

April 2009

Gulf of Mexico Foundation
PMB51 5403 Everhart Rd
Corpus Christi, TX 78411-4895
361-882-3939

To: Examining Physician

From: Quenton Dokken, Ph.D.

Subject: Physical Examination for SCUBA diving

This examination is required of all persons wishing to SCUBA (Self Contained Underwater Breathing Apparatus) dive as a participant in the 2009 *Down Under, Out Yonder Education Workshop and Field Expedition*. For the applicant to be accepted for diving activities, the following form must be completed by a licensed medical physician familiar with the effects of SCUBA diving on the body. **All tests listed on the examination form must be conducted** and the results noted as Normal or Abnormal. Space is provided for any additional comments. In addition, all tests except the chest x-ray must have been conducted since July 16, 2008. Results prior to that date will not be accepted. Chest x-rays must have been taken within the last 4 years (since July 16, 2005).

Please return all completed medical forms to the applicant, who is responsible for submitting them to:

Ms. Bobbi Reed
Gulf of Mexico Foundation
PMB 51, 5403 Everhart Road
Corpus Christi, TX 78411

Please see the attached "Note to Examining Physician" for a discussion of the Diving Medical Examination and the subsequent two page physical: "Diving Medical Questionnaire & Health History" and "Physician's Report of Diving Medical Examination".

Sincerely,

Quenton Dokken, Ph.D.
Executive Director
Gulf of Mexico Foundation

DIVING MEDICAL EXAMINATION

NOTE TO EXAMINING PHYSICIAN:

This person is an applicant for participating in activities involving diving with self-contained underwater breathing apparatus (SCUBA) or surface-supplied equipment. Your opinion of the applicant's physical fitness is requested. A report form and completed medical questionnaire are enclosed. Since the information requested may be of importance in preventing or treating a diving accident, please be as specific as possible in detailing your results and comments. Please bear in mind that diving involves a number of unusual physical and physiological challenges:

- Diving may involve **HEAVY EXERTION** and **IMMERSION IN COLD WATER**. A diver must be in good general health, free from cardiovascular and respiratory disease, and have good exercise tolerance. **Physician may elect to require a stress test to evaluate cardiovascular condition.**
- Diving involves significant changes in ambient pressure and gas volume. All body spaces must equalize pressure readily. Obstructive lung disease may cause catastrophic accidents on ascent.
- Momentary impairment of consciousness or seizures underwater may be fatal.

Responsibility to other divers is a consideration. Even if a diver were willing to take a calculated risk with his own safety, if an accident occurred, other divers would be at risk in attempting rescue. In addition, evidence of neurotic trends, recklessness, accident proneness, panicky behavior or questionable motivation should be noted.

ABSOLUTE CONTRAINDICATIONS TO DIVING (The following are examples of conditions which present unacceptable risks to health and safety while diving):

- Pregnancy
- History of seizure disorder (except febrile convulsions in infancy)
- Recurrent or unexplained syncope, whether neurogenic or cardiovascular
- Insulin-dependent diabetes
- Sickle cell disease
- Meniere's disease
- Active asthma if medication is required for control, if there have been attacks within the past two years, or if bronchospasm has ever been associated with exertion or inhalation of cold air.
- Ear surgery where prosthesis has been implanted in the conduction chain
- History of spontaneous pneumothorax
- Chronic inability to equalize pressure in middle ears or sinuses; unhealed perforation of tympanic membrane
- Pulmonary cysts, blebs, bullae, or definite air trapping lesions detected by x-ray; significant obstructive pulmonary disease
- History of coronary artery disease; myocardial infarction; arrhythmias; ventricular septal defect
- Chronic alcoholism or drug addiction

RELATIVE CONTRAINDICATIONS TO DIVING (The following are examples of conditions which may disqualify, limit, or restrict diving depending on severity, presence of residual effects, response to therapy, etc.):

- Any condition requiring continuous medication for control (e.g. antihistamines, steroids, barbiturates, mood altering drugs, anti-hypertensive drugs)
- Decreased pulmonary reserve from any cause

- Obesity
- Malignancies, unless treated and without recurrence for five years
- History of chest surgery; recent operations

TEMPORARY DISQUALIFICATIONS

- Upper or lower respiratory infection or severe hay fever causing inability to equalize pressure in ears or sinuses, or causing chest congestion; middle ear infection
- Inguinal hernia
- Minor perforation of tympanic membrane
- Alcohol or drug intoxication
- Any medication which could interfere with normal diving

Divers often enter polluted water and are subject to injuries requiring antitetanus treatment. It is strongly advisable to maintain routine immunizations up-to-date.

If you feel the need for additional tests beyond those outlined in the attached form or for consultation, please discuss with patient and note on applicant's medical form.

For a more complete treatment of medical standards for diving, please refer to:

Davis, J.E., Kindwall, E.P., and Youngblood, D.A., "Selection of Divers: Examination and Physical Standards,": in *Hyperbaric & Undersea Medicine*, J.E. Davis, Ed., 1981, 1:3, pp 2-7, Medical Seminars, Inc, 8480 Fredericksburg Road, #241, San Antonio, TX 778229. Strauss, Richard H. ed., *Diving Medicine*, 1976, Grune & Stratton, NY, pp. 341-347

DIVING MEDICAL QUESTIONNAIRE & HEALTH HISTORY

INSTRUCTIONS: Please answer the following questions as accurately as possible. **Be sure all blanks are filled in completely, sign and date, and return to the Gulf of Mexico Foundation.** Incomplete forms will be returned and authorization to dive may be unnecessarily delayed.

NAME _____ **AGE** _____ **Occupation** _____

HEIGHT _____ **WEIGHT** _____

1. Have you had any previous experience in diving? Yes _____ No _____

If so, have you ever had bends, embolism or other pressure related injury? Yes _____ No _____

2. Have you had any difficulty equalizing pressure in your ears or sinuses? Yes _____ No _____

3. What do you do for exercise? How often do you participate?

4. Have you ever been rejected for service or employment for medical reasons? Yes _____ No _____

5. Date of last physical examination: _____ Physician/Facility _____

Address _____

6. Have you ever had: an electrocardiogram (ECG/EKG)? Yes _____ No _____

electroencephalogram (EEG)? Yes _____ No _____

8. Do you smoke? Yes _____ No _____ How much? _____

9. Have you ever had, or do you now have: (Please check at left of each item)

YES	NO		YES	NO	
_____	_____	Frequent colds or sore throat	_____	_____	Hay fever or sinus trouble
_____	_____	Trouble breathing through nose	_____	_____	Painful, running ear, mastoid trouble
_____	_____	Ruptured eardrum	_____	_____	Chest pain, persistent cough
_____	_____	Fast or irregular heartbeat	_____	_____	Heart trouble
_____	_____	High or low blood pressure	_____	_____	Persistent back or stomach ache
_____	_____	Frequent diarrhea, bloody stools	_____	_____	Recent gain or loss of weight
_____	_____	Kidney or bladder disease	_____	_____	Jaundice or hepatitis
_____	_____	Frequent upset stomach, heart-burn, ulcers	_____	_____	Rheumatic fever
_____	_____	Tuberculosis	_____	_____	Broken bone, serious sprain
_____	_____	Venereal disease	_____	_____	Severe or frequent headaches
_____	_____	Rheumatism, arthritis, joint trouble	_____	_____	Migraines
_____	_____	Insomnia, nightmares, sleepwalking	_____	_____	Head injury causing unconsciousness
_____	_____	Dizziness, fainting, convulsions	_____	_____	Nervous breakdown, depression
_____	_____	Alcohol, drug narcotic habit	_____	_____	Motion sickness
_____	_____	Adverse reaction to serum, drug or medicine	_____	_____	Claustrophobia
_____	_____	Asthma	_____	_____	Any neurological condition
_____	_____		_____	_____	Diabetes
_____	_____		_____	_____	Cancer

_____ Any serious illness not mentioned above. Please explain on next page.

REMARKS: Briefly describe any items checked YES in the above list. Be specific.

ALLERGIES: List any allergies you may have.

MEDICATIONS: List all medications currently used (prescription and non-prescription).

Physician's Signature _____ **Date** _____

Applicant's Signature _____ **Date** _____
(or legal guardian, if applicant is less than 18 years old)

PHYSICIAN'S REPORT OF DIVING MEDICAL EXAMINATION

Applicant's Name _____

Physician's Name _____ **Physician's Phone (____)** _____

Address _____

TYPE OF EXAMINATION _____ **INITIAL** _____ **ANNUAL** _____ **SPECIAL** (Major illness or injury)

CLINICAL EVALUATION (All Tests Required)	NORMAL	ABNORMAL	RESULTS, COMMENTS (Please be specific)
General Physical Condition (after 7/16/08) Date:			
Ears, Nose, Throat (after 7/16/08) Date:			
Chest X-ray (after 7/16/05) Date:			
ECG/EKG (after 7/16/08) Date:			
Visual Acuity (after 7/16/08) Date:			
Hearing (after 7/16/08) Date:			
Hematocrit or Hemoglobin (after 7/16/08) Date:			
White Blood Cell Count (after 7/16/08) Date:			
Urinalysis (after 7/16/08) Date:			
Other as Determined by Examining Physician (please specify)			

The following conditions should be made known to any physician who may treat this person for a diving accident (**include medical conditions, medications, allergies, etc.**):

Opinion, disqualifications, limitations, temporary restrictions, comments:

_____ **APPROVED** (I find no defects which I consider incompatible with diving or other medical reasons that this individual should be prohibited from diving.)

_____ **DISAPPROVED** (The applicant has defects which in my opinion would constitute unacceptable hazards to health & safety in diving. I have explained and discussed this with the applicant.)

Physician's Signature _____ **Date** _____

Applicant's Signature _____ **Date** _____
(or legal guardian, if applicant is less than 18 years old)