NOTES FOR EXAMINING DOCTORS

Thank you for agreeing to do this medical. We are not asking you to make the judgement about the fitness of an individual for deployment. The medical team at BASMU will make the decision based on the information that you provide.
The British Antarctic Survey Medical Unit (BASMU) is employed to provide the medical service for the British Antarctic Survey (BAS). BAS is a government agency that enables science to be done in the Polar Regions. With regard to medical screening it is BASMU's job to ensure that the deploying population is fit to do their job, and to live in the environment to which they are being deployed.
BASMU is based in Plymouth, and the medical support is provided by senior medical staff from the Emergency Department, on a part time basis, and where necessary specialists from within Derriford Hospital are consulted.

If you have any questions/concerns please discuss the case with the BASMU medical officers on 01752 315220. Alternatively, the doctors, Anne Hicks, Simon Horne, Dave Farrance, Andy Kelly and Matthew Warner can also be contacted via our secretaries in the Emergency Department on 01752 437629.

BASMU Screening

- All personnel who are to be deployed with BAS are screened; this includes many personnel who are non BAS, and/or international visitors.
- Most people are deployed only for the summer (a few weeks to 5 months), however those who are going for winter are normally deployed for 20 months, and so have a more thorough medical.
- Where possible we try to facilitate deployment south, but we have to consider not just the individual, but the impact on others safety.
- The screening papers are kept within BASMU, and not available to BAS staff, although BAS staff will forward them unopened to BASMU.

Limitations of Environment

- Antarctica is the coldest, highest, windiest and most isolated place on earth
- The atmosphere in most areas is extremely dry, and UV levels are also extreme at times.
- In the Arctic most work is undertaken in summer, but conditions are often still severe, and medevac options limited.
- The ships are sailing in some of the most challenging seas in the world, and may be hampered by adverse weather, sea or ice conditions
- There are occasional flights in the summer to Rothera, and Halley
- Access to South Georgia, Bird Island and Signy is only by ship.
- Even in "summer" medivacs can be delayed for days/weeks by adverse weather.
- Field parties are often delivered to a remote location by plane, and left with no independent transport.
- All personnel, regardless of their job are required to partake in base support life (some of which is very strenuous) and must be able to muster

independently in the event of an emergency, so there is an expectation of baseline fitness.

Medical Provision

- There is a doctor present on the Ships when in the Southern Ocean, Rothera, Halley and South Georgia.
- The doctors have access to support via BASMU and Derriford ED.
- Where there is a doctor, there is a surgery with minimal equipment and drugs to cope with common emergencies, and common conditions.
- Field parties will not have a doctor with them, but a simple field medical box.
- The doctors have predeployment training, to make them fit for purpose.
- Their ability as a lone doctor in a remote location to care for a sick patient is extremely limited.
- Individuals are cautioned regarding the obvious ceilings of care prior to deployment.

Medical Support

- Whilst the weather on base may not be that challenging in the summer, the logistics are.
- The nearest "DGH" style hospitals are Falkland Islands and Punta Arenas (Chile). In summer we may be able to facilitate this in 2 days or up to 4 weeks.
- In winter, medivac is impossible from Rothera and Halley, for about 5 months.
- In the Arctic a medevac often requires multiply flights in order to reach a medical facility.

Impact of Medivacs

- There are no non-essential staff deployed, therefore having to remove someone will impact on many other people's lives, cause programmes to be stopped, or base functions to cease.
- Transport is so limited and timetables and weather windows so variable, that a single medivac may have huge knock on effect on the whole season.
- It may put rescuers at risk.
- The financial cost is not just in the individual transport costs, but in finding replacement staff, failed science projects etc.

Pressure to "Declare Fit"

- For some individuals this opportunity may be once in a lifetime. It is essential that this doesn't affect their presentation of their symptoms. Please bear this in mind when taking their medical history.

Blood Donor Pool
(For those who will be in the Antarctic between April – October in any given year)

In the Antarctic our blood bank is "on the hoof". We require that all **wintering** personnel travelling to the Antarctic are tested as potential recipients and donors according to NBS standards. The form "Consent for blood grouping and associated testing (BASMU 6) must be completed and signed by the candidate. The sample of venous blood should be collected in the tubes provided and identified (hand written) with **Forename, Surname, D.O.B. and Post Code.** (All four identifiers are necessary as there is no unique number) For individuals examined in the United Kingdom, the sample and completed BASMU 6 should be mailed in a suitable container with a biohazard label to:
National Blood Service
Trent centre, Longley Lane
Sheffield
S5 7JN

In the case of individuals undertaking their examination overseas, the doctor's own facilities for sampling should be used, the results (Blood Group, HIV, HTLV, Hepatitis B & C and VDRL) together with any other investigations should be obtained by the examining doctor and included with the completed documentation.

A guide to conditions that may cause concern

Conditions that will usually preclude service ↓	Conditions which may preclude service. ↓
Cardiac (Heart) and circulation problems	
Angina & Heart Attacks. *	
Leaky Heart valves & Rheumatic Fever	Previous Heart Surgery*
Uncontrolled High Blood Pressure	
Heart Rhythm Abnormalities	Treated abnormal rhythms*.
Heart Failure	Severe varicose veins
Arterial Disease	Previous Frostbite*
	Severe Reynaud's disease*
	Previous leg thrombosis*.
	Previous clot on the lung*.
Respiratory (chest) problems	
Recurrent "burst" lung (pneumothorax)*	Single episode of pneumothorax*
	History of moderate or severe Asthma*
Cold induced asthma*	
Chronic Bronchitis or emphysema*	
Active Tuberculosis	
Gastrointestinal problems	
Active stomach / duodenal ulcer	History of these ulcers*
Liver Disease	
Pancreatitis	Previous exploratory abdominal surgery*
Hernia* Untreated)	Severe piles*
	Recurrent (inflammatory) bowel disease*
Genito- urinary problems	
Recurrent Kidney Stones	Renal colic*
Kidney failure	Recurrent kidney infections*
Neurological Conditions	
Epilepsy or fits (on treatment)	Previous fits clear for > 3 years*
Brain Haemorrhage in past* (non traumatic)	Previous brain surgery*
Unexplained episodes of loss of consciousness	Severe ME*

Degenerative N.M. conditions
Significant Neuro Deficit secondary to Trauma

Metabolic Conditions

Most diabetes

Mild type II diabetes if well controlled (exceptional)*
Other "endocrine disorder"*

Cushing's Disease
Addison's Disease
Obesity (severe)* BMI >35

Thyroid disease

Musculoskeletal conditions **

Untreated Slipped disc*
Lower Limb Amputation*
Recurrent dislocations *(untreated)
Rheumatoid Arthritis*
Ankylosing Spondylitis*

Recurrent back pain*
Severe knee problems*
Unstable joint*
Frequent Gout*

Cancer and Haematological Disorders

Most cancers

Treated cancer with low risk of recurrence*

Clotting or bleeding disorders
Warfarin Medication
Bone marrow disease

Treated leukaemia*
Treated Hodgkin's disease*

Gynaecological conditions

Current Pregnancy

Pelvic inflammatory Disease*
Ovarian disease.*

Dermatological conditions

Blistering Skin diseases
Severe psoriasis*

Mental Health Problems

Current psychiatric Illness
Previous severe mental illness
Schizophrenia
Manic depression
Personality Disorder
Current Drug or alcohol abuse

Depression
Self harm
Previous drug / alcohol problems*

* The decision will depend on many different factors and will be made on an individual basis. With all of these conditions it is much more likely that you would be able to go to the Antarctic for a short summer trip than to overwinter.
** These conditions will be assessed in relation to the capacity to undertake activity/work in the anticipated environment.