

NATIONAL SCIENCE FOUNDATION  
4201 WILSON BOULEVARD  
ARLINGTON, VIRGINIA 22230  
**OFFICE OF POLAR PROGRAMS**

**Medical Risks for NSF-Sponsored Personnel Traveling to Antarctica**

Travel to Antarctica imparts certain risks to the traveler, because of harsh environmental conditions encountered, limitations in the medical care available in Antarctica, and difficulties, in emergencies, of providing timely evacuation to tertiary medical care facilities in New Zealand, South America, or in the United States. United States Antarctic Program (USAP) participants should consider these risks before deciding to deploy to Antarctica.

With no indigenous support infrastructure in Antarctica, virtually all medical care to USAP participants is provided through the USAP medical care system. This includes medical clinic operations at all three year-round stations (McMurdo, South Pole, and Palmer Stations), dispensary operations on the two oceanographic research vessels, and first-aid/first responder support in the larger seasonal remote field camps. The three clinics are comparable to a small community hospital emergency room and ambulatory care facility, but without secondary or tertiary care facilities nearby for patient referral or specialist support. Radiography (X-rays) and selected laboratory tests are available in the clinics, but more sophisticated imaging procedures and diagnostic tests are not. Typical operating room surgical suites are not available at the stations, although each clinic has a triage/trauma room. The USAP does not maintain a frozen blood supply at each station, relying instead on a "walking blood bank" concept (where individual donors could provide fresh blood if transfusions were needed and blood types matched). The evacuation of critically ill or injured patients from Antarctic sites to sophisticated medical care off the continent (to New Zealand, South America, or the United States) is difficult during the austral summer and may be impossible during the austral winter (February through August).

It is important that USAP participants recognize these limitations in medical care while they are in Antarctica. It is, in part, because of these limitations, that the NSF requires medical and dental screening of personnel prior to deployment to Antarctica. These medical screening examinations are necessary to determine the presence of medical conditions that could threaten the health or safety of the individual while in Antarctica. They are also necessary to determine whether medical conditions exist that cannot be effectively treated while the individual is in Antarctica. Persons who fail to meet these medical/dental screening criteria will be notified of the specific reason(s) for their disqualification. Disqualified individuals may request reconsideration by completing a waiver request package (obtained from the NSF's support contractor).

Pre-deployment screening can identify existing medical conditions that may be difficult or impossible to treat effectively in Antarctica. USAP participants should realize that serious accidents or injuries might challenge the medical care system in Antarctica as well. Therefore, individuals should recognize the limitations in the medical care system in Antarctica before they engage in any risk-taking behaviors (whether on-the-job or during recreational pursuits) that may result in accidents or injuries.

Data collected as a result of this medical screening requirement are maintained in accordance with the Privacy Act (5 USC 552a) and protected against unauthorized release, as described in the appended Privacy Notice. The collection of this information must display a currently valid OMB control number. You are not required to respond to the collection of this information unless it displays a currently valid OMB control number.

I have read and understand this information sheet.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature and Date