

AAUS MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT

Applicant Name _____ Evaluation Date _____

Organizational Member University of Rhode Island

Diving Safety Officer Anya Hanson Phone Number 401-874-6205 office

To The Examining or Supervising Physician: Scientific divers require periodic medical examinations to assess their fitness to engage in underwater diving. Their answers on the diving medical history form may indicate potential health or safety risks. Your evaluation is requested on this scuba diving fitness medical evaluation report. Please proceed in accordance with the AAUS medical standards (Sec. 5.00). If you have questions about diving medicine, please consult with the Undersea Hyperbaric Medical Society or Divers Alert Network. You can also contact the undersigned organizational Diving Safety Officer if you have any questions about the diving standards. Thank you for your assistance.

NOTE: Although portions of this exam may be conducted by other medical professionals (e.g., PA or NP), the final decision signature must come from a medical doctor (MD) or osteopath (DO).

THE FOLLOWING TESTS ARE REQUIRED FOR ALL EXAMS AND CANDIDATES:

- Medical history form
- Complete physical exam, with emphasis on cardiac, pulmonary, neurological and otological components
- Resting electrocardiogram (on initial exam only for candidates ≤ 40 years of age)
- Any further tests deemed necessary by the physician

ADDITIONAL TESTS FOR CANDIDATES >40 YEARS OF AGE:

- Assessment of coronary artery disease using the American College of Cardiology ASCVD risk estimator plus tool (<https://tools.acc.org/ascvd-risk-estimator-plus/#!/calculate/estimate>)
 - Evaluation to include age, blood pressure, smoking status, history of diabetes, resting electrocardiogram, and venous blood draw (for lipid panel and HbA1c)
 - Note to physician: If the 10-year ASCVD risk estimate is intermediate or high ($>7.4\%$), further cardiac evaluation could include cardiology consultation and indicated testing
- Any further tests deemed necessary by the physician

FOR THE EXAMINING PHYSICIAN

Scuba and other modes of compressed-gas diving can be strenuous and hazardous. Diving is an activity that puts unusual stress on the individual in several ways. Immersion produces physiological strain and diving may add to this with heavy exertion (planned or unplanned). Divers should be in good health, with no conditions that may be made worse by diving. Divers must be able to equalize pressure in any air spaces during compression and decompression (e.g., lungs, middle ears, sinuses, mask). Any condition that risks the loss of consciousness should disqualify the applicant. Cardiovascular disease also represents high risk to divers. The following conditions require additional investigation and **may** restrict candidates from diving:

- Episodic loss of consciousness
- History of seizure (except single febrile seizure in childhood)
- History of stroke or a fixed neurological deficit
- Recurring neurologic disorders, including transient ischemic attacks
- History of intracranial aneurysm, other vascular malformation, or intracranial hemorrhage
- Vertigo (including Meniere's disease), lightheadedness, or dizziness
- Head injury with sequelae

- Abnormalities of the tympanic membrane, such as perforation, presence of a monomeric membrane, or inability to autoinflate the middle ears
- Stapedectomy or middle ear reconstructive surgery
- Recent ocular surgery

- High risk for coronary artery disease (cardiovascular disease to include chest pain [angina], and claudication [especially with activity])

- Atrial septal defects
- Significant valvular heart disease, including sclerotic valve disease (note: isolated mitral valve prolapse may not be disqualifying on its own)
- Significant cardiac rhythm or conduction abnormalities
- Inadequate exercise tolerance
- Severe hypertension

- History of spontaneous or traumatic pneumothorax
- Asthma, wheezing, or bronchospasm
- Chronic pulmonary disease, including radiographic evidence of pulmonary bullae or cysts

- Psychiatric disorders including claustrophobia, suicidal ideation, psychosis, anxiety states, untreated depression
- Substance abuse, including alcohol

- History of neurological decompression illness with residual deficit

- Hematologic disorders including coagulopathies
- Diabetes
- Pregnancy
- Certain medications, including psychotropics, anticoagulation and those that lower seizure threshold
- Implanted devices (e.g., cardiac pacemaker)

PHYSICIAN STATEMENT

I have evaluated the patient considering the guidance above and the medical information they have provided. I have discussed with them any medical condition(s) that could increase their risk in diving. The patient understands the nature of the hazards and the risks involved in diving with these conditions.

_____ I find no medical conditions that are disqualifying for participation in underwater diving.

If health status remains unchanged, the candidate **IS** medically qualified to dive for:

_____ 5 years (age <40 years)

_____ 3 years (age 40-59 years)

_____ 2 years (age >59 years)

_____ Interval recommended if less than above (specify) _____

_____ Applicant **IS NOT** medically qualified to dive: _____ Permanently _____ Temporarily

MD/DO signature _____ Date _____

MD/DO name (print) _____

Address _____

Telephone _____ E-mail _____

**UNIVERSITY OF RHODE ISLAND &
AAUS MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT**

PHYSICIAN'S STATEMENT (CONTINUED)

Name of Applicant (Print or Type)

Your patient (the diving applicant listed above) is requesting approval to participate in research diving at the University of Rhode Island. The activity of scientific research diving is much more rigorous than traditional recreational scuba diving. In addition to typical dive equipment (weighing roughly 50-75 lbs), research divers routinely carry and use additional heavy research equipment (e.g. coring materials, biological survey materials, underwater cameras). The participant may be asked to perform multiple dives a day while on SCUBA, repeatedly lifting, carrying and maneuvering 50+ lbs of dive gear and equipment, while operating in potentially adverse conditions (e.g. wet and crowded boat decks, or during prolonged exposure to sun/wind/waves). Research divers also often work underwater in variable conditions (e.g. strong currents, poor visibility, or cold temperatures). Please note that by signing this form, you are validating that in your professional medical opinion, the diving applicant is in proper physical condition, including appropriate abilities and endurance to handle research scuba diving under strenuous and sometimes adverse underwater environmental conditions.

Signature _____ MD or DO _____ Date _____

Name (Print or Type)

Address

Telephone Number _____ E-Mail Address _____

REFERENCES

- Arnett DK, Blumenthal RS, Albert MA, Buroker AB, Goldberger ZD, Hahn EJ, et al. 2019 ACC/AHA guideline on the primary prevention of cardiovascular disease: executive summary: a report of the American College of Cardiology/American Heart Association task force on clinical practice guidelines. *J Am Coll Cardiol.* 2019;74(10):1376-414. doi: 10.1016/j.jacc.2019.03.009.
- Banham N, Smart D, Wilmshurst P, Mitchell SJ, Turner MS, Bryson P. Joint position statement on immersion pulmonary oedema and diving from the South Pacific Underwater Medicine Society (SPUMS) and the United Kingdom Diving Medical Committee (UKDMC) 2024. *Diving Hyperb Med.* 2024;54(4):344–9. doi:10.28920/dhm54.4.344-349.
- Bove AA. The cardiovascular system and diving risk. *Undersea Hyperb Med.* 2011;38(4):261–9. PMID: 21877555.
- Douglas PS. Cardiovascular screening in asymptomatic adults: lessons for the diving world. *Undersea Hyperb Med.* 2011;38(4):279–87. PMID: 21877557.
- Drezner JA, Ackerman MJ, Anderson J, et al. Electrocardiographic interpretation in athletes: the 'Seattle Criteria.' *Br J Sports Med.* 2013;47(3):122-4. doi:10.1136/bjsports-2012-092067.
- European Diving Technology Committee. Medical assessment for work under pressure: fitness to dive standards. 2nd ed. Biel-Bienne (Switzerland): Hyperbaric Editions; 2024. Jepsen N, Rienks R, Smart D, Bennett MH, Mitchell SJ, Turner M. South Pacific Underwater Medicine Society guidelines for cardiovascular risk assessment of divers. *Diving Hyperb Med.* 2020;50(3):273–7. doi:10.28920/dhm50.3.273-277.
- Mitchell SJ, Bove AA. Medical screening of recreational divers for cardiovascular disease: Consensus discussion at the Divers Alert Network Fatality Workshop. *Undersea Hyperb Med.* 2011;38(4):289–96. PMID: 21877558.
- Recreational diving medical screening system: diving medical guidance to physicians [Internet]. North Palm Beach (FL): UHMS; [cited 2025 Aug 14]. Available from: <https://www.uhms.org/en-us/resources/featured-resources/recreational-diving-medical-screening-system.html>
- Smart D, Wilmshurst P, Banham N, Turner M, Mitchell SJ. Joint position statement on atrial shunts (persistent [patent] foramen ovale and atrial septal defects) and diving: 2025 update. South Pacific Underwater Medicine Society (SPUMS) and the United Kingdom Diving Medical Committee (UKDMC). *Diving Hyperb Med.* 2025;55(1):51–5. doi:10.28920/dhm55.1.51-55.
- Thompson PD. The cardiovascular risks of diving. *Undersea Hyperb Med.* 2011;38(4):271–7. PMID: 21877556.

**AAUS MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT
APPLICANT'S RELEASE OF MEDICAL INFORMATION FORM**

Name of Applicant _____

I authorize the release of this information and all medical information subsequently acquired in association with my diving to the Diving Control Board or their designee of (organization/institution):

Signature of Applicant _____

Date _____

DIVING MEDICAL HISTORY FORM

Applicant Name _____

Date of Birth _____

Age _____ Weight _____ Height _____

Sponsor _____
(Department/Project/Program/School, etc.)

Date _____

TO THE APPLICANT:

Underwater diving places considerable physical and mental demands on the diver. Certain medical and physical requirements must be met before participating in diving activity. Your candid and complete answers are extremely important in determining your fitness to dive. Many of the below concerns may not result in your disqualification but are important for your long-term health and diving safety.

Should your answers indicate a condition which might make diving hazardous, you will be asked to review the matter with a physician, preferably one trained in diving medicine. Medical authorization is required for participation when concerns exist. If the physician evaluation determines that diving would involve undue risk for you, please remember that the concern is for your well-being and safety.

| Yes | No | Please indicate whether or not the following apply to you (either current or past) |
|-----|----|--|
| | | NEUROLOGIC |
| | | Convulsions, seizures, or epilepsy |
| | | Concussion, traumatic brain injury, head injury with loss of consciousness |
| | | Severe headaches, including migraines with any neurologic symptoms |
| | | Balance, dizziness, lightheadedness, or vertigo problems |
| | | Fainting or other loss of consciousness |
| | | Stroke or other neurologic disease |
| | | EAR, NOSE, THROAT, AND SINUSES |
| | | Eye disease, injury, or recent surgery (within 6 months) |
| | | Hearing loss |
| | | Ear disease, injury, or surgery |
| | | Perforated eardrum (tympanic membrane) |
| | | Obstructive sleep apnea |
| | | Dental or oral issues affecting ability to hold a mouthpiece in place |
| | | Allergies |
| | | CARDIAC/CARDIOVASCULAR |
| | | Chest pain, heart disease, or heart attack |
| | | Heart failure, pulmonary edema, heart murmur, or valvular heart disease |
| | | Atrial septal defect or other congenital heart disease |
| | | Abnormal heart rhythm (such as but not limited to long QT syndrome, Brugada, Wolff-Parkinson-White (WPW) syndrome, atrial fibrillation, blocks, supraventricular tachycardia, ventricular tachycardia, postural orthostatic tachycardia syndrome (POTS)) |
| | | Cardiac angiogram, echocardiogram, or other cardiac procedures |
| | | High cholesterol (hyperlipidemia) |
| | | High blood pressure (hypertension) |
| | | Family history of early heart disease or sudden death (i.e., at <50 years of age) |
| | | PULMONARY |
| | | Asthma, reactive airway disease, chronic obstructive pulmonary disease/emphysema, or wheezing |
| | | Tuberculosis, chronic lung conditions, or respiratory infection in last 2 months |
| | | Shortness of breath or fatigue with mild exertion or exercise |
| | | Pneumothorax (or collapsed lung) |
| | | Lung disease or surgery (including history of bullae) |
| | | Pulmonary embolism or deep vein thrombosis |
| | | Severe respiratory disease or infection causing hospitalization or with persistent symptoms |
| | | GASTROINTESTINAL, LIVER, AND KIDNEY |
| | | Gastrointestinal bleeding, ulcers, liver disease, or hepatitis |
| | | Crohn's disease or ulcerative colitis |
| | | Hernia |
| | | Kidney problems (including but not limited to impaired kidney function, kidney stones, blood in the urine) |
| | | MUSCULOSKELETAL |
| | | Back/Neck pain or injury, including herniated disc, spinal stenosis, or sciatica |

| | | |
|--|--|--|
| | | Joint injury causing restrictions in range of motion or activity |
| | | History of osteonecrosis |
| | | ENDOCRINE, HEMATOLOGIC, AND AUTOIMMUNE |
| | | Diabetes |
| | | Thyroid disease |
| | | Autoimmune disease |
| | | Anemia (sickle cell or other) |
| | | Bleeding or clotting disorder |
| | | History of or active cancer |
| | | PSYCHIATRIC AND SUBSTANCE USE |
| | | Mental illness, depression, anxiety, or panic |
| | | Tobacco use (including vaping) |
| | | Alcohol or substance abuse |
| | | DIVING ILLNESSES |
| | | Decompression sickness or arterial gas embolism |
| | | Immersion pulmonary edema (including shortness of breath while diving/swimming, coughing up pink or frothy fluid) |
| | | Any other problems related to diving |
| | | MISCELLANEOUS |
| | | Current pregnancy |
| | | Implantable device (such as pacemaker, medication pump, nerve stimulator, automated implantable cardioverter defibrillator [AICD]) |

Additional comments on any "yes" answers above:

Any changes in your medical condition or exercise capacity since your last physical examination:

List of all surgeries or hospitalizations:

Summarize other medical history not addressed in the above list:

List of all current medications (include dosages for both prescription and over-the-counter) and supplements:

List of all allergies:

I certify that the information above represents an accurate and complete description of my medical history.

I am aware that a meaningful drop in exercise capacity or a new or worsening health condition requires a dive examination by a physician before participation in any diving activity.

Applicant signature _____ Date _____