

CHAPTER 3: How and What to Pack



USAP participants carry their bags to the elevated station after arriving at the South Pole. Photo by Mike Lucibella.

There will be several stops on your journey to Antarctica. Various transportation providers (U.S., foreign, military, vessel) have different baggage allowances and restrictions. Please adhere to the limitations set forth by each carrier. In New Zealand or Chile, you will pick up your USAP-provided extreme-cold-weather (ECW) clothing. You may require additional, personal items for the various climates, types of work, and activities you will encounter. Planning is very important. Read this chapter carefully.

BAGGAGE ALLOWANCES

Commercial Carriers

You will travel from your airport of departure to Christchurch, New Zealand or Punta Arenas, Chile on commercial carriers. It is important to review the airline's baggage limitations and fees before departure. The baggage allowance on the flight from Christchurch to McMurdo differs from the commercial allowance.

At the time this book went to press, airline baggage allowances were two bags, 23 kg/50 lbs each, plus your carry-on. Updates regarding travel are posted on each airline's website and should be consulted before departure.

Flights from Christchurch to McMurdo Station

All personnel, summer and winter, have the same luggage weight allowance when flying from New Zealand to McMurdo Station. **A maximum of 39 kg/85 lbs for your luggage plus 7 kg/15 lbs for carry-on is allowed for this leg of your journey.**

NOTE: The ECW clothing issued to you in Christchurch weighs about 10 kg/22 lb. You are required to wear certain items on the flight. The rest of the issued clothing (about 3 kg/7 lb) will be considered part of your checked baggage.

Research Vessels and Palmer Station

There is no weight restriction for personal baggage on the research vessels. However, you should still indicate whether you have excess baggage, as storage space on the vessels is at a premium.

Grantee and Technical Event Excess Baggage

The program does not reimburse costs for excess baggage. However, you should indicate on the Trip Details form if you are carrying excess baggage, as this allows the Christchurch Travel Office to plan weight and balance for flights to McMurdo.

Mailing Excess Baggage

If you need to take more than the allowed weight to McMurdo or South Pole, you can mail boxes to yourself at the Army/Air Force Post Office (APO) address in Antarctica. See Chapter 6 for more information about mail services and restrictions.

PERSONAL PRESCRIPTION MEDICATIONS

You are responsible for obtaining a supply of your regular prescription medications that is sufficient to cover the time you will be deployed. The station doctor is not your primary care physician and cannot refill your prescription medication. You will not be allowed to winter-over unless you have enough of your regular medications to last through the winter. Carry a copy of each prescription provided by your personal physician.

You are also responsible for complying with all U.S. and international laws when exporting and importing personal medications. Please seek guidance from the U.S. Food and Drug Administration (www.fda.gov/drugs/default.htm) and the U.S. Drug Enforcement Administration (www.justice.gov/dea/index.shtml) to determine whether your specific medication is controlled and may require special export or import authorizations.

Participants working at McMurdo Station, South Pole Station, or area field camps

New Zealand customs laws only allow for three months of prescription medications (e.g. thyroid medication) and one month of controlled prescription medications (e.g. codeine) to be hand-carried through New Zealand.

New Zealand law requires the following for transporting controlled drugs into the country:

- You must declare the controlled drugs on your passenger arrival card.
- If you have more than one month's supply, you need an import license from the Ministry of Health.
- You must prove to Customs that the drug is required for treating your medical condition, and that it has been lawfully supplied to you in the country of origin. A letter from your doctor or a valid label on the container with your name and the quantity and strength of the drugs would be sufficient.

All medications must be in properly labeled pharmacy containers. It is important that you hand-carry the initial three months of medication (one month for controlled medications) in order to provide enough time for any remainder to reach you via mail in Antarctica. When you get your prescription medications filled, ask the pharmacist to put three months of medication (or one month of controlled medications) in one labeled container and the remainder in a separately labeled container.

If you will be deployed for longer than your hand-carried medications will last, your doctor or pharmacy should mail additional or refill medications through the APO in small, priority-mail envelopes to ensure their timely arrival. Medicines should never be packed inside a larger box containing other items, as the box may not make it to Antarctica, whereas a small envelope, which is considered flat mail, likely will. Medicines destined for summer participants should be mailed after Labor Day, or they will be returned.

If you need medications urgently while on station, contact the medical clinic staff and they will provide options on how to get it through Christchurch. In an emergency, you can also contact chc-couriernotifications@usap.gov with details of your situation. Remember that you will have to clear Customs in New Zealand to re-enter the country on redeployment, and the same restrictions on the quantity of medications will apply.

Participants working at Palmer Station

Chilean customs laws do not restrict the amount of personal medications hand-carried through Chile, so if you are deploying through Chile you can take the amount of medication you need for the deployment.

WHAT TO PACK

Below is a list of some personal items you may want to consider taking to Antarctica. The list is meant as a guide only and should be modified for individual needs and preferences. Wintering personnel, for example, should increase some quantities, while official visitors and others who are scheduled for only a few days in Antarctica will require less. **Your point-of-contact (POC) can give you specific advice about what you might need, depending on your length of stay and the Antarctic facility at which you will be working.**

You should bring your own supply of over-the-counter medications. There may be some special or brand name products, such as vitamins, cold remedies, aspirin, or toiletries that you may require during your deployment. The station store at each facility carries a limited supply of toiletries, gift items, batteries, snacks, and soda, but store stock is largely meant to supplement items you should bring with you. Your supervisor or team leader can give you a good idea of what items are stocked in the store at the station where you will be working.

Toiletries. Antarctica is very dry, and it is recommended that you use hand lotion and lip balm. The station stores carry only a limited selection of these items, along with soaps, toothpaste, and other toiletries, so you should bring your own. There is no store aboard the research vessels. **NOTE:** Do not bring personal products that contain microbeads, such as some soaps, body washes, toothpaste, and cosmetics. Under U.S. law, the manufacture and sale of such products are being phased out.

Pain relievers. Aspirin and cold capsules (non-prescription) are usually available for purchase at station stores. Quantities and brand names are unpredictable, however, and it is suggested that you bring your preferred pain

Packing Suggestions

Clothing:

Boots and shoes; work, hiking, insulated as needed for your work
 Prescription eyeglasses (if required), extra pair
 Gym clothes/shoes
 Jacket; warm windbreaker
 Neck gaiter
 Pajamas/robe
 Pants/jeans
 Shirts; light wool or fleece, long-sleeve (machine washable)
 Slippers for indoor wear
 Sock liners; polypropylene or Merino wool to wick moisture away from feet
 Socks; heavy to wear outdoor with boots; Merino wool or nylon
 Sunglasses
 Swimsuit (for sauna)
 Towel and washcloth
 Long underwear; thermal top/bottom; both base and mid-weight layers; polypropylene, Merino wool, or silk
 Underwear; regular
 Flip flops for shower

Other Items:

Alarm clock
 Batteries, rechargeable/charger
 Camera/camera batteries
 Coffee mug
 Day pack
 Hair dryer
 Hobby, craft items (small)
 Laundry bag
 Lip balm
 Lock, combination or key
 Memory sticks or external hard drive
 MP3 player/extra earbuds
 Ethernet adapter for your laptop
 Musical instrument/spare parts
 Prescription medications
 Skis; skate/cross country
 Plastic food containers with lids to hold left-over food in your dorm room mini-refrigerator
 Toiletry articles; toothpaste, dental floss, comb, razor, shave cream, deodorant, soap and skin lotion for dry skin, tampons, a carrying case
 Vitamins
 Water bottles

Station Store

Each station store normally carries the following items, with slight variations due to the remoteness and to supply and demand. Snacks, drinks, souvenirs, and other items are also sold.

Baby Oil	Facial Tissue	Sewing Kits
Body Soap	Feminine Hygiene Pads	Shampoo
Combs	Hair Brushes	Shaving Cream
Dental Floss	Hair Conditioners	Sunscreen SPF 30
Deodorants	Lip Balms	Tampons
Eye Care Solution,	Lotions	Toothbrushes
Multi-Purpose	Mouth Wash	Toothpaste
Eyeglass Repair Kits	Nail Clippers	Tweezers

relievers to Antarctica. If you re-pack them to conserve space, retain their original labels to avoid problems with Customs.

Vitamin D3. Recent research suggests that maintaining an adequate level of vitamin D in the blood can reduce the frequency and severity of respiratory infections. See Chapter 6 for more information.

Outdoor clothing. You will be issued ECW clothing as you pass through Christchurch or Punta Arenas. Special arrangements will be made if you are taking other routes to Antarctica. This clothing will include the outer garments necessary for warmth and dryness, pile jackets and pants, gloves, thermal boots, and other items. Depending on your work, you may also be issued special safety gear (e.g., hard hats, goggles) upon arrival at your work site.

If you are experienced in cold weather conditions, you may add your own cold weather gear (e.g., hiking boots, parka, gloves) for field use. Be sure these items are clean and free of soil or plant material before packing them (check the Velcro®). A lightweight windbreaker is useful in McMurdo during the austral summer.

You must bring your own long underwear and heavy socks. It is highly recommended that you bring at least three pairs of heavy socks and sock liners, and at least two sets of lightweight and mid-weight long underwear. Polypropylene, Merino wool, or silk are excellent at wicking away moisture and holding heat next to your body. Contact your POC to get a recommendation of how much to bring, based on your job and location.

Indoor clothing. You must bring your own regular indoor clothing, including underwear, socks, shirts, pants, and shoes. No dry cleaning services are available. The use of polyester double-knit fabric is not recommended, as it is not sufficiently warm. Base the quantity of clothing you bring on recommendations from your POC, the length of your stay in Antarctica, and the type of work you will be doing.

Layering. The temperature both inside buildings and outside can vary dramatically. The best way to manage these changes is by layering your clothing. This will allow you to shed or add layers quickly and easily. Several thin layers are more effective than one bulky layer.

Attire en route. While dress may be informal en route to and in both New Zealand and South America, please remember that you are representing the United States and NSF and that your appearance may be noted.

New Zealand and Chile. Plan for changeable weather conditions. Cold temperatures and rain can be expected even during the spring and summer months. Lightweight rain gear, as well as a warm sweater or jacket, are recommended.

Bed linens. The USAP supplies sheets, pillows, pillowcases, and blankets.

Towels and washcloths. The USAP does not provide towels and washcloths at the three stations, but it does provide towels on the research vessels.

Electric power. USAP stations use 110-volt power, same as in the U.S. No converters or adaptors are needed. The research vessels have both 220- and 110-volt power. Argentina, Chile, and New Zealand use 230-volt, 50 hertz, power supply systems. In order to use U.S.-purchased appliances, such as hair dryers and razors, you will need to

bring your own power converter and plug adapter (laptops and iPods have a built-in converter, but you will still need a plug adaptor for the wall socket).

Feminine hygiene. Supplies are normally available at the station store, though brand selection is limited. Women may wish to bring the items and brands they prefer.

Sunscreen. Carry and use sunscreen with an SPF number of 15 or greater. Ensure it provides both UVA and UVB coverage, and that the product expiration date does not occur during your stay. In summer, the sun is up 24 hours a day, and its reflection off snow and ice increases the potential for sunburn.

Sunglasses. Sunglasses or goggles are crucial. Your ECW clothing issue will include ski-type, UV-protective goggles. Participants should bring two pairs of 100% UV protective sunglasses in case one pair is lost or damaged. Consider wrap-around temple frames, side shields, nose guards or other features to protect from harsh sunlight and reflections off the snow. If you wear prescription glasses, you should also bring prescription sunglasses with the above recommended features. Eye protection is your responsibility.

Prescription eyeglasses and contact lenses. If you wear glasses, carry a record of your prescription to Antarctica. You should take a spare pair with you. The cost of eyewear replacement is your responsibility, and the means to obtain replacements are limited. If you wear contact lenses, you should carry them on your person when traveling to avoid possible damage from freezing.

There are no issues with contact lens use in Antarctica. Limited quantities of lens cleaning supplies are available at station stores, including regular and sensitive-eye solutions for soft contact lenses. Heat-type solutions are not available. If you prefer certain brands of lens care products, you should bring enough to last your entire stay.

Water bottle. Bring at least one water bottle that can be carried with you throughout the day. Antarctica is a desert and staying well hydrated is important. Water bottles may be available in the station store, but supplies are limited.

Recreational gear (e.g., skis, musical instruments). While musical instruments and recreational equipment is available for check-out at the three stations, variety and availability is different at each facility. Depending on your length of stay, you may wish to bring or mail your own recreational gear. Be aware that it may take three months or more for your gear to arrive if you mail it. Your POC can give you more information. Be sure all recreational gear is clean before you pack it.

Smartphones. You will NOT have cell phone service in Antarctica, but you can use your smartphone or pad as an alarm clock, a source of music, or a camera. Don't forget the charging cable and an extra set of earbuds. WiFi is only available in limited areas and only to grantees with a 24/7 mission-critical need to stay connected.

WHAT NOT TO PACK

Personal comfort in Antarctica is important, and so is environmental protection. When choosing items to make your stay more comfortable, please take the time to select items with the least environmental impact and package them frugally. Use biodegradable soaps and shampoos, which will have less of an environmental impact.

Plants, seeds, and animals. The Antarctic Treaty and the Antarctic Conservation Act (as amended by the Antarctic Science and Tourism Conservation Act) prohibits the importation to Antarctica of any:

- seeds (including chia seeds),
- plants and plant parts (except by permit and under controlled conditions), and
- animals (including insects) and animal parts.

Don't pack a pest when you pack bags for Antarctica! Be sure to clean your clothing and footwear before packing it to prevent inadvertently importing non-native species or other organic material. For example, be sure there are no seeds or other plant parts caught in Velcro®, no mud on boots, and no grass inside cuffs. Please read the Don't Pack a Pest brochure at www.usap.gov/usapgov/travelAndDeployment/documents/PackaPest_brochure_Final.pdf

In addition, biologically viable organisms in food, personal care products, and supplements are all prohibited for importation and use in Antarctica. This includes "SCOBY" (the symbiotic culture of bacteria and yeast used to make yogurt and kombucha), probiotics, spirulina, and similar biologically active products.

Microbeads, tiny plastic particles in bath and beauty products, are now a banned substance in Antarctica. Do not pack any personal care products containing microbeads. They cannot be contained by wastewater treatment and will be discharged to the ocean environment, resulting in plastic pollution. Microbeads can absorb toxins and be ingested by marine organisms. The "Beat the Microbead" website (www.beatthemicrobead.org) has more information and comprehensive, country-specific lists of products that contain microbeads.

Similarly, the **antimicrobial agent triclosan is banned**. The USAP has not purchased soaps or personal care products with triclosan since 2015, and participants should not bring them to Antarctica. Triclosan is not removed during wastewater treatment and accumulates in the tissues of marine organisms.

Polystyrene packing materials such as peanuts, chips, and beads are prohibited, as they can easily blow away, posing a threat to wildlife. Cushion your packed items with clothing, and advise family members and friends to avoid using polystyrene packing materials in mail they send to Antarctica.

Try to avoid using aerosols, such as hair spray, pressurized containers of deodorant, and shaving cream. These items become hazardous waste because of their ingredients or because they are pressurized.

Disposable batteries, such as mercury, alkaline, and lithium cells, are discouraged. Consider buying rechargeable batteries and a charger.

Unmanned aerial vehicles. Unless you have specific authorization from the NSF, operating drones or remotely piloted aircraft in Antarctica is prohibited.

Magazines, catalogs, newspapers and junk mail are discouraged. Do not have your mail forwarded to your Antarctic address, as it increases the amount of waste that must be removed from the continent.

Plastic and throwaway containers. Eliminate as many of these as possible. This will help reduce the volume of solid waste in Antarctica. Repackage products into containers you are more apt to take home with you, or use Ziplock® bags that can be used repeatedly during your stay. Use the backpacker's rule – if you pack it in, you pack it out. NOTE: Be sure to keep prescription labels with repackaged medications.

Commercial or other business activities. You may not market or sell clothing or finished articles that were printed, manufactured, or assembled outside Antarctica. You may not import materials to finish and market such items locally. Federal law forbids using an APO address to ship articles or materials destined for private resale operations. The USAP also prohibits using government transportation to ship goods and materials for unauthorized personal business activities.

Hazardous materials. Explosive gases, flammables, oxidizers, poisons, radioactive material, corrosives, and other hazardous materials may not be shipped as baggage, mail, or hand-carry. See Chapter 4: Science Cargo.

Electric blankets and heaters are not allowed for safety and power reasons. Any device that could be used to heat cooking oil is not allowed, as splattered oil poses a fire danger. No open flames, such as candles, are allowed.

BAGGAGE ORGANIZATION

If you are flying from Christchurch to McMurdo, your personal belongings and any ECW clothing you are not wearing will be transported as checked baggage on a cargo pallet. You will be allowed a carry-on bag, which must not exceed 61 x 38 x 23 centimeters (24 x 15 x 9 inches). All luggage will be screened as you check in at the Antarctic Passenger Terminal.

Laptops are accepted as hand-carry, but they must fit into the hand-carry dimensions along with the rest of your items. Unlike commercial airlines, liquids, aerosols, and gels are not restricted in carry-on luggage. However, you may not bring sharp objects aboard planes. If you are bringing a pocket knife, scissors, or other sharp object to Antarctica, stow them in your checked baggage. Your baggage will be screened using various detection sensors, including a drug detection dog. The contents of your baggage may also be subject to visual inspection.

If you are traveling to Antarctica on a research vessel, you should pack the items you'll need for the five-day ocean journey in a small piece of luggage. Any baggage you store in the cargo area will be inaccessible during the journey.

Mark all your bags clearly with tags, including the bags you carry aboard. Also, place identification inside each bag. Include your assigned Antarctic station, the initials “USAP,” “ASC” or event number, and return address.

Do Not Freeze (DNF) equipment should not be included in your checked or hand-carry baggage. Use the USAP cargo system to protect it from freezing (see Chapter 4).

Other personal equipment. Personal baggage may also include delicate scientific instruments that must be hand-carried. You are responsible for handling personal baggage to and from Antarctica unless it is checked as air cargo. If delicate instruments are to be moved as air cargo, clearly mark any handling requirements on the container. Pack items securely in easily handled containers.

STORAGE AVAILABILITY

In New Zealand

There is a limited amount of storage space available at the USAP Clothing Distribution Center (CDC) in Christchurch, where you can leave items not needed in Antarctica, such as summer clothing, street shoes, backpacking equipment, and New Zealand souvenirs. There will not be much time to spend sorting through your baggage before checking in for your flight to McMurdo Station. Plan ahead and organize your baggage and storage items in advance.

USAP participants who wish to use their personal dive equipment, bicycles, or camping gear in New Zealand may mail the items to themselves, care of the CDC. These items should not be mailed more than 60 days before your arrival in Christchurch. Items received after your departure to Antarctica will be held in the CDC's secure baggage storage room until you redeploy from Antarctica. The address is as follows:

[Participant's Name]
HOLD IN CHRISTCHURCH
Private Bag 4747
Christchurch 8140
New Zealand

The New Zealand Ministry of Primary Industries (MPI) is now assessing a fee (average NZ\$7) to clean and fumigate items (e.g., dirty hiking boots, tent poles) left in Christchurch while you are in Antarctica. These items will remain in MPI custody at the U.S. Post Office in Christchurch until arrangement has been made to pay the fee.

Upon redeployment from Antarctica to Christchurch, it is also possible to store items in the CDC. This allows participants the opportunity to take personal vacations before final redeployment, but this storage is limited to 60 days.

In Chile

In Punta Arenas there is limited secure storage, and it's usually reserved for scientific projects and equipment.

