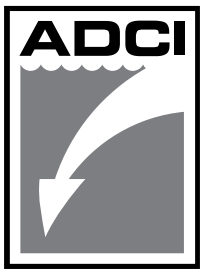
SECTION 2.0

DIVING PERSONNEL MEDICAL AND TRAINING REQUIREMENTS



Association of Diving Contractors International, Inc.

2.1 GENERAL

Each person engaged in diving and underwater operations shall possess the necessary qualifications for the job assignment. Designation of skill levels in these standards incorporates three primary elements:

- Technical training
- Field experience
- Demonstrated proficiency

Persons assigned to specific diving and underwater activities shall possess the following:

1. Knowledge and skills gained through a combination of formal training and/or experience in the following:
   - All dive crew members must undergo an annual diving physical. The physician can use his/her discretion on those dive crew members who will not be exposed to hyperbaric conditions (i.e, Non-Diving Supervisors).
   - Diving procedures and techniques.
   - Emergency procedures.
   - Physiology and physics as they relate to diving.
   - Diving equipment.
   - First aid and CPR.
2. Familiarity with procedures and proficiency in the use of tools, equipment, devices and systems associated with the assigned tasks.
3. For persons engaged as divers or otherwise exposed to hyperbaric conditions, physical qualifications for such activities must be met as outlined in **Section 2.3 Diver Medical Requirements.** Such physical qualifications must be documented on an ADCI **medical history and physical examination form,** or an equivalent form.
4. For persons who operate decompression chambers, knowledge and experience with chamber operations.

A person lacking the required experience and proficiency outlined above may be assigned a task, under the direction of an experienced and qualified individual, in order to obtain the experience and level of proficiency required.

Personnel trained and certified by recreational agencies such as, but not limited to, the National Association of Underwater Instructors (NAUI), the Professional Association of Diving Instructors (PADI), the Young Men's Christian Association (YMCA) or other such organizations are not sufficiently well-trained to participate in or conduct commercial diving activities without additional formal training from an accredited source.

For contractors operating in the United States, OSHA considers an employer to be in compliance with the diver training requirements of the Code of Federal Regulations for any employed diver with a valid ADCI Commercial Diver Certification Card for the appropriate training level.

2.2 COMMERCIAL DIVING TRAINING REQUIREMENTS

2.2.1 ENTRY-LEVEL QUALIFICATIONS

All personnel entering the profession of commercial diving shall be a high school graduate or equivalent. The entry-level minimum skill designation on the diving crew is a tender/diver. The entry-level tender/diver satisfies the minimum entry-level qualifications of diving proficiency, technical proficiency and experience by successfully completing a formal course of study.

A formal course of study for a tender/diver shall be completed at any accredited school, military school or equivalent whose curriculum, at a minimum, conforms to ANSI/ACDE-01-2015.[2] This standard can be found in the reference section.

The ADCI recognizes some formal training certificates issued from within other nations. Certificates of that nature will be evaluated together with presented documentation such as dive logs/supervisor logs, etc., to determine whether the individual is eligible in all respects for issuance of an ADCI commercial diver card.

The ADCI does not perform as an educational organization and as such does not endorse, certify or accredit any school participating in the training of personnel. Member schools are expected to obtain and preserve appropriate accreditation from agencies under whose jurisdiction their educational requirements must be maintained.

2.2.2 MINIMUM REQUIRED EXPERIENCE AND PROFICIENCY

1. Advancement beyond the designation of tender/diver requires completion of actual participation in commercial diving operations and demonstrated proficiency during working dives.

2. Field experience is defined as those days spent (offshore, inland lakes, harbors, rivers, etc.) participating as a crew member in diving operations at the level of competency determined by prior training and demonstrated proficiency.
3. Diving proficiency establishes the required minimum number of open-water working dives required to obtain various designations. All dives must be performed during a 24-month period immediately prior to issuance of the designation. Work must be performed during each dive with proper supervision. All dives must have a minimum of 20 minutes bottom time. A number of shorter-duration dives may be combined to equal one dive of the required 20-minute bottom time.
4. **Advancement** to higher designations requires completion of training and experience for all lower designations.

Minimum Qualifications:

- **Entry-Level Tender/Diver**

  Commercial diver training of at least 625 documented hours of formal instruction in subjects set forth in the ANSI Standard.[2]

- **Advanced Certifications**

  As defined in Matrix in Section 3.

- **Others**

  Technical proficiency as appropriate to the specific diving mode as detailed under the ADCI certification card program requirements or appropriate section for these standards.

2.2.1 ENTRY LEVEL ROV PILOT-TECHNICIAN PROGRAM CONTENT REQUIREMENTS

2.2.1 RIGGING - 16 HOURS

2.2.2 ENVIRONMENTAL CONSIDERATIONS - 4 HOURS

2.2.3 FLUID POWER, HYDRAULICS, AND MECHANICAL SYSTEMS - REQUIRED HOURS 40

Basic understanding of the concepts and applications of fluid power technology and the necessary skills for troubleshooting hydraulic systems in the field. General concept of fluid power systems including an introduction to energy input, energy output, energy control, system, and auxiliary components. Design, repair, and maintenance of launch and recovery equipment which may include hoses, sensors and components associated with ROV hydraulics systems.

2.2.4 ELECTRICITY AND ELECTRONICS - REQUIRED HOURS 60

Fundamentals of electricity and electronics by developing introductory analysis, construction and troubleshooting techniques for DC and AC circuits. Understanding of power supplies, transistors, amplifiers and digital logic families. Safe electrical practices, including industrial high voltage systems, read and follow schematics, and demonstrate proper wiring and soldering techniques. Electrical measurements shall be performed using test tools including multimeters and oscilloscopes. Additionally, systems, applications, electronics, and safety requirements specific to the marine and ROV environments shall be presented including the understanding of the design, repair, and integration of cabling, tether, communication devices, sensors, and components. Use of test equipment and protocols in troubleshooting methods.

2.2.5 BASIC PRINCIPLES AND CLASSIFICATION OF ROV SYSTEMS - 4 HOURS

Provide students with an understanding of basic principles of ROV systems including history, vehicle classification and function, service areas of industry and the major components of a ROV system.

2.2.6 ROV COMPONENTS -DETAILED - 40 HOURS

- Cameras and video systems
- Lighting systems
- Buoyancy and floatation
- Manipulator systems
- Cameras and video systems
- Lighting systems
- Buoyancy and floatation
- Manipulator systems
- Positioning systems/tracking systems

- Propulsion systems
- Sonar systems
- Navigation systems
- Tether management and handling systems
- Vehicle control systems
- ROV topside control center
- Auxiliary systems
  - o CP
  - o Laser
  - o Inspection and Scientific sampling
  - o Data logging

2.2.7 ROV OPERATIONS -DOCUMENTED AND SIGNED OFF - 40 HOURS

1. Pilot in command - 10 Hours

   This is time under operational activities-i.e. ROV in the water. ROV in-water operation time must include 75% of class II or above ROV as defined in 9.2.1.

2. Navigator - 10 Hours

   This is time under operational activities-i.e. ROV in the water.

3. Deck operations/tether handling - 20 Hours

2.3 DIVER MEDICAL REQUIREMENTS

It is recommended that candidates attending formal commercial diver training programs and schools follow the ADCI medical and examination guidelines outlined in this section.

2.3.1 GENERAL

For persons engaged as divers, or otherwise subjected to hyperbaric conditions, the following ADCI medical examinations (or equivalent) are required:

1. An initial medical examination by a physician qualified to perform commercial diver medical examination following the ADCI recommended guidelines.
2. Examinations are required on an annual basis.
3. A re-examination after a diving-related injury or illness as needed to determine fitness to return to diving duty. For the purposes of these medical requirements all examinations are to be performed only by licensed physicians qualified to perform commercial diver medical examinations. Must have licensed physician signature to be legible and/or stamped, with their medical designation clearly indicated. Non-physicians are not recognized by the ADCI as being qualified to perform commercial diver medical examinations. For dive team members *not* engaged in diving activity or otherwise subjected to hyperbaric conditions, the ADCI requires yearly documented *physical examination performed by a physician*.

2.3.2 PHYSICAL EXAMINATION

1. For persons engaged as divers or otherwise subjected to hyperbaric conditions, the initial exam and periodic medical re-examination will be recorded using the ADC diving medical examination form and will include the following:
   - Work history.
   - The tests required in Section 2, Table 1 as appropriate.
   - Any tests deemed necessary to establish the presence of any of the disqualifying conditions listed in this section.
   - Any additional tests the physician deems necessary.

2. All persons engaged as divers or otherwise subjected to hyperbaric conditions are required to get an annual exam. More frequent or extensive examination(s), including a complete medical re-examination, should be required if there have been any incidents (illness, accidents, etc.) during the course of that year that may have caused a change in the individual's medical condition. The diver is required to notify the diving medical examiner of any changes in his/her medical condition including any change in medications.

2.3.3 RE-EXAMINATION AFTER INJURY OR ILLNESS

Any person engaged as a diver, or otherwise exposed to hyperbaric conditions, will have a medical examination following a known diving-related injury or illness that requires hospitalization or known decompression sickness with audio-vestibular, central nervous system dysfunction or arterial gas embolism. Divers experiencing type I decompression sickness that is treated and symptoms completely resolve with a single treatment table do not need to be seen by a diving medical examiner prior to return to diving.

1. Any person engaged as a diver, or otherwise exposed to hyperbaric conditions, will have a medical evaluation following any non-diving injury or illness that requires any prescription medication, any surgical procedure or any hospitalization.
2. The person should not be permitted to return to work as a diver, or otherwise be subjected to hyperbaric conditions, until he or she is released by a physician recognized by the ADCI to do so.
3. The examining physician should determine the scope of the examination in light of the nature of the injury or illness.

2.3.4 TABLE 1 - MEDICAL TESTS FOR DIVING

Test	Initial	Frequency	Comments
History & Physical	X	Annual Frequency	Include predisposition to unconsciousness, vomiting, cardiac arrest, impairment of oxygen transport, serious blood loss or anything that, in the opinion of the examining physician, will interfere with effective underwater work.
Chest X-ray	X	Every 3 Years	PA and lateral (Projection: 14" x 17" minimum) every three years unless medical conditions dictate otherwise.
EKG: Standard (12 Leads)	X	Annual >35	Required initially to establish baseline; annually after age 35; and as medically indicated.
Framingham Risk Score	X	Annual >35	Required annually after the age of 35, consider before 35.
Stress Echo / Nuclear	X		Required as medically indicated or if the Framingham Risk Score indicates risk of >10%.
Spirometry	X	Annual	Required including FVC, FEV1. Tests should be compared with NHANESIII reference values for determining percent of predicted
Audiogram	X	Annual	Threshold audiogram by pure tone audiometry; bone conduction audiogram as medically indicated.
Visual Acuity	X	Annual	Required initially and annually.
Color Blindness	X		Required initially. Consider annually.
Complete Blood Count	X	Annual	
Routine Urinalysis	X	Annual	
Urine Drug Screen	Optional	Optional Annual	As medically indicated or otherwise required.
Lipid Panel	X	Annual >35	Required annually after the age of 35.
TB screening	Optional	Optional Annual	Optional.
Comprehensive Metabolic Profile	Optional	Optional Annual	Optional.
Hemoglobin A1c	Optional*	Optional Annual*	*Required annually if known history of diabetes, but otherwise optional at the discretion of the physician.
Pregnancy Test	Optional	Optional	Recommended prior to saturation diving.
EEG			Required only as medically indicated.

2.3.5 PHYSICIAN'S WRITTEN REPORT

A written report outlining a person's medical condition and fitness to engage in commercial diving or other hyperbaric activities should be provided by the examining physician at any time a physical examination is required herein. The written **physical examination form** should be accompanied with a completed copy of the standard **ADCI medical history form**.

The examining physician should be qualified by experience or training to conduct the commercial diver physical examination.

2.3.6 ABSOLUTE DISQUALIFYING CONDITIONS

A person having any of the following conditions, as determined by a physician's examination, shall be disqualified from engaging in diving or other hyperbaric activities.

- History of seizures other than early childhood febrile seizure, oxygen toxicity seizure, withdrawal seizure, unintentional medication related seizure.
- Cystic, bullous or cavitary disease of the lungs, significant obstructive or restrictive lung disease and/or spontaneous pneumothorax. Incidentally detected small blebs (extremely common in the general population) may be considered for waiver at the discretion of the

evaluating physician.

- Chronic inability to equalize sinus and middle ear pressure.
- Significant central or peripheral nervous system disease or impairment.
- Chronic alcoholism, drug abuse or dependence or history of psychosis.
- Hemoglobinpathies associated with comorbidities.
- Any person engaged as a diver, or otherwise exposed to hyperbaric conditions, will have a medical evaluation following any non-diving injury or illness that requires any prescription medication, any surgical procedure or any hospitalization.
- Untreated or persistent/metastatic or other significant malignancies under active treatment. Following treatment of cancer, fitness to return to diving should be evaluated by an experienced diving physician as described in section 2.4.1 and in consultation with the treating oncologist.
- Hearing impairment in the better ear should be greater than 40 dB average in the 500, 1000, and 2000 Hz frequencies.
- Untreated or symptomatic juxsta-articular osteonecrosis.
- Chronic conditions requiring continuous control by medication that increases risks in diving.
- Pregnancy.

2.3.7 WITHDRAWAL FROM HYPERBARIC CONDITIONS FOR DIVERS

It shall be determined on the basis of the physician's examination whether a person's health will be materially impaired by continued exposure to hyperbaric conditions. The physician should indicate, in the written report, any limitations or restrictions that would apply to the person's work activities.

2.3.8 MEDICAL RECORD KEEPING

1. An accurate medical record for each person subject to the medical specifications of this section should be established and maintained. The record should include those physical examinations specified herein, including the **ADCI medical history/physical examination forms** and the physician's written report.
2. The medical record shall be maintained for a minimum of five years from the date of the last hyperbaric exposure unless otherwise prescribed by law.

2.4 MEDICAL GUIDELINES AND RECOMMENDATIONS

2.4.1 INTRODUCTION

If any further clarification of this recommended standard is desired, please contact the ADCI.

The following recommendations are set forth by the ADCI and are intended to be used with the ADCI medical history/physical examination forms. They deal with specific aspects of the subject's physical fitness to dive by item number. These standards are offered with what we believe, in most cases, to be the minimum requirements. The use of these standards is intended to be tempered with the good judgment of the examining physician. Where there is doubt about the medical fitness of the subject, the examining physician should seek the further opinion and recommendations of an appropriate specialist in that field. Particular attention must be paid to past medical and diving history. In general, a high standard of physical and mental health is required for diving. Consequently, in addition to excluding major disqualifying medical conditions, examining physicians should identify and give careful consideration to minor, chronic, recurring or temporary mental or physical illnesses that may distract the diver and cause him or her to ignore factors concerned with his or her own safety or others' safety.

It is recommended that the medical examination be performed by a physician that has completed formal training or has experience in the medical assessment of fitness for commercial diving. Examinations shall not be performed by non-physicians.

The spectrum of commercial diving includes industrial tasks performed from just below the surface to deep saturation diving. Job descriptions and therefore job-limiting disabilities may vary widely. These standards, in general, apply to all divers. Some consideration must be given to the subject's medical history, work history, age, etc. Within commercial diving it may be that a diver is fit to perform some jobs but not others.

There is no minimum or maximum age limit, providing all the medical standards can be met. The ADCI does not issue commercial diver certification cards to persons younger than 18 years of age. Serious consideration must be given to the need for all divers to have adequate reserves of pulmonary and cardiovascular fitness for use in an emergency. The lack of these reserves may possibly lead to the termination of a professional diving career. The examining physician should exercise the appropriate professional judgment to determine whether in particular circumstances additional testing may be warranted. Disqualification for an inability to meet any of these standards must be determined on a case-by-case basis.

2.4.2 ADCI PHYSICAL EXAMINATION STANDARDS

Patient history is recorded on pages 2-15 through 2-16 of the form set. Pages 2-17 and 2-18 are used to record specific findings during the conduct of the examination.

The following headings refer to and explain the numbered boxes on the **ADCI physical examination form** on pages 2-17 and 2-18. A sample copy of these forms is enclosed in this standard. Use of these forms ensures quality and consistency throughout the commercial diving industry. These forms may be obtained from the ADCI website.

1	**Name**	Record.
2	**Last 4 digits of Social Security Number or Passport Number**	Record.
3	**Height**	No set limits.
4	**Weight**	The weight limits listed in the maximum allowable weight chart (2.4.9) should apply. If a diver exceeds these limits and the cognizant physician feels the increase is due to muscular build and physical fitness, a variance may be appropriate. A variance may be appropriate for divers who do not meet the weight limits but are at 23% body fat or less (males), 34% (females) as measured by impedance or hydrostatic fat testing. Furthermore, individuals who fall within these weight limits but who present an excess of fatty tissue should be disqualified.
5	**Body Mass Index (BMI)**	BMI < 28 for initial evaluation. For annual evaluation risk factor modification recommended for BMI > 28 and body fat exceeding limits, consider fitness assessment such as functional stress testing. BMI >30 (clinical obesity) is considered disqualifying. Calculation for $\frac{\text{BMI} = (\text{weight in pounds} \times 703)}{\text{height in inches}^2}$ *See also U.S. Navy height and weight table.
6	**Body Fat**	Optional. <23% for males, <34% for females. US Navy standard
7	**Temperature**	The diver should be free of any infection/disease that would cause an abnormal temperature.
8	**Blood Pressure**	The resting blood pressure should not exceed 140/90 mm Hg. In cases of apparent hypertension, repeated daily blood pressure determinations should be made before a final decision is made. The blood pressure should be controlled without target organ damage. Beta blockers and diuretics are not acceptable. Medications required to control blood pressure should be noted on the physical exam form.
9	**Pulse/Rhythm**	Persistent tachycardia, arrhythmia except of the sinus type, or other significant disturbance of the heart or vascular system should be evaluated and may be disqualifying.
10	**General Appearance/ Hygiene**	Record.
11	**Distant Vision**	Vision must be tested with and without correction when applicable. Should have vision corrected to 20/40, in both eyes. Monocular vision is not necessarily disqualifying for commercial diving. Divers who have had vision corrective surgery should be restricted from diving until cleared by a qualified diving physician and ophthalmologist.
12	**Near Vision**	Correctable to 20/40.
13	**Color Vision**	Record. Color blindness does not disqualify for diving, but diver must have color vision specific for duties.
14	**Field of Vision**	A minimum of 85 degrees field of vision is required.
15	**Contact Lenses**	Record if used. Appropriate lenses for diving may be used (soft lenses are the preferred contact lenses for diving / gas permeable fenestrated hard lens may be permitted). Vision must be recorded with and without contact lenses.
16	**Head, Face and Scalp**	Some causes for rejection may include: a) Deformities of the skull in the nature of depressions, exostosis, etc., of a degree that would prevent the individual from wearing required equipment. b) Deformities of the skull of any degree associated with evidence of disease of the brain, spinal cord or peripheral nerves. c) Loss or congenital absence of the bony substance of the skull.

17	**Neck**	Conditions affecting the neck must not impair the diver to cause insufficient range of motion. The causes for rejection may include: a) Cervical ribs if symptomatic. b) Fistula, chronic draining, of any type. c) Spastic contraction of the muscles of the neck of a persistent and chronic nature. d) Known cervical disc disease with neural impingement or radicular symptoms.
18	**Eyes**	Active pathology or previous eye surgery may be cause for restriction or rejection. Divers who have had vision corrective surgery should be restricted from diving until cleared by a qualified diving physician and ophthalmologist. History of cataract surgery with intraocular lens implant is not disqualifying.
19	**Fundus**	Optional. No pathology.
20-24	**Ears & Nose**	The following conditions are disqualifying: a) Acute disease including vestibular disease. b) Chronic serious otitis. c) Active otitis media. d) Current perforation of the tympanic membrane. e) PE tubes in place. f) Any significant nasal or pharyngeal respiratory obstruction. g) Chronic sinusitis if not readily controlled. h) Speech impediments due to organic defects. i) Inability to equalize pressure due to any cause. j) Recurrent or persistent vertigo. k) Recent piercing(s) must be fully healed prior to diving. If Eustachian tube dysfunction is suspected, then referral or testing should be done. Adequately repaired or healed round window ruptures that have no significant residual deficits may be approved for diving.
25	**Mouth and Throat**	a) Candidate should have a high degree of dental fitness; any abnormalities of dentition or malformation of the mandible likely to impair the diver's ability to securely and easily retain any standard equipment mouthpiece should disqualify. b) Removable dentures should not be worn while diving. c) Severe dental caries is disqualifying until repaired. d) History of tobacco use should be evaluated.
26	**Chest (include breasts)**	Note any chest deformities, breast abnormalities or masses.
27	**Lungs**	Pulmonary: Congenital and acquired defects that may restrict pulmonary function, cause air entrapment, or affect the ventilation-perfusion or balance shall be disqualifying for both initial training and continuation. Obstructive or restrictive pulmonary functions requires further evaluation. Pulmonary disease requiring medication use may be disqualifying. History of recurrent or spontaneous pneumothorax is disqualifying. History of smoking or use of e-cigarettes "vaping" should be evaluated.
28	**Heart (thrust, size, rhythm, sounds)**	Any evidence of heart disease or arrhythmias other than sinus arrhythmias must be fully investigated. For evaluation purposes, Bruce protocol functional stress testing through stage III must be to at least 10 METS without evidence of ischemia. Pacemakers and implantable cardiac defibrillators are disqualifying. PFO repairs are not disqualifying. Routine PFO testing is not recommended. Coumadin or any anticoagulants, antiplatlet medications and aspirin (except low dose aspirin) are considered disqualifying. Ejection fractions must be at least 40% if measured.
29	**Pulse**	Record. Peripheral pulses should be regular, full and symmetric. Resting pulse rate should be less than 100 BPM.
30	**Vascular System (varicosities, etc.)**	Cardiovascular system: The cardiovascular system shall be without significant abnormality in all respects as determined by physical examination and tests as may be indicated. Evidence of symptomatic arteriosclerosis, severe varicose veins and marked symptomatic hemorrhoids may be disqualifying. Carotid or abdominal bruits require further evaluation.

31	**Abdomen and Viscera**	a) Active peptic ulceration should be disqualifying until treated and healing has been documented. History of gastrointestinal bleeding may be disqualifying from diving and is disqualifying from saturation diving. b) Any other chronic gastrointestinal disease (e.g., Chrone's disease, ulcerative colitis, cholelithiasis) may be disqualifying. c) Hepatitis may be disqualifying. d) Colostomies should be disqualifying for saturation diving.
32	**Hernia (all types)**	All inguinal or femoral hernias are disqualifying until repaired. Ventral hernias should be assessed for strangulation risk by a surgeon prior to diving.
33	**Endocrine System**	Diabetes controlled only with diet and exercise and with Hgb A1C < 7.0 is acceptable. History of thyroid disease adequately controlled with medication is acceptable. Other endocrine disorders requiring medication may be disqualifying.
34	**G-U System (genital-urinary)**	a) Gonococcal disease, syphilis, chlamydia and genital herpes will disqualify until adequately treated. b) Evidence or history of nephrolithiasis must be fully investigated and treated and may be disqualifying. History of kidney stones is disqualifying for saturation diving. c) Any renal insufficiency or chronic renal disease may be disqualifying. d) Evidence or history of urinary dysfunction or retention must be fully investigated and treated.
35	**Upper Extremities (strength, ROM)**	Any impairment of musculoskeletal function should be carefully assessed against the general requirements that would interfere with the individual's performance as a diver. Amputations may be disqualifying. Orthopedic internal fixation hardware is not disqualifying if the fracture site is healed.
36	**Lower Extremities, Except Feet**	Any impairment of musculoskeletal function should be carefully assessed against the general requirements that would interfere with the individual's performance as a diver. Amputations may be disqualifying. Orthopedic internal fixation hardware is not disqualifying if the fracture site is healed.
37	**Feet**	Any impairment of musculoskeletal function should be carefully assessed against the general requirements that would interfere with the individual's performance as a diver.
38	**Spine**	Any impairment of musculoskeletal function should be carefully assessed against the general requirements that would interfere with the individual's performance as a diver. Known cervical, thoracic or lumbar disc disease with neural impingement or radicular syptoms may be disqualifying.
39	**Skin and Lymphatic System**	Acute or chronic disease of the skin or lymphatic system may be disqualifying. Tattoos must be fully healed prior to diving.
40	**Anus and Rectum**	Any conditions that interfere with normal function (e.g., stricture, prolapse, severe hemorrhoids) may be disqualifying.
41	**Sphincter Tone**	Note and record.
	Neurological Exam (42-49)	A full examination of the central and peripheral nervous system should show normal function, but localized minor abnormalities, such as patches of anesthesia, are allowable provided generalized nervous system disease can be excluded. History of seizure other than childhood febrile seizure, oxygen toxicity seizure, withdrawal seizure, unintentional medication related seizure. Intracranial surgery, loss of consciousness of more than 30 minutes, and severe head injury involving more than momentary unconsciousness or concussion, may be disqualifying. If the severity of head injury is in doubt, special consultation and studies should be considered. All neurodegenerative conditions are disqualifying.
42	**Cranial Nerves**	Examine, evaluate and record.
43	**Reflexes**	Should be symmetrical and free from pathology. Document any abnormalities. Pathological reflexes should be evaluated. Asymmetrical reflexes should be documented.
44	**Cerebellar Function**	Test and record.
45	**Strength and Tone of Muscles**	Examine and record. Note any asymmetry or loss of tone.
46	**Propioception/ Stereognosis**	Examine and record.

47	**Nystagmus**	Examine and record. Congenital nystagmus is not necessarily disqualifying. End point lateral gaze nystagmus is considered normal.
48	**Sensations and Vibration**	Examine and record. Vibration should be tested using a 128 Hz tuning fork. Two point discrimination should be tested at the thumb (C6), middle finger (C7) and the little finger (C8) and should be discernable at 5 mm.
49	**Romberg & Sharpened Romberg**	Examine and record.
50	**Miscellaneous Remarks and Dermatome Diagram**	Record findings and comments.
	Psychiatric	Any past or present evidence of psychiatric illness may be disqualifying: any psychiatric illness deemed significant by the physician should be evaluated by a specialist. Personality disorders, bipolar disorders, psychosis, instability and anti-social traits shall be disqualifying . Any psychiatric condition requiring medication may be disqualifying, however temporary situational depression may be approved if stable on low-dose antidepressants that do not affect seizure thresholds or have any side effects of CNS depression. Speech impediment related to stress/anxiety or other psychiatric illness may be disqualifying.
	Substance Use	Particular attention should be paid to any past or present evidence of alcohol or drug abuse, and may be and indication for referral to specialist. Any current alcohol or drug abuse is disqualifying. Anabolic steroids or other illicit substances are disqualifying. Any abnormalities should be noted in the physical examination form.
51	**Urinalysis**	Includes color pH, specific gravity, glucose, albumin and micro, abnormalities should be evaluated by the physician.
52	**Hematology**	Any significant anemia, history of hemolytic disease, or significant abnormalities on Complete Blood count (CBC) must be evaluated; sickle cell disease and other significant hemoglobinopathies are disqualifying.
53	**Spirometry**	All divers must have periodic spirometry to establish Forced Expiratory Volume at one (1) second (FEV1) and; Forced Vital Capacity (FVC), recording best of three measurements using American Thoracic Society standards. FEV1 and FVC should both be >75% using NHANES reference values. If either or both are below 75%, then the diver should be referred for pulmonary evaluation. Further evaluation should be considered in the event of an acute reduction of FEF 25-75.
54	**X-ray/Imaging**	a) PA and lateral every three years. b) Long bones (at discretion of evaluating physician): Any lesions, especially juxta-articular, should be evaluated and may be disqualifying. c) Lumbar/sacral spine (at discretion of evaluating physician): Abnormalities associated with symptoms should be further evaluated. d) Spine MRI (at discretion of evaluating physician): Neural impingement on MRI may be disqualifying.
55	**Electrocardiogram**	Resting standard 12 lead ECG is required on initial examinations and annually after the age of 35. Stress echocardiogram (preferred) or stress ECG required as medically indicated or if the Framingham Risk Score indicates risk of > 10%.
56	**Audiogram Pure Tone**	A hearing loss in either ear > 40 dB in the range of 500, 1000 and 2000 Hz may be an indication for referral to a specialist for further opinion. Monaural hearing is not disqualifying.
57	**Comprehensive Metabolic Panel**	Optional at the discretion of the examining physician. Significant abnormalities on Complete Metabolic Panel (CMP) must be evaluated.
58	**Hemoglobin A1C**	Required for any history of diabetes. Diabetes controlled only with diet and exercise and with Hgb A1C < 7.0 is acceptable.
59	**Lipid Panel**	Required annually after the age of 35.
60	**Urine Drug Screen**	All medically indicated or otherwise required.

2.4.3 ADCI MEDICAL HISTORY AND EXAMINATION FORMS

Association of Diving Contractors International

MEDICAL HISTORY FORM

Employer			Job Title			Date	
1. Last Name	First Name	Middle Name	2. Email Address		3. Date of Birth	4. Gender	5. Last 4 No. of SSN
6. Address (Number, Street)		7. City		8. State	9. Zip Code	10. Area Code – Phone Number ( )	
11. Emergency Contact Person – Relationship – Address – Telephone Number						12. Cell Phone Number ( )	

13. MEDICAL HISTORY: Have you ever had or been treated for (positive answers must be explained below):

Yes	No		Yes	No		Yes	No	
☐	☐	Convulsions or Seizures	☐	☐	Cardiac Angiogram or ECHO	☐	☐	Shoulder Injury
☐	☐	Epilepsy	☐	☐	PFO Repair	☐	☐	Elbow Injury
☐	☐	Concussion or Head Injury	☐	☐	High Blood Pressure	☐	☐	Arm/wrist/hand Injury
☐	☐	Disabling Headaches	☐	☐	Asthma or Wheezing	☐	☐	Hip/Leg/Ankle Injury
☐	☐	Loss of Balance/Dizziness	☐	☐	Coughing up Blood	☐	☐	Knee Injury or "Trick Knee"
☐	☐	Severe Motion Sickness	☐	☐	Tuberculosis	☐	☐	Foot Trouble or Injuries
☐	☐	Unconsciousness	☐	☐	Shortness of Breath	☐	☐	Dislocations
☐	☐	Fainting Spells	☐	☐	Chronic Cough	☐	☐	Swollen Joints
☐	☐	Wear Contacts/Glasses	☐	☐	Pneumothorax	☐	☐	Broken Bones or Fractures
☐	☐	Color Vision Defect	☐	☐	Lung Disease or Surgery	☐	☐	Varicose Veins
☐	☐	Eye Disease or Injury	☐	☐	Gallbladder Disease or Stones	☐	☐	Muscle Disease or Weakness
☐	☐	Eye Surgery	☐	☐	Stomach Trouble or Ulcers	☐	☐	Numbness or Paralysis
☐	☐	Hearing Loss	☐	☐	Stomach Bleeding	☐	☐	Sleep Disorders
☐	☐	Ear Disease or Injury	☐	☐	Frequent Indigestion	☐	☐	Diabetes
☐	☐	Ear Surgery	☐	☐	Jaundice	☐	☐	Goiter or Thyroid Disease
☐	☐	Perforated Eardrum	☐	☐	Liver Disease or Hepatitis	☐	☐	Blood Disease
☐	☐	Difficulty Clearing	☐	☐	Rectal Bleeding/Blood in Stools	☐	☐	Anemia: Sickle Cell or Other
☐	☐	Nose Bleed	☐	☐	Hemorrhoids (Piles)	☐	☐	Skin Rash or Disease
☐	☐	Airway Obstruction	☐	☐	Gas Pains	☐	☐	Staph Infections
☐	☐	Hay Fever or Allergies	☐	☐	Crohn's Disease/Ulcerative Colitis	☐	☐	Tumor or Cancer
☐	☐	Chest Pain	☐	☐	Rupture or Hernia	☐	☐	Claustrophobia
☐	☐	Heart Murmur	☐	☐	Kidney Disease	☐	☐	Mental Illness/Depression/Anxiety
☐	☐	Rheumatic Fever	☐	☐	Kidney Stones	☐	☐	Nervous Breakdown
☐	☐	Heart Attack	☐	☐	Protein, Sugar or Blood in Urine	☐	☐	Any Sexually Transmitted Disease
☐	☐	Abnormal Heart Rhythm	☐	☐	Joint Pain/Arthritis	☐	☐	Contagious Disease
☐	☐	Heart Disease	☐	☐	Back Strain or Injury	☐	☐	Prior Military Service
☐	☐	Covid 19 Infection	☐	☐	Spine Problems	☐	☐	Other Illness or Injury or Any Other Medical Condition
			☐	☐	Herniated Disc or Sciatica			
		For Females ONLY	☐	☐	Painful Menses			
☐	☐	Irregular Menses	☐	☐	Pregnancy	Last Menstrual Period _____		

PLEASE EXPLAIN THE DETAILS OF EACH ITEM CHECKED YES _____

14. LIST ALL SURGERIES YEAR

15. LIST ALL HOSPITALIZATIONS YEAR

16. LIST ALL INJURIES YEAR

17. LIST ALL MEDICATIONS, PRESCRIPTION OR OVER THE COUNTER

18. ANSWER THE FOLLOWING QUESTIONS:

Every Item Checked Yes Must Be Fully Explained Below	YES	NO		YES	NO
Do you have any physical defects or any partial disabilities?			Have you ever resigned, been terminated, or changed jobs for medical reasons?		
Have you ever been rejected or rated for insurance, employment, license, or armed forces for health reasons?			Have you ever been dismissed from employment because of excess use of drugs or alcohol?		
Have you ever had illnesses, injuries, or lost time accidents from any work that you have done?			Do you have any allergies or reactions to food, chemicals, drugs, insect stings, or marine life?		
Have you been advised to have a surgical operation or medical treatment that has not been done?			Are you presently under the care of a physician? Give physician's name and address on the next page.		

COMMENTS: _____

19. My Personal Physician is: Name _____
Address _____
City, State _____
Phone Number _____

20. DIVING HISTORY **How long have you been commercial diving?** _____

Surface Air Diving History

Maximum Depth Surface Air _____
Maximum Depth Surface Mixed Gas _____
Longest Bottom Time Air _____
Longest Bottom Time Mixed Gas _____

Saturation Diving History

Heliox Yes ☐ No ☐
Trimix Yes ☐ No ☐
Nitrox Yes ☐ No ☐

Maximum Depth _____
Maximum Duration (Days) _____

21. DIVING EXPERIENCE (Number of years experience):

Name of Diving School

Air ____
Mixed Gases ____
Saturation ____ _____

22. INDICATE THE NUMBER OF DECOMPRESSION INCIDENTS
If None put 0 (Zero) **List any residuals**

Bends, pain only ___ _____
Bends, neurological ___ _____
Chokes ___ _____
Inner ear ___ _____

23. IN DIVING HAVE YOU HAD A HISTORY OF: (Provide details of dates and severity)

	Yes	No	Details		Yes	No	Details
Gas Embolism	☐	☐		Lung Squeeze	☐	☐	
Oxygen Toxicity	☐	☐		Near Drowning	☐	☐	
CO_2 Toxicity	☐	☐		Asphyxiation	☐	☐	
CO Toxicity	☐	☐		Vertigo (Dizziness)	☐	☐	
Ear/Sinus Squeeze	☐	☐		Pneumothorax	☐	☐	
Ear Drum Rupture	☐	☐		Nitrogen Narcosis	☐	☐	
Deafness	☐	☐		Loss of Consciousness	☐	☐	

24. Have you been involved in a diving accident (decompression sickness or others) since your last physical examination? ☐Yes ☐No

25. Date of last physical examination: _____ Name of Physician who performed your last exam _____
For what company or organization were you last examined? Address of Physician _____
_____ City, State _____

26. Have you ever had any of the following? If so, give approximate date:

Yes	No		Give Date	Yes	No		Give Date
☐	☐	Chest X-Ray		☐	☐	Pulmonary Function Studies	
☐	☐	Longbone Series		☐	☐	Audiogram	
☐	☐	Back (Spine) X-Ray		☐	☐	EKG	
☐	☐	MRI		☐	☐	Exercise (Stress) EKG	

27. Physician Remarks: _____

I CERTIFY THAT I HAVE REVIEWED THE FOREGOING INFORMATION SUPPLIED BY ME AND THAT IT IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT LEAVING OUT OR MISREPRESENTING FACTS CALLED FOR ABOVE MAY BE CAUSE FOR REFUSAL OF EMPLOYMENT OR SEPARATION FROM THE COMPANY. I AUTHORIZE ANY OF THE DOCTORS, HOSPITALS, OR CLINICS MENTIONED ABOVE TO FURNISH THE COMPANY MEDICAL EXAMINER WITH A COMPLETE TRANSCRIPT OF MY MEDICAL RECORD FOR PURPOSES OF PROCESSING MY PHYSICAL EXAM.

Date _____ **Signature** _____

Association of Diving Contractors International
PHYSICAL EXAMINATION FORM

Employer	Date	Date of Birth	Age

1. Last Name	First Name	Middle Name	2. Last 4 No. of SSN or PASSPORT No.

3. Height (inches)	4. Weight (pounds)	5. Body Fat (%) (Optional)	6. BMI (Optional)

7. Temperature	8. Blood Pressure	9. Pulse/Rhythm	10. General Appearance/Hygiene	11. Build
	/			

12. Distant Vision:	13. Near Vision: Jaeger	Near Vision Corrected	14. Color Vision (Test Performed and Results)
R. 20/_____ Corr. to 20/_____	R. 20/_____	R. 20/_____	
L. 20/_____ Corr. to 20/_____	L. 20/_____	L. 20/_____	

15. Field of Vision (Degrees) R ° L ° **16. Contact Lenses** ☐ Yes ☐ No

NORMAL	ABNORMAL	Check each item in appropriate column (enter NE for Not Evaluated)	REMARKS
		17. Head, Face, Scalp	
		18. Neck	
		19. Eyes	
		20. Ears – General (internal and external canal)	
		21. Eustachian Tube Function	
		22. Tympanic Membrane	
		23. Nose (Septal Alignment)	
		24. Sinuses	
		25. Mouth and Throat	
		26. Chest	
		27. Lungs	
		28. Heart (Thrust, Size, Rhythm, Sounds)	
		29. Pulses (Equality, etc.)	
		30. Vascular System (Varicosities, etc.)	
		31. Abdomen and Viscera	
		32. Hernia (All Types)	
		33. Endocrine System	
		34. G-U System	
		35. Upper Extremities (Strength, ROM)	
		36. Lower Extremities (Except Feet)	
		37. Feet	
		38. Spine	
		39. Skin, Lymphatics	
		40. Anus and Rectum	
		41. Sphincter Tone	

NEUROLOGICAL EXAMINATION

42. CRANIAL NERVES

		NORMAL	ABNORMAL	NE
I	Olfactory			
II	Optic			
III	Oculomotor			
IV	Trochlear			
V	Trigeminal			
VI	Abducens			

		NORMAL	ABNORMAL	NE
VII	Facial			
VIII	Auditory			
IX	Glossophayrngeal			
X	Vagus			
XI	Spinal Accessory			
XII	Hypoglossal			

43. REFLEXES

DEEP TENDON

	Left					Right				
	0	1	2	3	4	0	1	2	3	4
Triceps										
Biceps										
Patella										
Achilles										

PATHOLOGICAL

	Left		Right	
	Present	Absent	Present	Absent
Babinski				
Hoffman				
Ankle Clonus				

SUPERFICIAL

	Present	Absent	NE
Upper Abdomen			
Lower Abdomen			
Cremasteric			

44. CEREBELLAR FUNCTION

	0	1	2	3	4
Ataxia					
Tremor (intention)					

	Normal	Abnormal
Finger to Nose		
Heel to Shin (Sliding)		
Rapidly Alternating Movements		

45. MUSCLE STRENGTH

	1	2	3	4	5
Right Upper Extremity					
Left Upper Extremity					
Right Lower Extremity					
Left Lower Extremity					

TONE

Normal	Abnormal

46. PROPIOCEPTION

	Left		Right	
	Normal	Abnormal	Normal	Abnormal
Joint Position Sense				
Stereognosis				
Vibratory Sensation				

47. NYSTAGMUS

	Present	Absent
End Point Lateral Gaze		
Pathological		

48. SENSATION

	Normal	Abnormal
Hot		
Cold		

	Normal	Abnormal
Sharp		
Soft		

Two Point Discrimination	
Normal	
Abnormal	

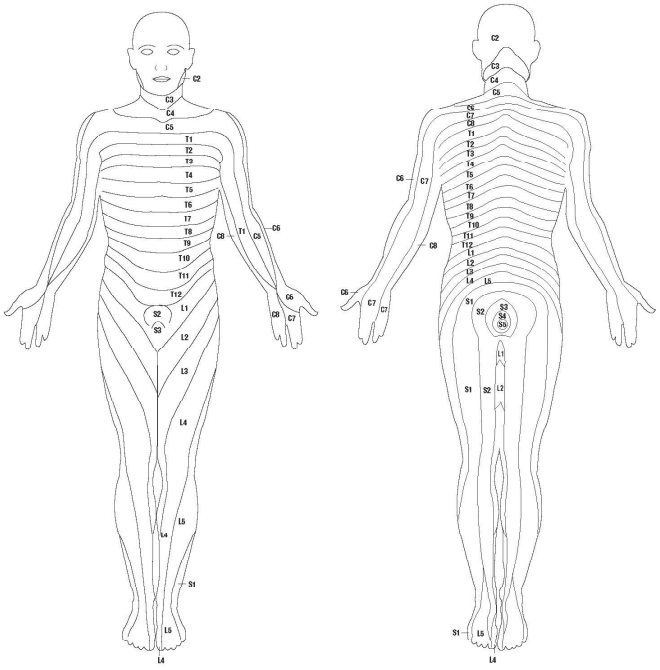
49. ROMBERG

Romberg Absent (normal)	
Romberg Present (abnormal)	
Sharpened Romberg Normal > 20s	
Sharpened Romberg Abnormal < 20s	

VIBRATION

	Left		Right	
	Normal	Abnormal	Normal	Abnormal
Joint Position Sense				
Stereognosis				
Vibratory Sensation				

50. MISCELLANEOUS REMARKS



LABORATORY FINDINGS

51. Urinalysis

Color _____
Appearance _____
Sp. Gravity _____
Ph _____
Microscopic Normal ☐ Abnormal ☐ (See report)

	0	1+	2+	3+	4+
Sugar					
Blood					
Ketones					
Bilirubin					
Protein					

52. Blood Tests

CBC
Normal ☐
Abnormal ☐

Sickle Cell ☐ Pos ☐ Neg

Attach Reports
RPR ☐ Pos ☐ Neg

53. Cardiac Risk Score

No. of Points _____

10 year risk

54. Pulmonary Function

FVC _____
FEV1 _____
FEV1/FVC _____

55. X-ray/MRI

	Normal	Abnormal	(Describe)
Chest	☐	☐	
Lumbar Spine	☐	☐	
Long Bones	☐	☐	
MRI	☐	☐	

56. Electrocardiogram

Static _____
Exercise Stress _____

57. Audiogram

Hz	500	1000	2000	3000	4000	6000	8000
Left							
Right							

58. Comprehensive Metabolic Panel Attach Report

Normal ☐ Abnormal ☐

Lipid Panel (if done)

Normal ☐ Abnormal ☐

Comments: _____

59. Drug Screen

☐ Not collected
☐ Collected, results sent to employer

Work Status:

☐ Fit for diving
☐ Cleared for supervisor
☐ Cleared for topside work only
☐ Cleared with restrictions: _____
☐ Further evaluation needed: _____
☐ Unfit for diving : _____
☐ Unfit

Comments: _____

Examinee Name _____
Physician Signature _____
Physician Name _____
Address _____
Phone Number _____
Date of Examination _____

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2.4.4 NEUROPSYCHIATRIC

Any past or present evidence of psychiatric illness may be disqualifying: any psychiatric illness deemed significant by the physician should be evaluated by a specialist. Personality disorders, bipolar disorders, psychosis, instability and anti-social traits shall be disqualifying, however temporary situational depression may be approved if stable on low-dose antidepressants that do not affect seizure thresholds or have any side effects of CNS depression. Speech impediment related to stress/anxiety or other psychiatric illness may be disqualifying.

Particular attention should be paid to any past or present evidence of alcohol or drug abuse, and may be an indication for referral to specialist. Any current alcohol or drug abuse is disqualifying. Anabolic steroids or any other illicit substances are disqualifying. Any abnormalities should be noted in the physical examination form.

2.4.5 MEDICATION

The following medications are disqualifying:

1. Amphetamines (including lisdexamfetamine dimesylate) and designer drugs (substituted methylenediosyphenethylamines including MDMA, MMDA, FLEA, EDMA, EFLEA, MDOH, EBDB, MDEA, 5-methyl-MDA and others)
2. Marijuana and synthetic forms of marijuana
3. Phencylidine (PCP)
4. Cocaine
5. Opioids, naturally occurring and synthetics including tramadol and buprenorphine
6. Phosphodiesterase inhibitors such as erectile dysfunction medications within 48 hours of diving
7. Immunosuppressants not recommended in saturation diving
8. Antidepressants which cause CNS depression or may affect seizure threshold (eg. Venlafaxine, bupropion)
9. All antipsychotic medications
10. Muscle relaxants
11. All forms of insulin
12. Oral hypoglycemic medication
13. Anticoagulants or platelet inhibitors (except low-dose aspirin)
14. Benzodiazepines
15. Barbiturates
16. Anxiolytic and/or hypnotic medications
17. Nictotine patches – must be removed while diving
18. Varenicline
19. Beta blockers
20. Diuretics

2.4.6 DISCLAIMER

Because of the lack of medical literature concerning commercial diving, these guidelines were developed as a consensus among diving physicians and are intended for only that purpose. The diving medical examiner may use discretion in deviating from these guidelines on an individual basis given the circumstances.

2.4.7 BMI TABLES

BMI Table										
Height (inches)	BMI									
	19	20	21	22	23	24	25	26	27	28
	Body Weight (pounds)									
58	91	96	100	105	110	115	119	124	129	134
59	94	99	104	109	114	119	124	128	133	138
60	97	102	107	112	118	123	128	133	138	143
61	100	106	111	116	122	127	132	137	143	148
62	104	109	115	120	126	131	136	142	147	153
63	107	113	118	124	130	135	141	146	152	158
64	110	116	122	128	134	140	145	151	157	163
65	114	120	126	132	138	144	150	156	162	168
66	118	124	130	136	142	148	155	161	167	173
67	121	127	134	140	146	153	159	166	172	178
68	125	131	138	144	151	158	164	171	177	184
69	128	135	142	149	155	162	169	176	182	189
70	132	139	146	153	160	167	174	181	188	195
71	136	143	150	157	165	172	179	186	193	200
72	140	147	154	162	169	177	184	191	199	206
73	144	151	159	166	174	182	189	197	204	212
74	148	155	163	171	179	186	194	202	210	218
75	152	160	168	176	184	192	200	208	216	224
76	156	164	172	180	189	197	205	213	221	230

BMI Table										
Height (Centimeters)	BMI									
	19	20	21	22	23	24	25	26	27	28
	Body Weight (kilograms)									
147.3	41.3	43.5	45.4	47.6	49.9	52.2	54.0	56.2	58.5	60.8
149.9	42.6	44.9	47.2	49.4	51.7	54.0	56.2	58.1	60.3	62.6
152.4	44.0	46.3	48.5	50.8	53.5	55.8	58.1	60.3	62.6	64.9
154.9	45.4	48.1	50.3	52.6	55.3	57.6	59.9	62.1	64.9	67.1
157.5	47.2	49.4	52.2	54.4	57.2	59.4	61.7	64.4	66.7	69.4
160.0	48.5	51.3	53.5	56.2	59.0	61.2	64.0	66.2	68.9	71.7
162.6	49.9	52.6	55.3	58.1	60.8	63.5	65.8	68.5	71.2	73.9
165.1	51.7	54.4	57.2	59.9	62.6	65.3	68.0	70.8	73.5	76.2
167.6	53.5	56.2	59.0	61.7	64.4	67.1	70.3	73.0	75.7	78.5
170.2	54.9	57.6	60.8	63.5	66.2	69.4	72.1	75.3	78.0	80.7
172.7	56.7	59.4	62.6	65.3	68.5	71.7	74.4	77.6	80.3	83.5
175.3	58.1	61.2	64.4	67.6	70.3	73.5	76.7	79.8	82.6	85.7
177.8	59.9	63.0	66.2	69.4	72.6	75.7	78.9	82.1	85.3	88.5
180.3	61.7	64.9	68.0	71.2	74.8	78.0	81.2	84.4	87.5	90.7
182.9	63.5	66.7	69.9	73.5	76.7	80.3	83.5	86.6	90.3	93.4
185.4	65.3	68.5	72.1	75.3	78.9	82.6	85.7	89.4	92.5	96.2
188.0	67.1	70.3	73.9	77.6	81.2	84.4	88.0	91.6	95.3	98.9
190.5	68.9	72.6	76.2	79.8	83.5	87.1	90.7	94.3	98.0	101.6
193.0	70.8	74.4	78.0	81.6	85.7	89.4	93.0	96.6	100.2	104.3

2.4.8 BODY FAT TABLE AND BODY FAT PERCENTAGES COMPARISON TABLE

Body Fat Percentages Comparison Table		
Fat Level	**Men (%)**	**Women (%)**
Very Low	7-10	14-17
Low	10-13	17-20
Average	13-17	20-27
High	17-25	27-31
Very High	above 25	above 31

2.4.9 MAXIMUM ALLOWABLE WEIGHT CHART

Maximum Allowable Weight Chart		
Males Weight in Pounds	**Height (inches)**	**Females Weight in Pounds**
170	60	170
176	61	174
182	62	179
188	63	182
194	64	187
200	65	192
206	66	196
212	67	200
218	68	204
225	69	209
230	70	212
235	71	217
241	72	222
247	73	225
253	74	230
259	75	234
265	76	239
271	77	243
277	78	248
283	79	252
289	80	255

2.4.10 RETURN TO DUTY AFTER DIVING RELATED INCIDENTS

ADCI Recommendations on Return to Diving	
Diving Related Incident	**Time to return to diving**
Simple pain only with complete resolution after single treatment table	24 to 72 hours
Pain only needing more than one treatment table for complete resolution	7 days
Altered sensation in limbs resolvable by one treatment table	7 days
Motor or other neurological deficit resolvable by one treatment table	28 days
Neurological injury needing several treatment tables to resolve	4 to 6 months
Pulmonary barotrauma resolved	3 months
Pneumothorax resolved (other than spontaneous)	3 months
Vestibular decompression sickness with formal vestibular testing	4 to 6 months
Round window rupture	6 months after repair
Central nervous system oxygen toxicity seizure (after complete evaluation)	7 days
Perforated tympanic membrane	6 weeks after healed
Non-Perforated ENT barotrauma	Determined by examiner

All cases except simple pain only decompression sickness resolved by a single treatment table must be cleared by medical examination from a qualified diving medical examiner before return to diving.

Persistent neurological deficits following diving related incidents are generally disqualifying.

2.4.11 FRAMINGHAM CARDIAC RISK CALCULATOR

The ADC recognizes that cardiac events are second only to drowning as a cause of death while diving. Rather than using an age based criteria for further cardiac screening, the Physicians Diving Advisory Committee is now recommending a risk based approach using the Framingham data. The cardiac risk calculators for men and women are provided below. If the cardiac risk is calculated to be 10% or greater then further testing such as an exercise stress test is recommended.

Cardiac Risk Calculator - MEN

Total Cholesterol	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
<160	0	0	0	0	0
160-199	4	3	2	1	0
200-239	7	5	3	1	0
240-279	9	6	4	2	1
280+	11	8	5	3	1

Age	Points
20-34	-9
35-39	-4
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	11
70-74	12
75-79	13

HDL	Points
60+	-1
50-59	0
40-49	1
<40	2

Systolic BP	If Untreated	If Treated
<120	0	0
120-129	0	1
130-139	1	2
140-159	1	2
160+	2	3

Age	Smoker	Non-smoker
20-39	8	0
40-49	5	0
50-59	3	0
60-69	1	0
70-79	1	0

Enter No of Points	
Age	
Total Chol	
HDL Chol	
Sys B/P	
Smoking	
Total	

Determine Risk From Chart →

Point Total	10-Year Risk
<0	<1%
0	1%
1	1%
2	1%
3	1%
4	1%
5	2%
6	2%
7	3%
8	4%
9	5%
10	6%
11	8%
12	10%
13	12%
14	16%
15	20%
16	25%
17 or more	≥30%

Determine Risk From Chart

Cardiac Risk Calculator - WOMEN

Total Cholesterol	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
<160	0	0	0	0	0
160-199	4	3	2	1	1
200-239	8	6	4	2	1
240-279	11	8	5	3	2
280+	13	10	7	4	2

Age	Points
20-34	-7
35-39	-3
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	12
70-74	14
75-79	16

HDL	Points
60+	-1
50-59	0
40-49	1
<40	2

Systolic BP	If Untreated	If Treated
<120	0	0
120-129	1	3
130-139	2	4
140-159	3	5
160+	4	6

Age	Smoker	Non-smoker
20-39	9	0
40-49	7	0
50-59	4	0
60-69	2	0
70-79	1	0

Enter No of Points	
Age	
Total Chol	
HDL Chol	
Sys B/P	
Smoking	
Total	

Point Total	10-Year Risk
<9	<1%
9	1%
10	1%
11	1%
12	1%
13	2%
14	2%
15	3%
16	4%
17	5%
18	6%
19	8%
20	11%
21	14%
22	17%
23	22%
24	27%
25 or more	≥30%

Determine Risk
From Chart