UNIVERSITY OF MIAMI/RSMAS
SCIENTIFIC DIVING PROGRAM

DIVING MEDICAL EXAM OVERVIEW FOR THE EXAMINING PHYSICIAN

TO THE EXAMINING PHYSICIAN:
This person, _____________________, requires a medical examination to assess their fitness for authorization as a Scientific SCUBA Diver for the University of Miami. Their answers on the Diving Medical History Form (attached) may indicate potential health or safety risks as noted. Your evaluation is requested on the attached SCUBA Diving Fitness Medical Evaluation Report. If you have questions about diving medicine, you may wish to consult one of the references on the attached list or contact the University of Miami/RSMAS Diving Safety Officer for a list of physicians with expertise in diving medicine. Please contact the University of Miami/RSMAS Diving Safety Officer if you have any questions or concerns about diving medicine or the University of Miami diving standards.

Rick Riera-Gomez, University of Miami/RSMAS
Diving Safety Officer
Office Phone - 305.421.4107   Email – rgomez@rsmas.miami.edu

SCUBA and other modes of compressed-gas diving can be strenuous and hazardous. A special risk is present if the middle ear, sinuses, or lung segments do not readily equalize air pressure changes. The most common cause of distress is eustachian insufficiency. Most fatalities involve deficiencies in prudence, judgment, emotional stability, or physical fitness. Please consult the following list of conditions that usually restrict candidates from diving.

CONDITIONS WHICH MAY DISQUALIFY CANDIDATES FROM DIVING
(Adapted from Bove, 1998: bracketed numbers are pages in Bove)
1. Abnormalities of the tympanic membrane, such as perforation, presence of a monomeric membrane, or inability to autoinflate the middle ears. [5, 7, 8, 9]
2. Vertigo including Meniere’s Disease. [13]
4. Recent ocular surgery. [15, 18, 19]
5. Psychiatric disorders including claustrophobia, suicidal ideation, psychosis, anxiety states, untreated depression. [20 - 23]
6. Substance abuse, including alcohol. [24 - 25]
7. Episodic loss of consciousness. [1, 26, 27]
8. History of seizure. [27, 28]
9. History of stroke or a fixed neurological deficit. [29, 30]
10. Recurring neurologic disorders, including transient ischemic attacks. [29, 30]
11. History of intracranial aneurysm, other vascular malformation or intracranial hemorrhage. [31]
12. History of neurological decompression illness with residual deficit. [29, 30]
13. Head injury with sequelae. [26, 27]
14. Hematologic disorders including coagulopathies. [41, 42]
15. Evidence of coronary artery disease or high risk for coronary artery disease'. [33 - 35]
16. Atrial septal defects. [39]
17. Significant valvular heart disease - isolated mitral valve prolapse is not disqualifying. [38]
18. Significant cardiac rhythm or conduction abnormalities. [36 - 37]
19. Implanted cardiac pacemakers and cardiac defibrillators (ICD). [39, 40]
20. Inadequate exercise tolerance. [34]
21. Severe hypertension. [35]
22. History of spontaneous or traumatic pneumothorax. [45]
23. Asthma’. [42 - 44]
24. Chronic pulmonary disease, including radiographic evidence of pulmonary blebs, bullae, or cysts. [45,46]
25. Diabetes mellitus. [46 - 47]
26. Pregnancy. [56]


2 “Are Asthmatics Fit to Dive?” Elliott DH, ed. 1996 Undersea and Hyperbaric Medical Society, Kensington, MD.

SELECTED REFERENCES IN DIVING MEDICINE
Most of these are available from Best Publishing Company, P.O. Box 30100, Flagstaff, AZ 86003-0100, the Divers Alert Network (DAN) or the Undersea and Hyperbaric Medical Association (UHMS), Bethesda, MD.

• Alert Diver Magazine; Articles on diving medicine http://www.diversalertnetwork.org/medical/articles/index.asp
• “Are Asthmatics Fit to Dive?” Elliott DH, ed. 1996 Undersea and Hyperbaric Medical Society, Kensington, MD.
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DIVING MEDICAL HISTORY FORM
(To Be Completed By Diver/Candidate)

Name __________________________________________ Sex ____ Age ___ Wt.___ Ht. ___

Sponsor ______________________________________ Date ___/___/___
(Dept./Project/School, Class, etc.)            (Mo/Day/Yr)

TO THE APPLICANT:
SCUBA diving makes considerable demands on you, both physically and mentally. Diving with certain medical conditions may be asking for trouble not only for yourself, but also to anyone coming to your aid if you get into difficulty in the water. Therefore, it is prudent to meet certain medical and physical requirements before beginning a diving or training program.

Your answers to the questions are as important, in determining your fitness as your physical examination. Obviously, you should give accurate information or the medical screening procedure becomes useless.

This form shall be kept confidential. If you believe any question amounts to invasion of your privacy, you may elect to omit an answer, provided that you shall subsequently discuss that matter with your own physician and he/she must then indicate, in writing, that you have done so and that no health hazard exists.

Should your answers indicate a condition, which might make diving hazardous, you will be asked to review the matter with your physician. In such instances, his/her written authorization will be required in order for further consideration to be given to your application. If your physician concludes that diving would involve undue risk for you, remember that he/she is concerned only with your well-being and safety.

Please respect the advice and the intent of this medical history form.

Have you ever had or do you presently have any of the following?
Please explain any “yes” responses on the back of this form  Yes or No

1. Trouble with your ears, including ruptured eardrum, difficulty clearing your ears, or surgery.
2. Trouble with dizziness.
3. Eye surgery.
4. Depression, anxiety, claustrophobia, etc.
5. Substance abuse, including alcohol.
7. Epilepsy or other seizures, convulsions or fits.
8. Stroke or a fixed neurological deficit.
9. Recurring neurologic disorders, including transient ischemic attacks.
10. Aneurysms or bleeding in the brain.
11. Decompression sickness or embolism.
12. Head injury
13. Disorders of the blood, or easy bleeding.
14. Heart disease, diabetes, high cholesterol
15. Anatomical heart abnormalities including patent foramen ovale,
valve problems, etc.
16. Heart rhythm problems.       
17. Need for a pacemaker  
18. Difficulty with exercise.       
19. High blood pressure  
20. Collapsed lung  
22. Other lung disease.   
23. Diabetes mellitus.  
24. Pregnancy  
25. Surgery. If yes explain below  
26. Hospitalizations. If yes explain below  
27. Do you take any medications? If yes list below  
28. Do you have any allergies to medications, foods, environmental?  
   If yes explain below  
29. Do you smoke?  
30. Do you drink alcoholic beverages?  
31. Is there a family history of high cholesterol?  
32. Is there a family history of heart disease or stroke?   
33. Is there a family history of diabetes?  
34. Is there a family history of asthma?  

Please explain any “yes” answers to the above questions.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

VERIFICATION OF INFORMATION AND APPLICANT'S RELEASE OF MEDICAL INFORMATION
I certify that the above answers and information represent an accurate and complete description of my medical history.

I authorize the release of this information and all medical information subsequently acquired in association with my diving at the University of Miami/RSMAS to the University of Miami/RSMAS Diving Safety Officer and Diving Control Board or their designee.

_________________________  __________________________
Signature of Diver/Candidate       Date
UNIVERSITY OF MIAMI/RSMAS
SCIENTIFIC DIVING PROGRAM

MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT

Name of Diver/Candidate (Print or Type) Date of Exam - (Mo/Day/Year)

To The PHYSICIAN:
This person is an applicant for training or is presently certified to engage in diving with self contained underwater breathing apparatus (SCUBA). This is an activity that puts unusual stress on the individual in several ways. Your opinion on the applicant's medical fitness is requested. SCUBA diving requires heavy exertion. The diver must be free of cardiovascular and respiratory disease. An absolute requirement is the ability of the lungs, middle ear and sinuses to equalize pressure. Any condition that risks the loss of consciousness should disqualify the applicant.

For any questions regarding this physical exam please contact the University of Miami/RSMAS Diving Safety Office at 305.421.4107 or email at rgomez@rsmas.miami.edu.

MEDICAL HISTORY reviewed by physician _____________ (PLEASE INITIAL)

TESTS: Please initial which exam was performed and that the following tests were completed. All tests must be performed for this exam to be complete.

[ ]INITIAL EXAM

Complete physical exam with emphasis on neurological and otological __________
Chest X-Ray _______ Spirometry _______
Hematocrit or Hemoglobin ___________ Urinalysis _______

Any further test deemed necessary by physician (PLEASE LIST TESTS) __________

Additional Tests for Initial Exam for divers over 40

Resting EKG ________ Assessment of coronary artery disease, ________
(age, lipid profile, blood pressure, diabetic screening, smoker)

[ ]RE-EXAMINATION (EVERY 5 YRS UNDER 40, EVERY 3 YEARS 40 – 60, EVERY 2 YEARS OVER 60)

Complete physical exam with emphasis on neurological and otological __________
Urinalysis _______ Spirometry _______ Hematocrit or Hemoglobin ___
Chest X-Ray (INITIAL EXAM AND FIRST EXAM OVER 40) __________

Additional Tests for divers over 40

Resting EKG ________ Assessment of coronary artery disease, ________
(age, lipid profile, blood pressure, diabetic screening, smoker)
Any further test deemed necessary by physician (PLEASE LIST TESTS) ____

PHYSICIANS RECOMMENDATION:
[ ] APPROVAL. I find no medical condition(s) that I consider incompatible with diving.

[ ] RESTRICTED ACTIVITY APPROVAL. The applicant may dive in certain circumstances as described in REMARKS.

[ ] REJECT. This applicant has medical condition(s), which, in my opinion, clearly would constitute unacceptable hazards to health and safety in diving.


REMARKS:
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
I have discussed the patient's medical condition(s) which would not seriously interfere with diving but which may seriously compromise subsequent health. The patient understands the nature of the hazards and the risks involved in diving with these defects.

__________________________________________  __________________________
Signature                                      Date

__________________________________________
Name (Print or Type)

__________________________________________
Address

__________________________________________
Telephone Number                                     E-mail

My familiarity with applicant is:
[ ] With this exam only  [ ] Regular Physician for _____ years [ ] Other ___________________________

My familiarity with diving medicine is:
_____________________________________________________________________________________

Name (Print or Type)