examples include, but are not limited to: ischemic heart disease or angina, myocardial infarction, cardiomyopathy, history/risk of arrhythmia, heart failure, uncontrolled hypertension, valvular disease, conduction disturbance, heart transplant, and cardiac tumors and conditions resulting in treatment with a pacemaker.
 - b. Conditions resulting in treatment with an implantable cardioverter defibrillator are disqualifying and generally will not be approved for issuance of a waiver. See Paragraph XX of this Chapter, **Waivers for Cardiovascular Conditions Requiring Special Consideration**.
- c. Conditions resulting in heart transplantation are disqualifying and generally will not be approved for issuance of a waiver. See Paragraph XX of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration.
- d. General classes of cardiovascular conditions that are subject to further review are discussed in paragraphs B-F of this chapter. These conditions include, but are not limited to:
 - (1) Coronary artery disease and cardiomyopathy;
- (2) Cardiac arrhythmias;
 - (3) Valvular disease;
- (4) Vascular disease; and
- (5) Cerebrovascular disease.

2. General Guidance to Mariner Applicants.

a. Some heart and vascular conditions may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of 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>G</u> u	uidance to Treating Providers
24	a.	Treating Provider's Assessment.
25 26		The treating provider's assessment should detail a full evaluation of the condition, as follows:
27		(1) Pertinent medical examination and physical evaluation data;
28		(2) The history of the condition;
29 30 31 32		(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;

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. Recommended Evaluation Data.
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	whether the mariner applicant is able to perform routine and emergency
18	duties without risk of sudden incapacitation.
19	(2) The treating provider should submit objective testing and supporting
20	documentation as appropriate for the specifics of the mariner applicant's
21	medical condition. Generally, the type and manner of evaluation data or
22	objective testing submitted will be left to the discretion of the treating
23	provider or specialist.
24	(3) If objective testing was performed within 5 years of the current medical
25	certificate application, and the treating specialist finds that there are no
26	indications for obtaining further study, then the provider should include
27	discussion and documentation to that effect in their assessment, along with
28	the results of previously performed testing.
29	(4) If the treating provider seeks to demonstrate the applicant's fitness by
30	alternate means, then the provider should include a statement to that effect
31	in the assessment.
32	(5) The Coast Guard may request additional testing, studies, or specialist
33	evaluation, on a case-by-case basis, if the mariner applicant's medical
34	condition is determined to be of significant concern. Examples of
35	recommended evaluation data for cardiovascular conditions include, but
36	are not limited to:
37	(a) Echocardiogram with Doppler flow studies;

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

B. Coronary Artery Disease and Cardiomyopathy

2	1. Guidance to Mariner Applicants.
3 4 5 6 7 8	a. In some cases, the conditions of coronary artery disease and cardiomyopathy may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as wel 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.
9 10 11	 Coronary artery disease and cardiomyopathy 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.
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 17	d. Mariner applicants with coronary artery disease and/or cardiomyopathy should:
18 19	(1) Discuss the following with their treating provider, and with the provider performing the medical certificate examination:
20 21	(a) Their medical condition and the limitations of medical care aboard the vessel;
22	(b) The safety-sensitive nature of their merchant mariner credential;
23 24	(c) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
25 26 27	(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.
28 29	(2) Make sure to submit sufficient information on any of their medical 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>Guidance to Treating Providers</u> .
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	(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 compliance and efficacy;
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, or
16	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, an
19	electrophysiologist, or a cardiothoracic surgeon, for example.
20	b. Recommended Evaluation Data.
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
32 33	feels strongly that further testing is not clinically indicated, then the
34	provider should include a statement to that effect in their assessment,
3 4 35	along with the results of previously performed testing.
	mong are reserve or pre-rousily 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 12	[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.
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
21	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 8 9		(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.
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.	<u>Disqualification</u> .
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 21 22 23 24 25 26		(3) Mariner applicants with conditions requiring treatment with an implantable cardioverter defibrillator (ICD) may be found unqualified. Conditions requiring treatment with an ICD are generally considered unsuitable for a medical waiver. See Paragraph G of this Chapter, Waivers for Cardiovascular Conditions Requiring Special Consideration, for further guidance on waiver criteria for applicants with an ICD
27 28		(4) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
29 30 31		(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
32 33 34		(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

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. Approval.
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.
11		The DME should provide education to mariner applicants on how their
12		condition may affect, or be affected by service at sea.
12		condition may unrect, or be unrected by between the sea.
13	e.	Referral.
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		

C. Cardiac Arrhythmias.

2	1. Guidance to Mariner Applicants.
3	a. In some cases, cardiac arrhythmia conditions may be deemed too high-risk for
4	medical certification. This would include conditions with life-threatening
5	reactions and impairing complications, as well as conditions that put the
6	individual at high risk of becoming unstable, unconscious, incapacitated, or
7	otherwise unsafe to operate under the authority of the credential.
8	b. Cardiac arrhythmia conditions that are determined to pose a low risk of
9	sudden incapacitation may be considered for a waiver, or may not require any
10	waiver or limitation.
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 cardiac arrhythmias 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. <u>Guidance to Treating Providers.</u>
31	a. The Treating Provider's Assessment.
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, 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. Recommended Evaluation Data.
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 36	(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 cardiac arrhythmias include, but are not limited to:
3	(a) Echocardiogram with Doppler flow study;
4	(b) 24-Hour Holter Monitoring; and
5	(c) Treadmill testing (graded exercise stress testing), with or without
6	perfusion scanning, as indicated.
7	[1] Treadmill stress testing is preferably performed by standard Bruce
8 9	protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (METS) of work, and 85% of maximum predicted heart rate.
10	[2] If pharmacological stress testing is submitted in lieu of exercise
11	testing, then the cardiologist's assessment should discuss the
12	rationale. Additionally, the cardiologist's assessment should
13	provide some manner of objective evaluation of the applicant's
14	exercise capacity, as well as objective evaluation of the applicant's
15	ability to meet the merchant mariner physical ability guidelines as
16	listed in Chapter 6 of this Manual, Physical Ability Guidelines.
17	[3] If medical conditions exist that prevent the mariner from
18	exercising, these conditions may be disqualifying in their own right
19	and will require further evaluation.
20	(d) Post-intervention evaluation for cardiac arrhythmia should include a
21	graded exercise stress test with perfusion scanning as clinically
22	indicated and 24-hour Holter monitor. Treadmill testing is preferably
23	performed by standard Bruce protocol to at least 7.5 minutes, 8 METS
24	and 85% maximum predicted heart rate.
25	(e) Some arrhythmia conditions may require submission of
26	electrophysiology (EP) studies.
27	(f) Applicants with conditions requiring placement of a pacemaker should
28	also submit an evaluation of pacemaker function to include full
29	description of device type and documentation of underlying rate and
30	rhythm with the pacer disabled or at its lowest setting, programmed
31	pacemaker parameters, surveillance record, and elective replacement
32	indicator/end of life (ERI/EOL).
33	3. Medical Certification Evaluation.
34	a. Certification Determinations.

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	o. 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	. <u>Disqualification</u> .
24 25 26	 Mariner applicants with reversible cardiac ischemia, syncope; heart 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

further guidance on waiver criteria for applicants with an ICD;
(4) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
(5) Mariner applicants with other findings that indicate a significant risk of an adverse cardiac event, syncope, collapse, or sudden death may be found unqualified; and
(6) Mariner applicants who do not have the exercise/functional capacity and/or physical ability necessary to perform routine and/or emergency duties may be found unqualified.
(7) 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.
4. Guidance to Designated Medical Examiners (DMEs).
a. <u>Documentation</u> .
The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
(1) An evaluation from the treating provider and/or specialist; and
(2) Any appropriate recommended evaluation data.
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:
(a) Favorable recommendation from the treating provider;
(b) Condition is asymptomatic and without recent need for emergency care, major intervention, hospitalization, or surgery;
(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse cardiac event; and
(d) Documentation supports that the applicant has the exercise/functional capacity and physical ability necessary to perform routine and emergency duties.
(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

D. Valvular Disease

2	1.	<u>Gu</u>	aidance to Mariner Applicants.
3		a.	In some cases, valvular disease (heart valve disorders) may be deemed too high-risk for medical certification. This would include conditions with life-
4 5			threatening reactions and impairing complications, as well as conditions that
			put the individual at high risk of becoming unstable, unconscious,
6 7			incapacitated, or otherwise unsafe to operate under the authority of the
8			credential.
o			credential.
9		b.	Valvular disorders that are determined to pose a low risk of sudden
10			incapacitation may be considered for a waiver, or may not require any waiver
11			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 valvular disease 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;
21			(b) The safety sensitive nature of their interestant mariner eredentiar,
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:
20			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>Gu</u>	idance to Treating Providers.
32			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	(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
1.5	
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. Recommended Evaluation Data.
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 8	(b) Treadmill testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
9 10 11	[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.
12 13 14	[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
15	provide some manner of objective evaluation of the applicant's
16	exercise capacity, as well as objective evaluation of the applicant's
17	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. Medical Certification Evaluation.
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 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 20		(1) Mariner applicants with reversible cardiac ischemia, syncope; heart failure, angina or other active cardiac symptoms may be found unqualified;
21 22	X	(2) Mariner applicants with evidence of, or at significant risk for symptomatic or malignant arrhythmias may be found unqualified;
23 24		(3) Mariner applicants with an ejection fraction of less than 40% may be found unqualified;
25 26 27		(4) Mariner applicants with other findings that indicate a significant risk of an adverse cardiac event, syncope, collapse, or sudden death may be found unqualified; and
28 29 30		(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.
31	4. <u>Gu</u>	uidance to Designated Medical Examiners (DMEs).
32	a.	Documentation.

2		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.	Approval.
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.
13	e.	Referral.
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		

E. Vascular Disease—Guidance to Mariner Applicants

2	1. Guidance to Mariner 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 8	unsafe to operate under the authority of the credential. Examples of vascular 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	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
27	the medical certificate examination review the guidance in this Manua
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. Guidance 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		(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;
		1 3
10		(4) Treatment efficacy and compliance;
11		(5) An assessment of the applicant's risk for future adverse vascular events,
12		adverse cardiac events, malignant arrhythmia, syncope, impairment,
13		sudden incapacitation, or debilitating complication;
14		(6) Reports of objective testing and standard evaluation data used to support
15		their assessment; and
1.0		(7) The extent to which the applicant's medical condition is likely to affect or
16		(7) The extent to which the applicant's medical condition is likely to affect, or
17		be affected by, service aboard the vessel or service at sea.
18		(8) In some cases, the Coast Guard may request that the applicant submit
19		documentation from a specialist such as a cardiologist or vascular surgeon,
20		for example.
21	b.	Recommended Evaluation Data.
22		(1) Objective testing and supporting documentation are requested to better
23		assess the severity of the condition, the applicant's functional capacity;
24		and the presence or absence of ischemia with exercise, or other
25		impairment. This information assists the evaluators in determining
26		whether the mariner is able to perform routine and emergency duties
20 27		without risk of sudden incapacitation.
21		without risk of sudden medphertation.
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		feels strongly that further testing is not clinically indicated, then the

2	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 vascular disease include, 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 12	(d) Treadmill stress testing (graded exercise stress testing), with or without perfusion scanning, as indicated.
13	[1] Treadmill stress testing is preferably performed by standard Bruce
14 15	protocol to at least 7.5 minutes of exercise, 8 metabolic equivalents (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 20	provide some manner of objective evaluation of the applicant's exercise capacity, as well as objective evaluation of the applicant's
21	ability to meet the merchant mariner physical ability guidelines as
22	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. Medical Certification Evaluation.
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;

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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. Approval.

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		(b) Condition is asymptomatic and without recent need for emergency
5		care, major intervention, hospitalization or surgery;
6		(c) Condition has been stable and the assessment indicates low likelihood
7		of sudden exacerbation, syncope, or adverse cardiac event; and
8		(d) Documentation supports that the applicant has the exercise/functional
9		capacity and physical ability necessary to perform routine and
10		emergency duties.
11		(2) If the DME approves issuance of the medical certificate, the DME should
12		document their rationale for recommending approval on the Application
13		for Medical Certificate, Form CG-719K.
14	c.	<u>Deferral.</u>
15		(1) The DME must defer the decision to the Coast Guard if any of the
16		following apply:
1.7		
17 18		(a) Unfavorable recommendation or insufficient documentation from the treating provider;
10		areaching provider,
19		(b) The applicant is symptomatic or the assessment indicates significant
20		risk for an adverse vascular event;
21		(c) The applicant's exercise/functional capacity and/or physical ability
22		suggests impaired ability to perform routine and emergency duties; or
22		(d) The applicant has other symptoms or findings that suggest a significant
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.
4		risk of all adverse cardiae event, syncope, conapse of sudden death.
25		(2) If the DME defers the certification decision to the Coast Guard, the DME
26		should discuss the reason(s) for deferral and document their
27		recommendation regarding medical certification on the Application for
28		Medical Certificate, CG-719K.
29	d.	Education.
30		The DME should provide education to mariner applicants on how their
31		condition may affect, or be affected by service at sea.
32.	e.	Referral.

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

3 4

1



F. Cerebrovascular Disease

2	1.	Guidance to Mariner Applicants.
3 4 5		a. In some cases, cerebrovascular disease may be deemed too high-risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the
6		individual at high risk of becoming unstable, unconscious, incapacitated, or
7		otherwise unsafe to operate under the authority of the credential. Examples of
8 9		cerebrovascular conditions that are subject to further review include, but are not limited to, stroke and transient ischemic attacks.
10 11		b. Cerebrovascular disease conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require any
12		waiver or limitation.
13		c. The evaluation for medical certification and waiver issuance will consider the
14		level of stability, the likelihood for worsening or recurrence, the written
15		assessment of the treating provider or specialist (as applicable), and the results
16		of appropriate testing.
17		d. Mariner applicants with cerebrovascular disease should:
18		(1) Discuss the following with their treating provider, and 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
26		the medical certificate examination review the guidance in this Manual
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.

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2. <u>Guidance to Treating Providers</u>.

2	a.	Treating Provider's Assessment.
3		The treating provider's assessment should detail a full evaluation of the
4		condition 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;
		(1) Treatment efficacy and compilation,
12		(5) An assessment of the applicant's risk for cerebrovascular events,
13		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		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.	Recommended 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.
3∠		provider or specialist.
33		(3) If the applicant has undergone prior testing, and the treating physician
34		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>M</u>	ledical Certification Evaluation.
11	a.	Certification Determinations.
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 22		(7) The risk of impaired cognitive ability, judgment or reaction time related to 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.	Medical Waivers.
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.
		<u> </u>

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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. <u>Documentation</u> .
13	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
14	
15	(1) An evaluation from the treating provider and/or specialist; and
16	(2) Any appropriate recommended evaluation data.
17	b. Approval.
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 26 27	(d) Documentation that the applicant has the exercise/functional capacity 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
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		(a) Unfavorable recommendation or insufficient documentation from the
4		treating provider;
5		(b) The applicant's exercise/functional capacity and/or physical ability
6		suggests impaired ability to perform routine and emergency duties; or
7		(c) The applicant has other symptoms or findings that suggest a significant
8		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		recommendation regarding medical certification on the Application for
12		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
20		

G. Waivers for Cardiovascular Conditions That Require Special Consideration.

1	G. Waivers for Cardiovascular Conditions That Require Special Consideration.
2	1. Cardiomyopathy.
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
8	discern those individuals with cardiomyopathy who have factors that mitigate
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
13	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);
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

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These individuals may be denied medical certification.

not meet the low risk criteria for consideration for a medical waiver.

2. Anti-tachycardia Devices or Implantable Cardioverter Defibrillators (ICDs).

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

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1	(8) There is no evidence of significant reversible ischemia on myocardial
2	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.
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3. <u>Heart Transplant</u>.

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

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
- 5 determined disqualifying. Examples include, but are not limited to labyrinthitis, mastoiditis,
- 6 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.
- 2. 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.
 - 3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
 - 4. Mariner applicants with ear, nose, and throat conditions should:
 - a. Discuss the following with their treating provider, and 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:
- 29 (1) The **Treating Provider's Assessment**; and
- 30 (2) **Recommended Evaluation Data**.

C. Guidance to Treating Providers.

	2	1.	Treating	Provider's	Assessmer
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- 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;
 - c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
 - e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an otolaryngologist, for example.

2. Recommended Evaluation Data:

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

d. 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. 2

D. Medical Certification Evaluation.

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- 1. Detailed information on the merchant mariner hearing standards and policy are contained 4 in Chapter 5 of this Manual, Vision and Hearing Standards. 5
 - 2. Certification Determinations.
- Certification determinations will be made on a case-by-case basis. Information 7 considered during the evaluation for issuance of a medical certificate will include, but is 8 not limited to: 9
- a. The severity of the condition, to include the degree of auditory impairment, 10 disequilibrium and /or impaired balance; 11
 - b. The presence of symptoms or impairing complications;
 - c. The stability of the condition;
- d. The need for access to medical care; 14
 - e. The applicant's ability to perform routine and emergency duties;
- The risk for sudden incapacitation or debilitating complication; 16
- g. The risk of impaired cognitive ability, judgment or reaction time related to the 17 condition or associated medications; 18
 - h. The written assessment of the treating provider; and
- i. The results of objective testing and standard evaluation data. 20
- Medical Waivers. 21
- a. Mariner applicants whose condition does not meet the standard may be approved for 22 a medical waiver if objective medical evidence indicates that the condition is 23 sufficiently controlled to pose no significant risk to maritime and public safety. 24
 - 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 27 certificate, on a case-by-case basis. 28
- 4. Disqualification. 29
 - 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. G	uidance to Designated Medical Examiners (DMEs).
11	1.	Documentation.
12 13		The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
14		a. An evaluation from the treating provider and/or specialist; and
15		b. Any appropriate recommended evaluation data.
16	2.	Approval.
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.
31	3.	Deferral.

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.	Ed	<u>lucation</u>
14 15			e DME should provide education to mariner applicants on how their condition may fect, or be affected by service at sea.
16	5.	Re	eferral.
17 18			ne DME should refer_mariner applicants to their treating provider for follow-up of any normal findings discovered during the examination or during screening.
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CHAPTER 14. ENDOCRINE CONDITIONS

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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.

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

C. Guidance to Treating Providers.

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)	1	Treating	Provider'	C.	Assessment
2	1.	Heanng	riovidei	S 4	Assessment.

- The treating provider's assessment should detail a full evaluation of the condition as follows:
 - 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 impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a ophthalmologist, for example.

2. Recommended Evaluation Data:

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

- d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.
- e. Examples of recommended evaluation data for endocrinology disorders include but are not limited to glycated hemoglobin (HbA1c) levels.

5 D. Medical Certification Evaluation.

1. Certification Determination	1.	Certification	Determination
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- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
- b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

20 2. Medical Waivers.

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

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1		3.	<u>Disqualification.</u>
2 3			a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing 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 below, WAIVERS FOR ENDOCRINE CONDITIONS THAT REQUIRE SPECIAL CONSIDERATION.
12	Ε.	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.

1 2 3		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.	De	eferral.
5		a.	The DME Must Defer the decision to the Coast Guard if any of the following apply:
6 7			(1) Unfavorable recommendation or insufficient documentation from the treating provider;
8 9			(2) The applicant has evidence of instability, or history of life-threatening reactions or impairing symptoms or complications;
10 11			(3) The applicant's functional capacity and/or physical ability suggests impaired ability to perform routine and emergency duties; or
12 13			(4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication.
14 15 16			(5) For applicants with diabetes: The DME must defer if the applicant is treated with insulin, their HbA1c level is greater than or equal to 8%, they have diabetic complications, or they have had episodes of symptomatic hypoglycemia.
17 18 19		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.
20	4.	<u>Ed</u>	lucation
21		Th	e DME should provide education to mariner applicants on how their condition may
22			ect, or be affected by service at sea.
23	5.	Re	<u>ferral.</u>
24		Th	e DME should refer_mariner applicants to their treating provider for follow-up of any
25		ab	normal findings discovered during the examination or during screening.

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F. WAIVERS FOR ENDOCRINE CONDITIONS THAT REQUIRE SPECIAL CONSIDERATION

- 1. Diabetes mellitus treated with insulin or with history of diabetic ketoacidosis (DKA).
 - a. Applicants with this condition may be denied medical certification unless they demonstrate that their condition is sufficiently controlled to warrant consideration for a medical waiver, according to the following:
 - (1) Applicants seeking medical certification should submit an evaluation from the treating physician documenting interval history, and a current glycated hemoglobin (HbA1c) level which is no more than 90 days old.
 - (2) The evaluation from the treating physician should discuss the applicant's treatment compliance, blood glucose log findings, whether the applicant has had any hypoglycemic episodes, and whether the applicant has any diabetic complications. The discussion should also provide explanation of any HbA1c levels of 8% or above, if present.
 - b. If the evaluation of the treating physician supports good compliance with the treatment regimen, the absence of recent, severe hypoglycemic episodes¹, and the absence of impairing diabetic complications, applicants with a consistent pattern of HbA1c levels of less than 8% may be considered for a waiver.
 - c. Applicants whose HbA1c levels are greater than or equal to 8% but less than 10% may be considered for a medical waiver with a time-limited medical certificate, if the evaluation of the treating physician and objective documentation support extenuating circumstances that indicate low risk for sudden incapacitation or debilitating complication.
 - d. Applicants with HbA1c levels of greater than 10% are generally not considered for a waiver unless extenuating circumstances confirm temporary irregularity due to acute illness, medication interaction, or other short-term occurrence that is not likely to recur. If issued, the medical certificate would be time-limited.

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. <u>Diabetes Treated with Oral Medication</u>.

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

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CHAPTER 15. GASTROINTESTINAL CONDITIONS

2 A. Conditions of Concern.

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- 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,
- 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.

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

(2) **Recommended Evaluation Data**.

C. Guidance to Treating Providers.

3	1	Treating	Provider ³	ď	Assessment
3	1.	Heating	I IUVIUCI	0	Assessment

- The treating provider's assessment should detail a full evaluation of the condition as follows:
 - a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition;
 - c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as hepatologist, for example.

2. Recommended Evaluation Data:

- a. Objective testing and supporting documentation 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.
- b. The treating provider should submit objective testing and supporting documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating provider or specialist.
- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.

d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

D. Medical Certification Evaluation.

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1.	Certification	Determinations.

- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- 10 c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

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

26 3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; 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	Ε.	Gı	idance to Designated Medical Examiners (DMEs).
4		1.	<u>Documentation</u> .
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.	Approval.
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.	Deferral.
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.

1 2 3		(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.
4 5 6		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.	Education
8		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
10	5.	Referral.
11 12		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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CHAPTER 16. GENITOURINARY CONDITIONS

A. Conditions of Concern. 2

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- 3 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 4
- determined disqualifying. Examples include, but are not limited to kidney (renal) failure. 5
- Kidney (renal) failure requiring renal replacement therapy (dialysis) is disqualifying and 6 generally will not be approved for issuance of a waiver. 7

- 1. In some cases, genitourinary 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 unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority 12 of the credential. 13
- 2. Genitourinary conditions that are determined to pose a low risk of sudden incapacitation 14 may be considered for a waiver, or may not require any waiver or limitation. 15
 - 3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
- 4. Mariner applicants with genitourinary conditions should: 19
 - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
 - (1) Their medical condition and the limitations of medical care aboard the vessel;
 - (2) The safety sensitive nature of their merchant mariner credential;
 - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
 - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
 - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
 - (1) The Treating Provider's Assessment; and
 - (2) Recommended Evaluation Data.

1 C. Guidance to Treating Providers.

- 2 1. Treating Provider's Assessment.
- 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;

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- 7 c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
 - e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a nephrologist, for example.

2. Recommended Evaluation Data:

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

d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

D. Medical Certification Evaluation.

1.	Certification	Determinations.
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- 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
- 7 not limited to:

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

2. Medical Waivers.

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

26 3. Disqualification.

- a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
- b. Mariner applicants with other findings that indicate a significant risk of syncope, debilitating complication, or impairment may be found unqualified; 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. Guidance to Designated Medical Examiners (DMEs).
5	1. <u>Documentation</u> .
6 7	The DME should ensure that the applicant has provided adequate documentation for the condition, to include:
8	a. An evaluation from the treating provider and/or specialist; and
9	b. Any appropriate recommended evaluation data.
10	2. Approval.
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	 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>Deferral</u> .
25	a. The DME Must Defer the decision to the Coast Guard if any of the following apply:
26 27	 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:

1 2		(4) The applicant has other symptoms or findings that suggest a significant risk of syncope, sudden incapacitation or impairing complication; or
3		(5) The applicant requires dialysis.
4 5 6		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.	Education
8 9		The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
10	5.	Referral.
11 12		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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CHAPTER 17. INFECTIOUS CONDITIONS

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- Infectious 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
- determined disqualifying. Examples include, but are not limited to hepatitis, tuberculosis,
- 6 sexually transmitted diseases, gastrointestinal infections and human immunodeficiency virus
- 7 infections.

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

C. Guidance to Treating Providers.

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2	1.	rreating	Provider s	Assessment.

- 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 impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
- d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as an infectious disease specialist, for example.

2. Recommended Evaluation Data:

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

d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

D. Medical Certification Evaluation.

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1.	Certification	Determinations.

- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

2. Medical Waivers.

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

3. Disqualification.

- 27 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.	Gu	idance 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.	Approval.
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.	Deferral.
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. Education

The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.

5. Referral.

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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CHAPTER 18. MUSCULOSKELETAL CONDITIONS

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- Musculoskeletal 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 include, but are not limited to chronic musculoskeletal
- pain conditions, conditions resulting in use of controlled substances or impairing
- 7 medications; and paraplegia, amputation or restricted motions of limb.

8 B. Guidance to Mariner Applicants.

- 1. In some cases, musculoskeletal conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of the credential.
- 2. 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.
- 3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
 - 4. Mariner applicants 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
 - (2) **Recommended Evaluation Data**.

C. Guidance to Treating Providers.

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

2. Recommended Evaluation Data:

- a. Objective testing and supporting documentation 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.
- 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 1 be left to the discretion of the treating provider or specialist. 2 c. If the applicant has undergone prior testing, and the treating physician feels strongly 3 that further testing is not clinically indicated, then the provider should include a 4 statement to that effect in their assessment, along with the results of previously 5 performed testing. 6 d. If the treating provider seeks to demonstrate the applicant's fitness by alternate 7 means, then the provider should include a statement to that effect in their assessment. 8 Examples of recommended evaluation data for musculoskeletal disorders include, but 9 are not limited to: 10 (1) Demonstration of physical abilities; 11 (2) Practical examination underway – If requested by the Coast Guard, for applicants 12 with severely restricted motion of limb, loss of limb or loss of use of limb due to 13 conditions such as amputation or paralysis, for example; and 14 (3) Neuropsychological/neurocognitive testing - if condition results in use of 15 controlled substances or impairing medications, and such testing was requested by 16 the Coast Guard. 17 D. Medical Certification Evaluation. 18 19 1. Certification Determinations. Certification determinations will be made on a case-by-case basis. Information 20 considered during the evaluation for issuance of a medical certificate will include, but is 21 not limited to: 22 a. The severity of the condition; 23 b. The presence of symptoms or impairing complications; 24 c. The stability of the condition; 25 d. The need for access to medical care; 26 e. The applicant's ability to perform routine and emergency duties; 27 The risk for sudden incapacitation or debilitating complication; 28 g. The risk of impaired cognitive ability, judgment or reaction time related to the 29 condition or associated medications; 30 h. The written assessment of the treating provider; and 31 The results of objective testing and standard evaluation data.

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1	2.	Mo	edical 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.	<u>Di</u>	squalification.
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. Gu	ıida	ance to Designated Medical Examiners (DMEs).
20	1.	Do	ocumentation.
21 22			e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
23		a.	An evaluation from the treating provider and/or specialist; and
24		b.	Any appropriate recommended evaluation data.
25	2.	Ap	oproval.
26 27		a.	The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:

(1) Favorable recommendation from the treating provider;

intervention, hospitalization or surgery;

(2) Condition is asymptomatic and without recent need for emergency care, major

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	ł	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>I</u>	<u>Deferral</u> .
11	г	a. The DME must defer the decision to the Coast Guard if any of the following apply:
12 13		 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	, i	o. 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>I</u>	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	5. <u>I</u>	Referral.
29 30		The DME should refer_mariner applicants to their treating provider for follow-up of any abnormal findings discovered during the examination or during screening.

CHAPTER 19. NEUROLOGIC CONDITIONS

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1.	Neurologic	Conditions	of	Concern.
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- 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 attack, tumor, disorders of disequilibrium, migraine headaches, migraine visual aura, and transient loss of control of nervous system function are subject to further review, and may be determined disqualifying.
- b. The conditions of epilepsy, seizures, and convulsive disorders are disqualifying and generally will not be approved for issuance of a waiver. See Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring Special Consideration.
- c. Sleep disorders, including but not limited to, obstructive sleep apnea, central hypersomnias, and insomnia, are subject to further review, and may be determined disqualifying. The conditions of narcolepsy and idiopathic hypersomnia are disqualifying and generally will not be approved for issuance of a waiver. See Paragraph G of this Chapter, Waivers for Neurologic Conditions Requiring Special Consideration.
- d. General classes of neurologic conditions that are subject to further review include, but are not limited to:
 - (1) Chronic, Progressive Conditions;
- (2) Non-progressive Conditions;
 - (3) Intracranial Surgery, Brain Injury, Brain Tumors, or Central Nervous System Infection;
 - (4) Seizure Disorders; and
- 27 (5) Sleep Disorders.

2. General Guidance to Mariner Applicants.

a. Some neurologic conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions and impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of the credential.

1 2 3	b.	Neurologic conditions that are determined to pose a low risk of sudden incapacitation may be considered for a waiver, or may not require a 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 neurologic 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;
16 17 18		(d) The recommendation that the treating provider/provider review 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>Gu</u>	uidance to the Treating Providers.
24	a.	Treating Provider's Assessment.
25 26		The treating provider's assessment should detail a full evaluation of the condition as follows:
27		(1) Pertinent medical examination and physical evaluation data;
28		(2) The history of the condition;
29 30 31 32		(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;

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 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. Recommended Evaluation Data.
12 13 14 15 16	(1) Objective testing results and supporting documentation are requested to better assess the severity of the condition, the presence of adequate functional capacity; and the presence or absence of impairment. This information assists the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
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 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 32 33 34 35	(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 neurologic conditions include, but are not limited to:
36	(a) Electroencephalogram;

- 1 (b) Polysomnogram;
- 2 (c) Positive airway pressure therapy logs; and
- 3 (d) Neuropsychological/neurocognitive testing.



B. Chronic, Progressive Conditions.

2	1.	Guidance to Mariner Applicants.
3		a. Examples include, but are not limited to, multiple sclerosis, Alzheimer's
4		disease, and Parkinson's disease. In some cases, chronic, progressive
5		neurologic conditions may be deemed too high risk for medical certification.
6		This would include conditions with life-threatening reactions and impairing
7		complications, as well as conditions that put the individual at high risk of
8		becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate
9		under the authority of the credential.
10		b. Chronic, progressive conditions that are determined to pose a low risk of
11		sudden incapacitation or debilitating complication may be considered for a
12		waiver, or may not require any waiver or limitation.
13		c. The evaluation for medical certification and waiver issuance will consider the
14		level of stability, the likelihood for worsening or recurrence, the written
15		assessment of the treating provider or specialist (as applicable), and the results
16		of appropriate testing.
17		d. Mariner applicants with chronic, progressive conditions should:
18		(1) Discuss the following with their treating provider, and 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
26		the medical certificate examination review the guidance in this Manual
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.	Guidance to Treating Providers.
33		a. 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	(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) Discuss treatment compliance and efficacy;
10	(5) Include an assessment of the applicant's risk for future adverse neurologic
11	events, syncope, impairment sudden incapacitation debilitating
12	complication;
13	(6) Include reports of objective testing and standard evaluation data used to
14	support their assessment; and
15	(7) Discuss the extent to which the applicant's medical condition is likely to
16	affect, 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 neurologist or neurosurgeon, for
19	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 chronic, progressive neurologic conditions may include, but are not limited to neuropsychological/neurocognitive testing.
7	3. Medical Certification Evaluation.
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. Medical Waivers.
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	(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> .

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

1. Guidance to Mariner Applicants.
a. In some cases, non- progressive neurologic conditions may be deemed too
high risk for medical certification. This would include conditions with life-
threatening reactions and impairing conditions, as well as conditions that put
the individual at high risk of becoming impaired, distracted, incapacitated, or
otherwise unsafe to operate under the authority of 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 pas
5 years, and vertigo.
h. Non muconoscino conditions that are determined to a very law risk of and den
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.
c. The evaluation for medical certification and waiver issuance will consider the
level of stability, the likelihood for worsening or recurrence, whether the
condition results in the use of controlled substances or impairing medications
the written assessment of the treating provider or specialist (as applicable),
and the results of appropriate testing.
d. Mariner applicants with non- progressive 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 refety are iting nature of their moved out mariner and article
(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
sorvice and an income of an end and soun, units
(d) The recommendation that the treating provider/provider performing
the medical certificate examination review the guidance of this manua
when providing their assessment for medical certification.
(2) Make sure to submit sufficient information on any of their medical
conditions that are subject to further review. This includes:
(a) The Treating Provider's Assessment; and
(b) Recommended Evaluation Data.
2. Guidance to Treating Providers.

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		past 5 years;
10		(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		(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
24 25 26		assists the evaluators in determining whether the mariner is able to perform routine and emergency duties without risk of sudden incapacitation.
27		(2) The treating provider should submit objective testing and supporting
28 29		documentation as appropriate for the specifics of the mariner applicant's medical condition. Generally, the type and manner of evaluation data or
29 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 non-progressive neurologic conditions include, but are not limited to neuropsychological/neurocognitive testing.
7	3. Medical Certification Evaluation.
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. Medical Waivers.
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. Approval.
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
3	101 Wedled Certificate, 1 offit CO 717K
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	(d) The applicant's functional capacity and/or physical ability to perform
14	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	(f) The applicant's condition requires treatment with controlled
18	substances or impairing medications.
19	(2) If the DME defers the certification decision to the Coast Guard, the DME
20	should discuss the reason(s) for deferral and document their
21	recommendation regarding medical certification on the Application for
22	Medical Certificate, CG-719K.
23	d. Education.
24	1) <u>The DME Should Provide</u> :
25	The DME should provide education to mariner applicants on how their
26	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.
31	

1 2	D.			cranial Surgery, Brain Injury, Brain Tumors, and Central Nervous System ion.
3		1.	<u>G</u> u	uidance to Mariner Applicants.
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 9				unconscious, incapacitated, or otherwise unsafe to operate under the authority of the credential.
10			b.	Intracranial surgery, brain injury, brain tumors or CNS infections that are
11				determined to pose a low risk of sudden incapacitation may be considered for
12				a waiver, or may not require any waiver or limitation.
13			c.	The evaluation for medical certification and waiver issuance will consider the
14				level of stability, the likelihood for worsening or recurrence, the written
15				assessment of the treating provider or specialist (as applicable), and the results
16				of appropriate testing.
17			d.	Mariner applicants with a history of intracranial surgery, brain injury, brain
18				tumors or CNS infection 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
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.

2. Guidance to Treating Providers.

1	a.	<u>Treating Provider's Assessment.</u>
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		(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	X	(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
25 26		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.
JJ		aiong with the results of previously performed testing.

2 3	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. Medical Certification Evaluation.
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. Medical Waivers.
23 24 25 26	(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.
27 28	(2) The evaluation will consider whether there are extenuating circumstances 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		(1) 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. <u>G</u> 1	uidance to Designated Medical Examiners(DMEs).
15	a.	Documentation.
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.	Approval.
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.	Education.

The **DME should provide** education to mariner applicants on how their condition may affect, or be affected by service at sea.

e. Referral.

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



E. Seizure or Convulsive Disorders.

2	1.	<u>Gu</u>	aidance to Mariner Applicants.
3		a.	Examples include, but are not limited to, unprovoked seizures, epilepsy,
4		u.	convulsions, provoked seizures and single-seizure events. The conditions of
5			epilepsy, seizures, and convulsive disorders are disqualifying and generally
6			will not be approved for issuance of a waiver. See Paragraph G of this
7			Chapter, Waivers for Neurologic Conditions Requiring Special Consideration.
8			This is because seizure conditions and convulsive disorders are generally
9			deemed too high risk for medical certification because they are conditions
10			with life-threatening reactions and impairing complications, as well as put the
11			individual at high risk of becoming unstable, unconscious, incapacitated, or
12			otherwise unsafe to operate under the authority of the credential.
13		b.	Childhood febrile seizures that occurred before the age of 5, and did not
14			persist or recur after age 5, are not subject to further review. Seizure
15			conditions that are determined to pose a low risk of sudden incapacitation or
16			debilitating complication may be considered for a waiver, or may not require
17			any waiver or limitation.
18		c.	The evaluation for medical certification and waiver issuance will consider the
19			level of stability, the likelihood for worsening or recurrence, the written
20			assessment of the treating provider or specialist (as applicable), and the results
21			of appropriate testing.
22		d.	Mariner applicants with seizure or convulsive disorder disorders should:
23			(1) Discuss the following with their treating provider, and with the provider
24			performing the medical certificate examination:
25			(a) Their medical condition and the limitations of medical care aboard the
26			vessel;
27			(b) The safety sensitive nature of their merchant mariner credential;
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28			(c) How/whether the medical condition may affect, or be affected by
29			service aboard a vessel or by service at sea; and
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			(2) Make sure to submit sufficient information on any of their medical
34			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, o 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, fo example.
22	b. Recommended Evaluation Data.
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. Medical Certification Evaluation.
12	a. <u>Certification Determinations</u> .
13 14 15	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:
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 23	(7) The risk of impaired cognitive ability, judgment or reaction time related to 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 28 29 30	(1) Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.

2 3		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.	<u>Documentation</u> .
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) The DME Must Defer the decision to the Coast Guard for all applicants with seizure or convulsive disorders.
	(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.
d.	Education.
	The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.
e.	<u>Deferral</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.

F. Sleep Disorders. 1 Sleep disorders, including but not limited to, obstructive sleep apnea, central 2 hypersomnias, and insomnia, are subject to further review, and may be determined 3 disqualifying. The conditions of narcolepsy and idiopathic hypersomnia are 4 disqualifying and generally will not be approved for issuance of a waiver. 5 1. Guidance to Mariner Applicants. 6 a. Examples include, but are not limited to, obstructive sleep apnea, central 7 hypersomnias, insomnia, narcolepsy and idiopathic hypersomnia. In some 8 9 cases, sleep disorders may be deemed too high risk for medical certification. This would include conditions such as narcolepsy and idiopathic hypersomnia 10 which are disqualifying and generally will not be approved for issuance of a 11 waiver. 12 b. Sleep disorders that are determined to pose a low risk of impairment, sudden 13 incapacitation or debilitating complication may be considered for a waiver, or 14 may not require any waiver or limitaiton 15 c. The evaluation for medical certification and waiver issuance will consider the 16 level of stability, the likelihood for worsening or impairment, the written 17 assessment of the treating provider or specialist (as applicable), and the results 18 of appropriate testing. 19 d. Mariner applicants with sleep disorders should: 20 21 (1) Discuss the following with their treating provider, and the provider performing the medical certificate examination: 22 (a) Their medical condition and the limitations of medical care aboard the 23 vessel: 24 (b) The safety sensitive nature of their merchant mariner credential; 25 (c) How/whether the medical condition may affect, or be affected by 26 service aboard a vessel or by service at sea; and 27 (d) The recommendation that the treating provider/provider performing 28 the medical certificate examination review the guidance in this Manual 29 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

(b) Recommended Evaluation Data.

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(a) The Treating Provider's Assessment; and

1	2. <u>Gui</u>	idance to Treating Providers.
2	a.	Treating Provider's Assessment.
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.	Recommended Evaluation Data.
22 23 24 25 26 27		(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.
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. Medical Certification Evaluation.
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 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;

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	(1) Mariner applicants whose conditions are inadequately controlled, unstable
8	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	(3) Mariner applicants with other findings that indicate a significant risk of
12	excessive daytime/worktime sleepiness, impairment, or other adverse
13	neurologic event may be found unqualified;
14	(4) Mariner applicants with obstructive sleep apnea who do not meet the
15	criteria for issuance of a medical waiver as outlined in Paragraph H of this
16	Chapter, Medical Waivers for Applicants with Obstructive Sleep Apnea,
17	may be found unqualified;
18	(5) Mariner applicants who do not have the exercise/functional capacity
19	and/or physical ability necessary to perform routine and/or emergency
20	duties may be found unqualified; and
21	(6) Mariner applicants whose conditions are treated with controlled
22	substances or impairing medications, may be found unqualified.
23	4. Guidance to Designated Medical Examiners (DMEs).
24	a. <u>Documentation</u> .
25	The DME should ensure that the applicant has provided adequate
26	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. Approval.
30	(1) The DME may approve issuance of the medical certificate if their
31	evaluation finds that the applicant meets all of the following:
32 33	(a) Favorable recommendation from the treating provider which
33	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.

1		If the DME defers the certification decision to the Coast Guard, the DME
2		should discuss the reason(s) for deferral and document their
3		recommendation regarding medical certification on the Application for
4		Medical Certificate, CG-719K.
5	d.	Education.
6		The DME should provide education to mariner applicants on how their
7		condition may affect, or be affected by service at sea.
8	e.	Referral.
9		The DME should refer mariner applicants to their treating provider for
10		follow-up of any abnormal findings discovered during the examination or
11		during screening
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1 G. Waivers for Neurologic Conditions Requiring Special Consideration.

- a. Medical Waivers for Applicants with a History of Seizure(s).
- 3 Under the regulations, seizures and convulsive disorders may be disqualifying
- because they pose a significant risk of sudden incapacitation (See 46 CFR 10.304(a)).
- 5 While seizures or convulsive disorders are generally disqualifying, the Coast Guard
- 6 may consider granting waivers under 46 CFR 10.303 to mariner applicants with
- 7 seizure disorders under the conditions delineated below.
 - 1. Unprovoked Seizures.

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- 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.
 - 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
 - 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
 - 2) If still using AEDs, the mariner must have been on a stable medication regimen for a minimum of two years.
 - 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
 - 1) If all medication has been stopped, the mariner must have been seizurefree for a minimum of four years since cessation of medication; or
 - 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.
 - 5. Provoked Seizures
 - 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.]

1 2 3	div	ariner applicants evaluated under the criteria for provoked seizures will be yided into those with low risk of recurrence and those with a higher risk of currence (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		2) 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	X	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;

1 4) Stroke;

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- 2 5) Intracranial hemorrhage;
 - 6) Post-operative brain surgery with significant brain hemorrhage; and
- 4 7) Brain tumor.
 - 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.

- Applicants should submit an evaluation from the treating sleep specialist that
 documents the history of the condition and the results of any pertinent diagnostic
 studies obtained; the recommended course of treatment; treatment efficacy, treatment
 compliance, and an assessment for symptoms of daytime sleepiness.
- 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:
- 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.
 - 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).
 - 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.
 - d) If the condition is being treated with an oral appliance, the applicant should submit documentation from the treating provider that specifies the type of appliance prescribed and provides objective documentation of treatment efficacy, such as a polysomnogram performed while utilizing the appliance, unless previously submitted to the Coast Guard.
 - 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.

CHAPTER 20. OPHTHAMOLOGIC CONDITIONS

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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
- 5 conditions that are subject to further review include, but are not limited to retinopathy,
- 6 monocular vision, glaucoma, and macular degeneration.

B. Guidance to Mariner Applicants.

- 1. In some cases, ophthalmologic conditions may be deemed too high risk for medical certification. This would include conditions that impair visual acuity and/or color vision, or that impair the ability to detect, discern and respond to visual clues or alarms as necessary for the safety of ship, crew, passengers and the environment.
- 2. 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.
 - 3. The evaluation for medical certification and waiver issuance will consider the degree of impairment, the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
 - 4. Mariner applicants with ophthalmologic conditions should:
 - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
 - (1) Their medical condition and the limitations of medical care aboard the vessel;
 - (2) The safety sensitive nature of their merchant mariner credential;
 - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
 - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
 - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
 - (1) The **Treating Provider's Assessment**; and
 - (2) **Recommended Evaluation Data**.

C. Guidance to Treating Providers.

1	Treating	Provider's	Assessment.
1.	Heating	Provider 8	Assessment.

- The treating provider's assessment should detail a full evaluation of the condition as follows:
 - 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 impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. The extent to which the applicant has, or is at significant risk for visual impairment;
 - e. The degree to which the applicant is able to detect and discern colors, navigational lights, buoys and other objects at a distance, and under conditions of low light or poor visibility;
 - f. Treatment compliance and efficacy;
 - g. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - h. Reports of objective testing and standard evaluation data used to support their assessment; and
 - i. The extent to which the applicant's medical condition is likely to affect, or be affected by, service aboard the vessel or service at sea.
 - j. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a ophthalmologist, for example.

2. Recommended Evaluation Data:

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

- c. If the applicant has undergone prior testing, and the treating physician feels strongly that further testing is not clinically indicated, then the provider should include a statement to that effect in their assessment, along with the results of previously performed testing.
 - d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

D. Medical Certification Evaluation.

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- 1. Detailed information on the merchant mariner vision standards and policy are contained in Chapter 5 of this Manual, Vision and Hearing Standards.
 - 2. Certification Determinations.
- 11 Certification determinations will be made on a case-by-case basis. Information 12 considered during the evaluation for issuance of a medical certificate will include, but is 13 not limited to:
- a. The degree of visual impairment;
- b. The severity of the condition;
- 16 c. The presence of symptoms or impairing complications;
- d. The stability of the condition;
- e. The need for access to medical care;
- f. The applicant's ability to perform routine and emergency duties;
- 20 g. The risk for sudden incapacitation or debilitating complication;
- h. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications:
 - i. The written assessment of the treating provider; and
- j. The results of objective testing and standard evaluation data.
- 3. Medical Waivers.
- a. Mariner applicants whose condition does not meet the standard may be approved for a medical waiver if objective medical evidence indicates that the condition is sufficiently controlled to pose no significant risk to maritime and public safety.
- b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.

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.	<u>Di</u>	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.
15 16	E. Gı	uida	ance to Designated Medical Examiners (DMEs).
17	1.	<u>D</u> c	ocumentation.
18 19			ne DME should ensure that the applicant has provided adequate documentation for the indition, 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> 1	oproval.
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			(1) 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			(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. 1	Deferral.
9	á	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	1	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.]	Education 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. <u>]</u>	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.

CHAPTER 21. ORGAN TRANSPLANT

A. Conditions of Concern.

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- Organ transplant 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
- determined disqualifying. Examples include, but are not limited to, transplanted organs that
- are associated with complications such as organ failure or rejection.

B. Guidance to Mariner Applicants.

- 1. In some cases, transplant conditions may be deemed too high risk for medical certification. This would include conditions with life-threatening reactions or impairing complications, as well as conditions that put the individual at high risk of becoming unstable, unconscious, incapacitated, or otherwise unsafe to operate under the authority of the credential.
- 13 2. 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.
 - 3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
 - 4. Mariner applicants with a history of organ transplant should:
 - a. Discuss the following with their treating provider, and the provider performing the medical certificate examination;
 - (1) Their medical condition and the limitations of medical care aboard the vessel;
 - (2) The safety sensitive nature of their merchant mariner credential;
- 23 (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
 - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.
 - b. Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
 - (1) The **Treating Provider's Assessment**; and
 - (2) Recommended Evaluation Data.

C. Guidance to Treating Providers.

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2	1.	Treating	Provider'	S	Assessment

- 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 impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
 - e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a transplant specialist, for example.

2. Recommended Evaluation Data:

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

d. If the treating provider seeks to demonstrate the applicant's fitness by alternate means, then the provider should include a statement to that effect in their assessment.

D. Medical Certification Evaluation.

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1.	Certification	Determinations.

- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

18 2. Medical Waivers.

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

29 3. Disqualification.

1 2			a.	Mariner applicants with unstable conditions, life-threatening symptoms, or impairing complications may be found unqualified;
3 4			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.	Gı	ıida	nce to Designated Medical Examiners (DMEs).
9		1.	<u>Do</u>	ocumentation.
10 11				e DME should ensure that the applicant has provided adequate documentation for the ndition, to include:
12			a.	An evaluation from the treating provider and/or specialist; and
13			b.	Any appropriate recommended evaluation data.
14		2.	<u>Ap</u>	pproval.
15			DI	ME's may not approve issuance of the medical certificate for mariner applicants with a
16				story of organ transplant.
17		3.		eferral.
18			a.	The DME must defer the decision to the Coast Guard for mariner applicants with
19			а.	history of organ transplant.
20			h	The DME's deferral should discuss the reason(s) for deferral and document their
21				recommendation regarding medical certification on the Application for Medical
22				Certificate, Form CG-719K.
23		4.	Ed	ucation
24			Th	e DME should provide education to mariner applicants on how their condition may
25				ect, or be affected by service at sea.
26		5.	Re	<u>ferral.</u>
27			Th	e DME should refer_mariner applicants to their treating provider for follow-up of any
28				normal findings discovered during the examination or during screening.

1 CHAPTER 22. PREGNANCY

2 A. Conditions of Concern.

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- 3 **Uncomplicated** pregnancy is not disqualifying or subject to further review.
- 4 Pregnancy with complications that pose a risk of sudden incapacitation or debilitating
- 5 complication is subject to further review, and may be determined disqualifying.
- **B.** Guidance to Mariner Applicants.
- 7 Mariner applicants who are pregnant 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;
- 12 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.
- 17 2) Make sure to submit sufficient information on any of their medical conditions that are subject to further review. This includes:
 - a. The Treating Provider's Assessment; and
- b. Recommended Evaluation Data.
- 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:
- a. Pertinent medical examination and physical evaluation data;
- b. The history of the condition;
- c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization during the current pregnancy;

- d. Treatment compliance and efficacy; 1 e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, 2 or debilitating complication; 3 f. Reports of objective testing and standard evaluation data used to support their 4 assessment: and 5 g. The extent to which the applicant's medical condition is likely to affect, or be 6 affected by, service aboard the vessel or service at sea. 7 h. In some cases, the Coast Guard may request that the applicant submit documentation 8 from a specialist such as a obstetrician, for example. 9 2. Recommended Evaluation Data: 10 a. Objective testing and supporting documentation may be requested to better assess the 11 severity of the condition, the applicant's functional capacity; and the presence or 12 absence of impairing complications. This information assists the evaluators in 13 determining whether the mariner is able to perform routine and emergency duties 14 without risk of sudden incapacitation. 15 b. The treating provider should submit objective testing and supporting documentation 16 as appropriate for the specifics of the mariner applicant's medical condition. 17 Generally, the type and manner of evaluation data or objective testing submitted will 18 be left to the discretion of the treating provider or specialist. 19 c. If the applicant has undergone prior testing, and the treating physician feels strongly 20 that further testing is not clinically indicated, then the provider should include a 21 statement to that effect in their assessment, along with the results of previously 22 performed testing. 23 d. If the treating provider seeks to demonstrate the applicant's fitness by alternate 24 means, then the provider should include a statement to that effect in their assessment. 25 e. Examples of recommended evaluation data for pregnancy include, but are not limited 26 to an obstetrician's assessment. 27 D. Medical Certification Evaluation. 28 29
 - 1. Certification Determinations.

- Certification determinations will be made on a case-by-case basis. Information 30 considered during the evaluation for issuance of a medical certificate will include, but is 31 not limited to: 32
 - a. The severity of the condition;

- b. The presence of symptoms or impairing complications; 1 2 c. The stability of the condition; d. The need for access to medical care; 3 e. The applicant's ability to perform routine and emergency duties; 4 f. The risk for sudden incapacitation or debilitating complication; 5 The risk of impaired cognitive ability, judgment or reaction time related to the 6 condition or associated medications: 7 8 h. The written assessment of the treating provider; and The results of objective testing and standard evaluation data. 9 2. Medical Waivers. 10 a. Mariner applicants whose condition does not meet the standard may be approved for 11 a medical waiver if objective medical evidence indicates that the condition is 12 sufficiently controlled to pose no significant risk to maritime and public safety. 13 b. The evaluation will consider whether there are extenuating circumstances that warrant 14 special consideration for issuance of a medical waiver. 15 c. If approved, waivers and limitations may be applied to the credential and/or medical 16 certificate, on a case-by-case basis. 17 18 3. Disqualification. a. Mariner applicants with unstable conditions, life-threatening symptoms, or impairing 19 complications may be found unqualified; 20 b. Mariner applicants with other findings that indicate a significant risk of syncope, 21 debilitating complication, or impairment may be found unqualified; and 22 c. Mariner applicants with inadequate exercise and/or functional capacity that impairs 23 their ability to perform routine and/or emergency duties may be found unqualified. 24 E. Guidance to Designated Medical Examiners (DMEs).
- 1. Documentation. 26

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- The DME should ensure that the applicant has provided adequate documentation for the 27 condition, to include: 28
 - a. An evaluation from the treating provider and/or specialist; and

1		b.	Any appropriate recommended evaluation data.
2	2.	<u>A</u> p	pproval.
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.	<u>De</u>	<u>eferral</u> .
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		X	(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.	<u>Ed</u>	<u>lucation</u>
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.

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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CHAPTER 23. PSYCHIATRIC OR MENTAL HEALTH CONDITIONS

2	Α.	Intr	oduo	ction.

1.	Psy	vchiatric	Conditions	of	Concern

- a. Psychiatric or mental health conditions that pose a risk of sudden incapacitation, debilitating complication or other impairment are subject to further review, and may be determined disqualifying. Examples include, but are not limited to mental health disorders requiring treatment with controlled substances or impairing medication; alcohol and substance abuse/dependence disorders, and conditions with a history of, or at significant risk for psychosis, suicidal ideation, homicidal ideation, or hospitalization.
- b. Psychotic disorders are disqualifying and generally will not be approved for issuance of a waiver.
 - c. A current clinical diagnosis of alcohol or substance abuse/dependence, which is not in remission, is disqualifying and generally will not be approved for issuance of a waiver.
 - d. General classes of psychiatric or mental health conditions that are subject to further review include, but are not limited to:
 - (1) Mood Disorders;
 - (2) Anxiety Disorders:
 - (3) Attention Deficit/Hyperactivity Disorder;
 - (4) Substance Abuse/Dependence Disorders; and
- 22 (5) Schizophrenia/Psychotic Disorders.

2. Guidance to Mariner Applicants.

- a. In some cases, psychiatric or mental health conditions may be deemed too high risk for medical certification. This would include conditions treated with impairing medications and conditions associated with impairing signs and symptoms, 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.
- b. Psychiatric or mental health 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.

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. Guidance to the Treating Providers.
21	a. Treating Provider's Assessment.
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. Recommended Evaluation Data.
12 13 14	(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
15 16 17	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) Neuronsychological/neurocognitive testing

B. Mood Disorders.

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

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	(b) Applicants whose conditions are treated with controlled substances,
6	impairing medications or anti-psychotic medications may be asked to
7	submit the results of neuropsychological/neurocognitive testing. See
8	the Medication Enclosure for further guidance.
9	3. Medical Certification Evaluation.
10	a. <u>Certification Determinations</u> .
11	Certification determinations will be made on a case-by-case basis.
12	Information considered during the evaluation for issuance of a medical
13	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	(7) The risk of impaired cognitive ability, judgment or reaction time related to
21	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	(1) Mariner applicants whose condition does not meet the standard may be
26	approved for a medical waiver if objective medical evidence indicates that
27	the condition is sufficiently controlled to pose no significant risk to
28	maritime and public safety.
29	(2) The evaluation will consider whether there are extenuating circumstances
30	that warrant special consideration for issuance of a medical waiver.

2	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
22	(2) Any appropriate recommended evaluation data.
23	b. Approval.
24 25	(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
26	(a) Favorable recommendation from the treating provider;
27 28	(b) Condition is asymptomatic and without recent need for major intervention, hospitalization or surgery;
29 30	(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, syncope or adverse event;

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	(1) The DME must defer the decision to the Coast Guard if any of the
15	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

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

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 result
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 Manus
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.
20	2. Cuidence to Treating Drawiders
30	2. <u>Guidance to Treating Providers</u> .
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	(3) The status of the condition, to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has
5 6	required emergency treatment, intervention or hospitalization within the past 5 years;
7	(4) Treatment efficacy and compliance;
8	(5) An assessment of the applicant's risk for future adverse cardiac events,
9 10	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. Recommended Evaluation Data.
18	(1) Objective testing and supporting documentation may be requested to
19 20	better assess the severity of the condition, and the presence or absence of impairing symptoms or complications. This information assists the
21	evaluators in determining whether the mariner is able to perform routine
22 23	and emergency duties without risk of sudden incapacitation or other impairment.
23	ппраписи.
24	(2) The treating provider should submit objective testing and supporting
25	documentation as appropriate for the specifics of the mariner applicant's
26 27	medical condition. Generally, the type and manner of evaluation data or objective testing submitted will be left to the discretion of the treating
28	provider or specialist.
29	(3) If the applicant has undergone prior testing, and the treating physician
30	feels strongly that further testing is not clinically indicated, then the
31	provider should include a statement to that effect in their assessment,
32	along with the results of previously performed testing.
33	(4) If the treating provider seeks to demonstrate the applicant's fitness by
34	alternate means, then the provider should include a statement to that effect
35	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. Medical Certification Evaluation.
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. 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 27	the condition is sufficiently controlled to pose no significant risk to 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.
30	(3) If approved, waivers and limitations may be applied to the credential
31	and/or medical certificate, on a case-by-case basis.
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1	c.	<u>Disqualification</u> .
2 3		(1) 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. <u>G</u> ւ	uidance 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
23		(b) Any appropriate recommended evaluation data.
24	b.	Approval.
25 26		(1) The DME may approve issuance of the medical certificate if their evaluation finds that the applicant meets all of the following:
27		(a) Favorable recommendation from the treating provider,
28 29		(b) Condition is asymptomatic and without recent need for major intervention, or hospitalization;
30 31		(c) Condition has been stable and the assessment indicates low likelihood of sudden exacerbation, or impairing complications;

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

1 2		recommendation regarding medical certification on the Application for Medical Certificate, Form CG-719K.
3	d.	Education.
4 5		The DME should provide education to mariner applicants on how their 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.

1	2.	At	tention-Deficit/Hyperactivity Disorders (ADD/ADHD).
2		1	Guidance to Mariner Applicants.
3			a. In some cases, Attention-Deficit/Hyperactivity Disorders (ADD/ADHD) may
4			be deemed too high risk for medical certification. This would include
5			ADD/ADHD conditions that are treated with controlled substances or
6			impairing medications, associated with impairing signs and symptoms, or
7			associated with a history of, or at significant risk for psychosis, suicidal
8			ideation, homicidal ideation, or hospitalization.
9			b. ADD/ADHD conditions that are determined to pose a low risk of sudden
10			incapacitation or impairment may be considered for a waiver, or may not
11			require any waiver or restriction.
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 ADD/ADHD conditions should:
17			1. Discuss the following with their treating provider, and the provider
18			performing the medical certificate examination:
19			• Their medical condition and the limitations of medical care aboard the
20			vessel;
21			• The safety sensitive nature of their merchant mariner credential;
22			 How/whether the medical condition may affect, or be affected by
23			service aboard a vessel or by service at sea; and
24			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		(3)	Guidance to Treating Providers.

a. Treating Provider's Assessment.

32

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		٠,	malignant arrhythmia, syncope, sudden incapacitation, or debilitating
12			complication;
12			complication,
13		f)	Reports of objective testing and standard evaluation data used to support
14		-/	their assessment; and
			unen assessment, and
15		g)	The extent to which the applicant's medical condition is likely to affect, or
16		6)	be affected by, service aboard the vessel or service at sea.
			3, 32 32 32 32 32 32 32 32 32 32 32 32 32
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.
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			impairing symptoms or complications. This information assists the
23			evaluators in determining whether the mariner is able to perform routine
24			and emergency duties without risk of sudden incapacitation or other
25			impairment.
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			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.
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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	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) Medical Certification Evaluation.
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	(1) 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. Approval.
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;
22	a) The applicant has other symptoms or findings that suggest a significant
23 24	c) The applicant has other symptoms or findings that suggest a significant risk of an sudden incapacitation or debilitating complication;
24	risk of all sudden incapacitation of debilitating complication,
25	d) The applicant has a history of, or risk for psychosis, suicidal ideation,
26	or homicidal ideation;
27 28	e) The applicant has required emergency treatment or hospitalization in the past 6 years;
29 30	f) The applicant is at risk for impaired cognitive ability, judgment or reaction time;
31	

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

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2	f. Alcohol/Substance Abuse or Dependence.
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 result
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	
28	b) The safety sensitive nature of their merchant mariner credential;
29	
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 Manua
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	a) The Treating Dravidor's Aggregation to and
40	a) The Treating Provider's Assessment ; and
41	b) Decommended Evoluction Date
42	b) Recommended Evaluation Data.

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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.

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 psychiatric or mental health conditions include, but are not limited to:

- i. Full mental health evaluation from the treating provider/treating mental health specialist;
- ii. Applicants with a diagnosis of abuse or dependence, or self-reported abuse or dependence, within the last 5 years should submit an evaluation from a substance abuse professional that includes assessment of the applicant's suitability to return to work in safety-sensitive positions; and
- iii. 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.

c. Medical Certification Evaluation.

- 1) Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
 - a) The severity of the condition;
 - b) The presence of symptoms;
 - c) The stability of the condition;
 - d) The need for access to medical care;
 - e) The applicant's ability to perform routine and emergency duties;
 - f) The risk for sudden incapacitation or debilitating complication;

1	g) The risk of impaired cognitive ability, judgment or reaction time
2 3	related to the condition or associated medications;
4 5	h) The written assessment of the treating provider; and
6	i) The results of objective testing and standard evaluation data.
7	O
8	2) <u>Medical Waivers</u> .
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
13	maritime and public safety.
14	
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) <u>Disqualification</u> .
23	
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.

1 2 3 4	(3) 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.
5	
6	d. Guidance to Designated Medical Examiners.
7	
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) The DME NOT approve applicants with a history of alcohol/substance
16	abuse or dependence for certification.
17	
18	3) The DME Must Defer the decision to the Coast Guard if any applicants
19	have a history of alcohol/substance abuse or dependence.
20	
21	The DME's deferral should address the reason(s) for deferral and their
22	recommendation regarding medical certification.
23	O THE DATE OF THE STA
24	4) The DME Should Provide:
25	
26	Education to mariner applicants on how their condition may affect, or be
27	affected by service at sea.
28	5) The DME Charled Defense
29	5) The DME Should Refer:
30	Manipus analicants to their treating provider for fellow we of any shapened
31	Mariner applicants to their treating provider for follow-up of any abnorma
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.
10		nospituiization.
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		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		2) Malay and to reducit sufficient information on any of their modical
34		2) Make sure to submit sufficient information on any of their medical
35		conditions that are subject to further review. This includes:
36		a) The Treating Providents Aggregment, and
37		a) The Treating Provider's Assessment ; and
38		b) Recommended Evaluation Data.
39 40		o) Accommended Evaluation Data.
41	b.	Guidance to Treating Providers.
41	υ.	Guidance to Treating Troviders.
42		1) Treating Provider's Assessment.
⊤ J		1) Troums 1 to vider 5 / 1000 55 mont.

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

- a) Pertinent medical examination and physical evaluation data;
- b) The history of the condition;
- 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 5 years;
- d) Treatment efficacy and compliance;
- e) An assessment of the applicant's prognosis and risk for future adverse neurologic events;
- f) Reports of objective testing and standard evaluation data used to support their assessment; and
- 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.

In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a psychiatrist, for example.

2) Recommended Evaluation Data.

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.

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.

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.

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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 psychiatric or mental health conditions include, but are not limited to the full mental health evaluation from the treating psychiatrist.

c. Medical Certification Evaluation.

- 1) Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
 - a) The severity of the condition;
 - b) The presence of symptoms;
 - c) The stability of the condition;
 - d) The need for access to medical care;
 - e) The applicant's ability to perform routine and emergency duties;
 - f) The risk for sudden incapacitation or debilitating complication;
 - g) The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h) The written assessment of the treating provider; and
 - i) The results of objective testing and standard evaluation data.

2) Medical Waivers.

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.

i. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver; and

1	ii. If approved, waivers and limitations may be applied to the
2	credential and/or medical certificate, on a case-by-case basis.
3	3) <u>Disqualification</u> .
4	
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
25	routine and emergency duties may be found unqualified.
26	
27	d. Guidance to Designated Medical Examiners.
28	
29	1) The DME should ensure that the applicant has provided adequate
30	<u>documentation for the condition, to include</u> :
31	
32	a) An evaluation from the treating provider and/or specialist; and
33	
34	b) Any appropriate recommended evaluation data.
35	
36	2) The DME May NOT approve applicants with schizophrenia or psychotic
37	disorders for medical certification.
38	
39	3) The DME Must Defer the decision to the Coast Guard if applicants have
40	schizophrenia or psychotic disorders.
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42	The DME's deferral should address the reason(s) for deferral and their
43	recommendation regarding medical certification.
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45	a) The DME Should Provide:
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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.







CHAPTER 24. PULMONARY CONDITIONS

2 A. Conditions of Concern.

- 1. Pulmonary conditions likely to interfere with the ability to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response are subject to further review, and may be determined disqualifying. Examples include, but are not limited to severe chronic obstructive pulmonary disease, poorly controlled asthma, and conditions causing significant dyspnea or respiratory dysfunction.
- 2. Conditions requiring use of supplemental oxygen while working are disqualifying and generally will not be approved for issuance of a waiver.

B. Guidance to Mariner Applicants.

- 1. 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.
- 2. 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.
- 3. The evaluation for medical certification and waiver issuance will consider the level of stability, the likelihood for worsening or recurrence, the written assessment of the treating provider or specialist (as applicable), and the results of appropriate testing.
 - 4. Mariner applicants with pulmonary conditions should:
- a. Discuss the following with their treating provider, and the provider performing the medical certificate examination:
 - (1) Their medical condition and the limitations of medical care aboard the vessel;
 - (2) The safety sensitive nature of their merchant mariner credential;
 - (3) How/whether the medical condition may affect, or be affected by service aboard a vessel or by service at sea; and
 - (4) The recommendation that the treating provider/provider performing the medical certificate examination review the guidance in this Manual when providing their assessment for medical certification.

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subject to further review. This includes: 2 (1) The **Treating Provider's Assessment**; and 3 (2) Recommended Evaluation Data. 4 C. Guidance to Treating Providers. 5 1. Treating Provider's Assessment. 6 The treating provider's assessment should detail a full evaluation of the condition as 7 follows: 8 a. Pertinent medical examination and physical evaluation data; 9 b. The history of the condition; 10 c. The status of the condition - to include severity, stability, symptoms, presence of 11 impairing complications, and whether the applicant has required emergency care, 12 major intervention, hospitalization, or surgery within the past 6 years; 13 d. Treatment compliance and efficacy; 14 e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, 15 or debilitating complication; 16 f. Reports of objective testing and standard evaluation data used to support their 17 assessment; and 18 g. The extent to which the applicant's medical condition is likely to affect, or be 19 affected by, service aboard the vessel or service at sea. 20 h. In some cases, the Coast Guard may request that the applicant submit documentation 21 from a specialist such as a pulmonologist, for example. 22 2. Recommended Evaluation Data: 23 24 a. Objective testing results and supporting documentation are requested to better assess the severity of the condition, the likelihood of symptom recurrence or exacerbation, 25 and the presence of adequate exercise/functional capacity. This information assists the 26 evaluators in determining whether the mariner is able to perform routine and 27 emergency duties without risk of sudden incapacitation or impairment. 28 b. The treating provider should submit objective testing and supporting documentation 29 as appropriate for the specifics of the mariner applicant's medical condition. 30 Generally, the type and manner of evaluation data or objective testing submitted will 31 be left to the discretion of the treating provider or specialist. 32

b. Make sure to submit sufficient information on any of their medical conditions that are

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. M	edic	cal Certification Evaluation.
13	1.	<u>Ce</u>	ertification Determinations.
14 15 16		co	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 at 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 medical waiver if objective medical evidence indicates that the condition is

sufficiently controlled to pose no significant risk to maritime and public safety.

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1 2		b. The evaluation will consider whether there are extenuating circumstances that warrant special consideration for issuance of a medical waiver.
3	,	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		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	dance 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.	Approval.
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.

1 2 3		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>De</u>	<u>ferral</u> .
5		a.	The DME must defer the decision to the Coast Guard if any of the following apply:
6 7			(1) Unfavorable recommendation or insufficient documentation from the treating provider;
8 9			(2) The applicant's history indicates severe symptoms, frequent exacerbations, or hospitalization within the past 6 years;
10 11			(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
13 14			(5) The applicant has other symptoms or findings that suggest a significant risk of an adverse event, syncope, impairment, collapse or sudden death.
15 16 17		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.	Edi	ucation
19 20			e DME should provide education to mariner applicants on how their condition may ect, or be affected by service at sea.
21	5.	Re	ferral.
22 23			e DME should refer _mariner applicants to their treating provider for follow-up of any normal findings discovered during the examination or during screening.

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.

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

C. Guidance to Treating Providers.

2	1.	Treating	Provider'	S	Assessment

- 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;
 - c. The status of the condition to include severity, stability, symptoms, presence of impairing complications, and whether the applicant has required emergency treatment, intervention or hospitalization within the past 6 years;
 - d. Treatment compliance and efficacy;
- e. An assessment of the applicant's risk for syncope, impairment, sudden incapacitation, or debilitating complication;
 - f. Reports of objective testing and standard evaluation data used to support their assessment; and
 - 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.
 - h. In some cases, the Coast Guard may request that the applicant submit documentation from a specialist such as a dermatologist, for example.

2. Recommended Evaluation Data:

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

d. 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. Medical Certification Evaluation.

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1.	Certification	Determinations.

- Certification determinations will be made on a case-by-case basis. Information considered during the evaluation for issuance of a medical certificate will include, but is not limited to:
- a. The severity of the condition;
 - b. The presence of symptoms or impairing complications;
- c. The stability of the condition;
- d. The need for access to medical care;
- e. The applicant's ability to perform routine and emergency duties;
- f. The risk for sudden incapacitation or debilitating complication;
- g. The risk of impaired cognitive ability, judgment or reaction time related to the condition or associated medications;
 - h. The written assessment of the treating provider; and
 - i. The results of objective testing and standard evaluation data.

18 2. Medical Waivers.

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

3. Disqualification.

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

1 2			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.
3	E.	Gı	dance 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			o. Any appropriate recommended evaluation data.
9		2.	Approval.
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.	Deferral.
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 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

- 1 (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. Education

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7 The DME should provide education to mariner applicants on how their condition may affect, or be affected by service at sea.

5. Referral.

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