

CHAPTER 8

HEALTH REQUIREMENTS FOR DIVERS

References:

- A. [Defence Safety Manual](#)
- B. [Health Directive 242—Australian Defence Force Health Promotion Program](#)
- C. [Defence Instruction \(Navy\) PERS \(DI\(N\)\) 31–38—Royal Australian Navy Policy on Physical Fitness and Instructions for the Conduct of the RAN Physical Fitness Test](#)
- D. [DI\(N\) PERS 31–20—Diving Courses—Physical Fitness](#)
- E. [Defence Instruction \(General\) PERS 16–15—Australian Defence Force Medical Employment Classification System](#)

INTRODUCTION

Executive summary

- This chapter applies to initial applicants as well as Australian Defence Force (ADF) members applying for recognition as divers or undertaking training for additional diving qualifications as defined.
- Medical examination requirements for initial entrants and serving members are addressed.
- Applicants for diver are to meet occupation specific medical standards.
- Medical examinations for diver are current for 12 months.
- Officer in Charge Submarine Underwater Medicine Unit (OIC SUMU) is the confirming authority of medical fitness for all divers.
- Waivers and appeals are to be managed as for general entry applicants. SUMU may provide occupation specific advice if appropriate.

8.1 The provisions of this chapter apply to new diving applicants as well as ADF members applying for recognition as divers or undertaking training for additional diving qualifications. Former ADF members reapplying for entry and trained divers transferring from civilian diving or from other Defence forces must meet the standards in this chapter. A medical waiver may be considered for these applicants on a case-by-case basis. Diving is a military qualification in the Navy and Army.

8.2 There are two main categories of diver in the Navy:

- a. **Compressed air breathing apparatus diver.** Navy also have a specialist qualification of Underwater Medic (UM) and Medical Officer-trained in Underwater Medicine (MOUM) to support diving operations and to treat stricken divers in recompression chambers.
- b. **Clearance diver.** Clearance divers (CD) undertake an extensive course, using both compressed air and rebreathing equipment, and for them diving is a full-time occupation. CD have the potential to operate all types of diving apparatus including surface supplied breathing apparatus and closed circuit breathing apparatus.

8.3 Army diving embraces all forms of underwater swimming, assault swimming, shallow water diving, Army work diving, armoured fighting vehicle, emergency escape and UM. Army diving utilises a variety of equipment and uses compressed air breathing apparatus (CABA), pure oxygen, or mixed gases as the breathing medium.

8.4 CABA divers, UM, MOUM and Army divers are additional qualifications gained during service. Personnel are not recruited to these occupations. Standards to determine fitness for transfers or in-Service training are included in this chapter. For medical examination procedures for serving members transferring to diver refer also to [chapter 4—'Entry of applicants with previous military service and medical examination requirements for transfer of personnel between or within the services of the Australian Defence Force \(including candidates for appointment of serving personnel as commissioned officers\)'](#).

HISTORY/CLINICAL EXAMINATION

8.5 In assessing applicants for ADF diving, medical officers are to pay special attention to all aspects of the medical history and physical examination of each individual. The medical examination should confirm that the applicant is capable of withstanding the extreme physiological and psychological stresses of the underwater environment in addition to the stresses associated with their other military duties.

8.6 The following medical examinations are required:

- a. **Initial applicants.** Applicants are to be managed initially in accordance with [chapter 3—‘Medical history and examination’](#). The diver section of [Form PM 165—Medical History Questionnaire](#), is to be completed by the applicant.
- b. **Serving applicants.** Diver candidates must complete a Comprehensive Preventive Health Examination with a focus on diving fitness (see reference A. The applicant is to complete [Form AD 449—Diver Health Questionnaire](#). A copy of the form is in [annex A](#). For medical examination procedures for serving personnel transferring to diver refer also [chapter 4](#).)

Medical fitness standards

8.7 Medical standards are in [chapter 5—‘Health standards’](#). The causes of rejection for general entry and for divers, as defined in [chapter 6—‘Causes of and reasons for rejection’](#), are to be strictly applied. Other requirements applicable to diver applicants are:

- a. **Physique.** CD and Army divers are to be within the height–weight limits for entry as defined in [paragraph 5.5](#). Divers must have full function of the spine and all limbs with no impairment of musculoskeletal function. Currently serving applicants for diver may be considered acceptable with a body mass index of up to 35 if they are able to pass the appropriate physical fitness assessment (PFA).
- b. **Visual and colour perception standards.** See chapter 5, [annex A](#) for standards for minimum visual requirements (MVR). The following standards apply:

Diver Category	Minimum Visual Requirements	Colour Perception
CD	MVR 2	CP1
CABA	MVR 2	CP3
UM/MOUM	MVR 3	CP3
Army divers	MVR 2	CP3

Table 8-1: Minimum visual requirements and colour perception standards for divers

- c. **Refractive surgery.** A history of refractive surgery (photo refractive keratectomy, laser epithelial keratomileusis or laser assisted in situ keratomileusis only) is acceptable in accordance with chapter 3, annex D, paragraph 22.f. and chapter 6, [annex K](#), serial 8.3.
- d. **Hearing standard.** The hearing standard (HS) for all categories of diver is HS2.
- e. **Ear, nose and throat.** Both tympanic membranes must be intact and mobile. The eustachian tubes must be patent (as tested by Valsalva manoeuvre). Diver applicants are to be referred for ear, nose and throat (ENT) assessment if clinically indicated.
- f. **Emotional stability.** All applicants are to have a thorough psychological screening and demonstrate emotional stability and high motivation. There must be no history of alcohol or substance abuse.
- g. **Blood pressure limits.** Blood pressure (BP) limits are for all ages:
 - (1) Systolic BP upper limit 139 mm Hg, and
 - (2) Diastolic BP upper limit 89 mm Hg.

- h. **Respiratory function.** There must be no evidence of lung disease and particular attention must be paid to any condition that might cause retention and trapping of expanding gas in any part of the lungs during decompression. Applicants must have an FEV1.0/FVC ratio of 75 per cent or better, a clear chest X-ray (CXR), and FEV1.0 and FVC to be between 80 and 120 per cent of predicted. If outside these limits the opinion of OIC SUMU should be sought. Contact details are in chapter 1, [annex D](#).
- i. **Chest X-ray.** A full inspiration/expiration CXR reported by a radiologist is required for applicants for CD. Any lung scarring on CXR, including inactive tuberculosis scarring, requires respiratory physician assessment and confirmation by OIC SUMU. The CXR is to be less than twelve months old at commencement of diver training.
- j. **Sharpened Romberg test.** All prospective divers are to perform a sharpened Romberg test as described in chapter 3, [annex D](#), paragraph 33.d.
- k. **Physical fitness assessment.** The following physical fitness standards are required:
 - (1) Initial candidates applying for Navy CD are to meet the PFA standards for Army male entrants:

Test	Level
Push-ups	15
Sit-ups	45
Shuttle run	7.5

Table 8-2: Physical fitness assessment standards: clearance divers

- (2) Serving personnel applying for dive qualifications are to meet the following standards:
 - (a) Army work divers are to meet the physical fitness requirements detailed in joining instructions provided by the Army Dive Wing, HMAS PENGUIN, and swimming and diving tests in accordance with reference B.
 - (b) Navy candidates for diver selection are to meet PFA standards for Navy as detailed in references C and D.

8.8 Army work divers. Army work divers are to meet the medical standards for clearance diver.

Currency of medical examination

8.9 An initial dive medical examination is valid for 12 months. A medical check is to be conducted within two weeks prior to commencement of dive training. This includes an ENT and respiratory examination and a brief check to exclude current illnesses or injury, which may prevent commencement of dive training. The medical check may be completed by an advanced medical assistant, underwater medical assistant or a medical officer. [Form AD 450—Medical Fitness Check—Diving](#) is to be completed and forwarded to SUMU with medical documents and CXR on commencement of the diving course. A copy of the form is in [annex B](#).

Confirmation

8.10 Documentation for all applicants for diving is to be forwarded to SUMU for confirmation. Cases of doubt are to be referred to SUMU. Chief Medical Officer Defence Force Recruiting is to be an addressee on all correspondence related to initial entrant applicants who are confirmed as Class 4 Diver.

8.11 Allocation of specialist employment classification. SUMU is to allocate an appropriate specialist employment classification for Diver (D) when an applicant is confirmed as medically fit for diving duties (see reference E).

Waivers

8.12 Medical waivers may be considered by OIC SUMU on a case-by-case basis. Waivers for initial diver applicants are to be managed as for general entry applicants, *refer* [paragraphs 1.19–1.28](#). For waivers for serving members *refer* [paragraphs 4.32 and 4.33](#).

Appeals

8.13 Appeals for initial diver applicants are to be managed as for general entry applicants, *refer paragraphs 1.29–1.35*. For appeals for serving members, *refer paragraph 4.34*. Specialist medical advice may be sought from OIC SUMU if required.

Annexes:

- A. [Form AD 449—Diver Health Questionnaire](#)
- B. [Form AD 450—Medical Fitness Check—Diving](#)