

Questions and Answers: The National Veterinary Stockpile and Portable Refrigeration Units

The National Veterinary Stockpile (NVS) program, coordinated by the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), provides support to States, Tribes, and Territories responding to damaging animal disease outbreaks. Within 24 hours, the NVS can provide veterinary countermeasures—including certain types of animal vaccines, antivirals, supplies, equipment, and response services—to animal health officials in affected areas. To learn more about this program, see the NVS factsheet on APHIS' Web site at www.aphis.usda.gov/publications/animal_health/content/printable_version/veterinary_stockpile.pdf.

NVS can provide portable refrigeration units to safely store and transport animal vaccines.

Q. What portable refrigeration capabilities does NVS offer?

A. We currently maintain two types of portable refrigeration units in our inventory: VaxiCool® and FridgeFreeze™. They are ideal for storing vaccines within the required temperature range of 2 to 8 °C. The units can be used to transport vaccines from a central storage location to a disease-free premises.

Q. What are the units' power requirements?

A. The VaxiCool units are powered by conventional 110 voltage alternating current (110v AC). After the unit's temperature stabilizes and its batteries are fully charged, it can be disconnected from the power source and operate off its batteries as a portable unit. If the unit is operated and maintained properly in either refrigeration or freeze mode, it will operate for approximately 10 hours using internal battery power before needing to be reconnected to a power source for recharging.

The FridgeFreeze units can be powered independently by either conventional 110v AC or through a supplied 12-volt external deep-cycle battery. If the unit is operated and maintained properly, it will operate for approximately 4 days using just the external battery. A solar panel trickle charger is also supplied that, if connected to the external battery, will provide sufficient power to maintain the battery during operation. This allows the unit to continue operating for an extended period. However, the solar panel must be exposed to a minimum of 7 hours of daylight each day to operate properly.

Q. What are the dimensions of each unit?

A. Each VaxiCool unit is 38 inches long, 21 inches wide, and 20.5 inches high, with an empty weight of 120 pounds.

Each FridgeFreeze unit is 38 inches long, 21 inches wide, and 22 inches high, with an empty weight of 90 pounds. These figures do not include the external battery or solar panel.

Due to the size, shape, and weight of both styles of portable refrigeration units, it is recommended that two people move them. Handles are installed on each end to facilitate movement.

Q. What is the capacity of each unit?

A. The VaxiCool unit has an internal capacity of 27 liters. It can hold approximately 12 500-milliliter (mL) vials or 60 100-mL vials.

The FridgeFreeze unit has an internal capacity of 60 liters. It can hold approximately 46 500-mL vials or 230 100-mL vials.

Q. Can the units be used on infected, contact, or suspect premises?

A. No. These units must remain outside of potentially contaminated areas at all times. The cleaning and disinfection needed on an infected, contact, or suspect premises would damage the electronic components and render the units inoperable.

Q. Are images of these units available?

A. A photograph of each unit is displayed in the NVS Logistics Catalog. If you are an NVS planner, you may request this catalog by emailing us at nvs@aphis.usda.gov.

Q. If I have questions about NVS or these portable refrigeration units, who should I contact?

A. Email us at nvs@aphis.usda.gov with any questions. More information is also available on our Web site at www.aphis.usda.gov/animal_health/emergency_management/nvs.shtml.

USDA is an equal opportunity provider and employer.

Mention of companies or commercial products does not imply recommendation or endorsement by the U.S. Department of Agriculture over others not mentioned. USDA neither guarantees nor warrants the standard of any product mentioned. Product names are mentioned solely to report factually on available data and to provide specific information.