



Alfred-Wegener-Institute for Polar and Marine Research

Of the Helmholtz Association of National Research Centres

Ärztlicher Dienst - Medical Service

Prager Str. 71, 27568 Bremerhaven, Tel.: 0471- 43636, Fax: 0471- 417858

Information on Medical Examination for Expeditions of the Alfred-Wegener-Institute

General information for all expedition participants:

In the following questionnaire we have not made an explicit distinction between the sexes for the sake of simplicity. Unless specified otherwise in the text, the masculine form shall apply to male and female expedition participants alike.

The detailed investigation into the medical case history (personal anamnesis) is intended to give the examining physician an overall picture of the state of health of the expedition participant that is as comprehensive as possible. The exact knowledge of any previous illnesses not only serves to ascertain the actual medical prerequisites for participation in the expedition but in particular also to avoid possible health risks during the expedition. We therefore ask you to complete pages 1-6 of this investigation form conscientiously before your visit to the doctor.*

All questions answered with "yes" require a detailed explanation in the field indicated. Should there have been any alteration in your state of health in the period following the medical examination, please inform the Medical Service of the Alfred-Wegener-Institute in good time before the start of the expedition. Expedition participants suffering from chronic diseases should please send in a copy of pages 1-6 of the completed investigation form to the Medical Service of the Alfred-Wegener-Institute within one week after receipt of the documents. Otherwise the deadlines specified at the coordination meetings or by the Logistics department of the Alfred-Wegener-Institute shall apply. On reassignment to an expedition the examination must be repeated after 12 months; in the case of shorter assignment intervals pages 1 and 6 should be completed and sent in to the Medical Service.

Please be so kind as to print out pages 1-10 of the investigation form only on one side of each page.

Additional information for expedition participants in marine expeditions to the Arctic and Antarctic:

The general information shall apply to all participants. In addition, it should be borne in mind that for every marine expedition to the Arctic or Antarctic an examination of expedition fitness is necessary regardless of the duration of the assignment. The examination documents should include a confirmation issued by your dentist stating that your teeth have received adequate treatment. Expedition participants over 40 years of age are asked to attach findings (not older than 36 months) regarding visual acuity, intra-ocular pressure and the retina (examination with dilated pupils).

Additional information for expedition participants in land expeditions/flight missions on Spitsbergen:

The general information shall apply to all participants. Expedition participants who remain on Spitsbergen for less than four weeks shall please submit pages 1-6 of the investigation form to the Medical Service of AWI not later than three weeks before departure. A medical examination is not generally required for such persons. However, a dental examination is advised. In the case of stays lasting more than four weeks an examination for expedition fitness is required. The examination documents should include a confirmation issued by your dentist stating that your teeth have received adequate treatment. Expedition participants over 40 years of age are asked to attach findings (not older than 36 months) regarding visual acuity, intra-ocular pressure and the retina (examination with dilated pupils).

* Data will only be processed as hardcopy on the basis of the Data Protection Act of Bremen and the Civil Service Act of Bremen (§§ 2, 3 para. 2 BremDSG resp. § 20 para. 1 BremDSG in conjunction with § 93 BremBG - Law of Bremen).

Cont'd next page



Alfred-Wegener-Institute for Polar and Marine Research

Of the Helmholtz Association of National Research Centres

Information on Medical Examination for Expeditions of the Alfred-Wegener-Institute

Cont'd:

Additional information for expedition participants in land expeditions/flight missions to the Antarctic:

The general information shall apply to all participants. For every expedition to the Antarctic an examination of expedition fitness is necessary regardless of the duration of the assignment. The examination documents should include a confirmation issued by your dentist stating that your teeth have received adequate treatment. Expedition participants over 40 years of age are asked to attach findings (not older than 36 months) regarding visual acuity, intra-ocular pressure and the retina (examination with dilated pupils).

Additional information for persons staying over winter in the Arctic and Antarctic:

The general information shall apply to all expedition participants. Persons staying over winter should please send in a copy of pages 1-6 of the completed investigation form within one week after receipt of the documents to the Medical Service of the Alfred-Wegener-Institute at which the examination of fitness for overwintering takes place. The following examinations are also required: ophthalmologic and dental examination, X-ray examination of the lungs, sonography of the abdominal region and a gynaecological examination for female persons staying over winter. The scope of these additional examinations is given on page 10 of the investigation form. After overwintering a follow-up examination is planned.

Additional information for pilots and mechanics of polar aircraft:

The general information shall apply to pilots and aircraft mechanics as well as the additional information for land expeditions/flight missions to the Arctic and Antarctic. For pilots the investigation form must be completed by the aviation physician and sent in to the Medical Service of the Alfred-Wegener-Institute together with the results of the annual examination of pilot fitness. The examination of expedition fitness for aircraft mechanics may be performed by the aviation physician or the Medical Service of the Alfred-Wegener-Institute.

Additional information for pilots and mechanics of helicopters:

The general information shall apply to pilots and helicopter mechanics as well as the additional information for expedition participants in marine expeditions to the Arctic and Antarctic. For pilots the investigation form must be completed by the aviation physician and sent in to the Medical Service of the Alfred-Wegener-Institute together with the results of the annual examination of pilot fitness. The examination of expedition fitness for helicopter mechanics may be performed by the aviation physician or the Medical Service of the Alfred-Wegener-Institute.

Alfred-Wegener-Institute for Polar and Marine Research

Of the Helmholtz Association of National Research Centres

Ärztlicher Dienst - Medical Service

Prager Str. 71, 27568 Bremerhaven, Tel.: 0471- 43636, Fax: 0471- 417858

Medical Examination for Expedition Participants

Marine expedition

Polarstern

Research vessel

Land expedition/flight mission

Overwintering in Arctic:

Overwintering in Antarctic:

Last name, First name:

Date of birth: Profession:

Home address:

Postal address:

Tel. homework:.....

E-mail:Fax:.....

Duty region:

Expedition/Travel leg:

Period of stay:

Type of activity:

Final comment of Medical Service of Alfred-Wegener-Institute regarding expedition fitness:

- Fit for expedition
- Fit for expedition under certain conditions forming the subject of notification to the expedition physician by the Medical Service.
- Unfit

Date: Signature: Stamp:

Anamnesis (medical case history)

**The family case history need only be completed by persons staying over winter:
Have any of the following diseases occurred among one or more of your family members (parents, siblings or children)**

	yes <input type="checkbox"/>	no <input type="checkbox"/>	Degree of kinship
Diabetes	yes <input type="checkbox"/>	no <input type="checkbox"/>
Heart attack	yes <input type="checkbox"/>	no <input type="checkbox"/>
Stroke	yes <input type="checkbox"/>	no <input type="checkbox"/>
High blood pressure	yes <input type="checkbox"/>	no <input type="checkbox"/>
Kidney disease	yes <input type="checkbox"/>	no <input type="checkbox"/>
Cancer	yes <input type="checkbox"/>	no <input type="checkbox"/>
Emotional disturbance	yes <input type="checkbox"/>	no <input type="checkbox"/>

Personal anamnesis:

What diseases have you suffered from to date?

Infectious diseases

Infectious hepatitis	yes <input type="checkbox"/>	no <input type="checkbox"/>
Rheumatic fever	yes <input type="checkbox"/>	no <input type="checkbox"/>
Tuberculosis	yes <input type="checkbox"/>	no <input type="checkbox"/>
Tropical diseases	yes <input type="checkbox"/>	no <input type="checkbox"/>
Venereal diseases	yes <input type="checkbox"/>	no <input type="checkbox"/>
Other infectious diseases (apart from the usual childhood diseases)	yes <input type="checkbox"/>	no <input type="checkbox"/>
The indication of HIV infection is voluntary		

Diseases of the ear, nose and throat

Sinusitis	yes <input type="checkbox"/>	no <input type="checkbox"/>
Tonsillitis/Tonsillectomy	yes <input type="checkbox"/>	no <input type="checkbox"/>
Diseases of the ear	yes <input type="checkbox"/>	no <input type="checkbox"/>
Other ENT diseases	yes <input type="checkbox"/>	no <input type="checkbox"/>

Dental diseases

yes no

Eye diseases

Glaucoma (ocular pressure)	yes <input type="checkbox"/>	no <input type="checkbox"/>
Grey cataract (clouding of the lens)	yes <input type="checkbox"/>	no <input type="checkbox"/>
Diseases of the retina	yes <input type="checkbox"/>	no <input type="checkbox"/>
Do you wear glasses? For distance vision? For close vision?	yes <input type="checkbox"/>	no <input type="checkbox"/>
Other eye diseases or impaired vision	yes <input type="checkbox"/>	no <input type="checkbox"/>

Diseases of the lungs

Pneumonia	yes <input type="checkbox"/>	no <input type="checkbox"/>
Pleurisy	yes <input type="checkbox"/>	no <input type="checkbox"/>
Chronic bronchitis	yes <input type="checkbox"/>	no <input type="checkbox"/>

With "yes" please include detailed explanations and specify dates (if appropriate including diagnoses and comments of the examining physician):

Asthma yes no

Other lung diseases (e.g. sarcoidosis) yes no

Cardiovascular diseases

Heart attack yes no

Coronary disease yes no

High blood pressure yes no

Stroke yes no

Circulatory disturbances of neck/head vessels yes no

Circulatory disturbances of extremities yes no

Thrombosis/varicose veins yes no

Other cardiovascular diseases yes no

Diseases of the abdominal and digestive organs

Gallstones yes no

Diseases of the liver yes no

Diseases of the pancreas yes no

Diseases of the stomach and oesophagus yes no

Diaphragmatic hernia yes no

Chronic intestinal disease
(e.g. ulcerative colitis or Crohn's disease) yes no

Intestinal bleeding/intestinal polyps/diverticula yes no

Appendicitis yes no

Haemorrhoids/anal abscess yes no

Abdominal hernias yes no

Other diseases of the abdominal organs yes no

Kidney and bladder diseases

Inflammation of renal pelvis yes no

Renal cysts yes no

Kidney and bladder stones yes no

Cystitis yes no

Other diseases of the efferent urinary tract yes no

With "yes" please include detailed explanations and specify dates (if appropriate including diagnoses and comments of the examining physician):

Only for female expedition participants:

- Inflammation of the Fallopian tubes or ovaries yes no
- Ovarian cysts yes no
- Severe menstrual pain
or other menstrual disorders yes no
- Ectopic pregnancy yes no
- Mammary disease yes no
- Endometriosis (endometrium occurring
outside the normal area) yes no

Only for male expedition participants:

- Diseases of the prostate yes no
- Inflammation of the epididymis yes no
- Other diseases of the male
genitals yes no

Metabolic disorders

- Diabetes mellitus yes no
- Disorders of lipid metabolism yes no
- Gout yes no
- Thyroid diseases yes no
- Other metabolic diseases yes no

Diseases of the joints, bones or spinal column

- Injuries to the big joints yes no
- Bone fractures yes no
- Rheumatism yes no
- Arthritis yes no
- Lumbago yes no
- Sciatic complaints yes no
- Diseases of the intervertebral discs yes no
- Other diseases of the joints, bones
or spinal column yes no

With "yes" please include detailed explanations and specify dates (if appropriate including diagnoses and comments of the examining physician):

Current state of health

Are you currently undergoing medical treatment yes no

Have you received medical treatment in the last 24 months? yes no

Do you take regular medication? yes no
Which drugs, for what ailments and in what dosage?

Do you suffer from chronic disease? yes no

Do you suffer from allergies? yes no
Which?

Are you intolerant to certain drugs? yes no
Which?

Have you suffered from frostbite? yes no

When and involving what part of the body?

Do you smoke? yes no
How many cigarettes per day?

Height: cm

Weight: kg

With "yes" please include detailed explanations and specify dates (if appropriate including diagnoses and comments of the examining physician):

Vaccination status:

When were you last vaccinated against tetanus?

When were you last vaccinated against diphtheria?

When were you last vaccinated against polio?

When were you last vaccinated against hepatitis A and/or B?

Vaccine protection from tetanus, diphtheria and polio is required, vaccine protection from hepatitis A and B is recommended. Please ask your GP whether you have adequate basic immunisation from the above infectious diseases and whether booster inoculation is possibly required (Vaccination costs will only be borne for staff employed by the Alfred-Wegener-Institute.)

Please include a copy of your certificate of vaccination and blood group card with the examination documents.

With my signature I confirm

that I have answered the above questions to the best of my knowledge and belief and I understand that any false statements made knowingly and any failure to disclose diseases may result in my exclusion from participation in the expedition.

I am aware that any false statements or any failure to disclose diseases which result in emergency medical measures or evacuation during an expedition may put my health at risk and jeopardise safe progress of the expedition.

I release my GP from his obligation of confidentiality vis-à-vis the physician of the Alfred-Wegener-Institute only where a query is necessary as regards my expedition fitness.

yes no

If yes:

Name, address and telephone No. of GP:
.....
.....

The release of your GP from his obligation of confidentiality is voluntary, and no disadvantages will result if consent is withheld; however, it is possible that a query involving the determination of expedition fitness is required and that in such a case, you will be subsequently asked to give your consent as regards releasing your GP from his obligation of confidentiality

Place, Date

Signature

Name in block letters:

Name of person examined: Date of examination:

Visible deformation of the thorax yes no

Visible deformation of the **spinal column** yes no

Impaired mobility of the **spinal column** yes no

Finger-floor distance: cm

Is there tenderness on pressure in the **abdomen** or is **resistance** palpable? yes no

Are the **liver** and/or **spleen** palpable? yes no

Are the renal beds sensitive to percussion? yes no

Are **scars** present? yes no

Are **herniae** present? (rectus diastasis, umbilical hernia, inguinal hernia, post-operative hernia) yes no

Are the **lymph nodes** enlarged? yes no

Are the **extremities** deformed, have injuries been sustained or is there impaired mobility? yes no

Is **articular swelling** present? yes no

Are **varicose veins** present? yes no

Abnormalities on palpation of the **foot pulses** yes no

Reflex status:

Pat. reflex left: Pat. reflex right:

Ach. tendon reflex left: Ach. tendon reflex right:

Biceps reflex left: Biceps reflex right:

Radial reflex left: Radial reflex right:

Are there **sensitivity** disorders? yes no

Is any **tremor** present? yes no

Is there **impaired coordination**? yes no

Is **Romberg's test** pathological? yes no

Are other **neurological findings** present? yes no

Are there **abnormalities in behaviour**? yes no

Signs of **mental disease**? yes no

Other findings not explicitly mentioned in the questions? yes no

Please give a detailed description of the findings and/or diagnosis

Resting and Exercise ECG

Name of person examined: Date of examination:

Date of birth: Heightcm Weight:kg BMI:

Resting ECG (Please include ECG printout without fail)

Evaluation:

Assessment of resting ECG:

Ergometry according to WHO standard (Please include ECG printout without fail)

If the resting ECG and the findings of the cardiac examinations show no abnormalities and there are no relevant physical symptoms or risk factors an exercise ECG is not required for persons under 35 years of age. For persons staying over winter an exercise ECG is obligatory regardless of age.

With a renewed medical examination prior to an expedition the exercise ECG must be repeated after two years in the case of persons under 45 years of age and after one year for persons over 45 years of age provided no abnormal examination findings and cardiologically relevant diseases have occurred since the previous examination.

Required heart rate: 200 minus age (submaximal load)

Excerpt from ergometric record:

(if no separate record is attached as an annex):

Before load:	Blood pressure:	Heart rate
Initial load .of watt:	Blood pressure:	Heart rate
With load of 150 watt:	Blood pressure:	Heart rate
With max. load of watt:	Blood pressure:	Heart rate
1 min. after load:	Blood pressure:	Heart rate
3 min. after load:	Blood pressure:	Heart rate
5 min. after load:	Blood pressure:	Heart rate

Performance in watt with HR of 150/min)

Actual watt
Required watt

(Required: 1.8 watt/kg body weight for women and 2.1 watt/kg body weight for men)

Symptoms?	yes <input type="checkbox"/>	no <input type="checkbox"/>
Extrasystoles?	yes <input type="checkbox"/>	no <input type="checkbox"/>
Arrhythmia?	yes <input type="checkbox"/>	no <input type="checkbox"/>
Pathological ST segments?	yes <input type="checkbox"/>	no <input type="checkbox"/>

If " yes " description:

Reason for stopping ergometric test:

Assessment of ECG under load:

Assessment of RR and HR behaviour:

Assessment of state of fitness:

Assessment summary for ergometric test:

Laboratory Diagnostics:

Name of person examined: Date of examination:

Standard laboratory diagnostics: (Please attach laboratory reports)

ESR:
Blood count:
Leukocytes:
 (under 4.0 and over 10.0 /nl differential blood count required)
Erythrocytes:
Haemoglobin:
Haematocrit:
MCV:
MCH:
MCHC:
Thrombocytes:

Blood sugar:
Creatinine:
Uric acid:
GPT:
Gamma GT:
Cholesterol:
HDL chol.:
LDL chol.:

Urine findings:
Blood group:

(if known, please include a copy of blood group card)

Additional laboratory diagnostics for persons staying over winter: (Please attach laboratory reports)

Differential blood count:
Bilirubin:
Alk. phosphatase:
Triglycerides:
TSH:
CRP:
CDT:
Attach hepatitis serology for HA, HB and HC
HIV:
TPHA:
VDRL:
PSA (for male persons over 45 staying the winter):

Haemocult:	Date	neg.	pos.
1. Test:		<input type="checkbox"/>	<input type="checkbox"/>
2. Test:		<input type="checkbox"/>	<input type="checkbox"/>
3. Test:		<input type="checkbox"/>	<input type="checkbox"/>

Reports of specialist findings:

Ophthalmologic examination: Obligatory for persons staying over winter. Other expedition participants over 40 years of age are asked to please include findings (not older than 36 months) regarding visual acuity, intra-ocular pressure and the retina (examination with dilated pupils).

Dental examination: Please attach confirmation (not older than 3 months). For persons staying over winter an orbital pantomogram (OPT) with a detailed report of findings is also necessary.

Gynaecological examination: Obligatory only for persons staying over winter. Please attach reports of findings for physical gynaecological examination, PAP smear test and mammography (mammography from 35 years of age).

Other specialist examinations: If required following general examination, please attach reports of findings.

X-ray-of thorax and abdominal sonography: Obligatory only for persons staying over winter. Please attach reports of findings and images.

Assessment of expedition fitness by the examining physician:

Physicians performing the examination of expedition fitness are asked to check the anamnesis form filled in by the expedition participant and complete it where necessary. Please ensure you provide a meaningful assessment of expedition fitness, for which the findings of any specialist examinations additionally necessary should be taken into account. Please attach the reports of findings and printouts of ECGs and spirometric tests to the examination documents without fail.

- Fit for expedition**
- Fit for expedition under certain conditions (please explain)**
- Unfit (please give reasons)**

Date: Signature: Stamp +Tel: