

# Vaccine Storage and Handling

With the advent of some new vaccine technologies, such as modified-live vaccines, and those administered in ways other than injection, such as intranasals, it is more important than ever to be aware of proper handling and storage of vaccines.

Each vaccine is packaged with specific recommendations, which should be followed carefully. For all vaccines it is important to clean the area where you are going to vaccinate and use a new, clean needle for each administration (if applicable). The Guidelines point out that you need to make sure you are administering the vaccine in the way it is intended, noting that intranasal vaccines should be administered up the nose and never intramuscularly, as it could cause unintended reactions and not be protective. Have a designated individual responsible for handling and storing vaccines.

Maintain a vaccine inventory log, documenting the vaccine name, manufacturer, lot number, expiration date, date and number of doses received, and arrival condition of vaccine.

Store vaccines in a refrigerator with a separate freezer compartment because some vaccines can easily freeze and lose their potency, and it's good to keep them at a constant temperature.

Keep a working thermometer in the refrigerator and monitor the temperature twice daily. Maintenance of a log is advisable, particularly if multiple people share responsibility for temperature monitoring.

Store vaccines in the middle of the refrigerator, *not* in the door or against the back of the refrigerator.

Organize vaccines according to expiration date, avoiding wastage by ensuring that products with earlier expiration dates are used before products with later dates.

In the event of refrigerator failure, promptly remove vaccines to an adequately refrigerated container.

In the event of a power failure, keep the refrigerator door closed until power is restored or a suitable

location for the vaccines has been identified. Refrigeration can be maintained in a kitchen-sized refrigerator (20-24 cubic feet) for six to nine hours if the door remains closed. Once power is restored, promptly check refrigerator temperature to determine if vaccines have been exposed to temperatures outside of the recommended range. If the power outage is expected to be longer than six to nine hours, remove vaccines to a container that is maintained with ice and monitor the temperature in the container.

Transport vehicles should have a thermometer in the refrigeration unit or portable cooler in which vaccines are carried. Temperature should be checked each time the container is opened. (*Note: A freezer pack placed in a cooler generally is not sufficient to maintain vaccines in the proper temperature range throughout an entire day.*)

Consult the manufacturer if vaccines are exposed to temperatures outside of the recommended range.

