

Maine Center for Disease Control and Prevention An Office of the Department of Health and Human Services

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Maine Immunization Program

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Storage and Handling - FAQ's



Temperature Monitoring

How often should temperatures be recorded for refrigerator and freezer compartments where vaccines are stored?

Temperatures inside both refrigerator and freezer compartments should be measured and recorded at least twice a day: (1) at the start of the clinic day and; (2) at the end of the day at the close of clinic.

Refrigeration and Freezer Requirements

What are the required specifications for refrigerator units?

All refrigerator units must:

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- Maintain temperature (35°- 46°F) (2°- 8°C)
- Automatically defrost
- Allow for vaccine storage at least 2-3 inches away from walls and cold air vents
- Have separate temperature controls for refrigerator and freezer
- Have the thermometer placed centrally and in close proximity with the vaccines stored in the unit
- All freezer units must:
 - Maintain appropriate storage temperature between (-58°F and +5°F) (-50°C and -15°C) for frozen vaccine
- Provide adequate space to store vaccines, as well as having sufficient space for cold packs to help maintain stable freezer temperatures

Vaccine Potency

What happens to vaccine contents when vaccines are not properly stored?

Excessive heat or cold exposure can result in the loss of potency. The result is irreversible. Additionally, HPV, MMR, MMRV, rotavirus, varicella, and zoster vaccines are light sensitive. Exposure to light may cause loss of potency.

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Vaccine Expiration Dates

When the expiration date of vaccine indicates a month and year, does the vaccine expire on the first or last day of the month?

When the expiration date is marked with only a month and year, the vaccine or diluent may be used up to and including the last day of the month indicated on the vial. Any unused vaccine or diluent should not be used after this month has passed.

Vaccine Storage Locations

Why is it recommended to store vaccines in the middle of the refrigerator?

The temperature inside the refrigerator compartment is not consistent throughout. The temperature in the vegetable bins, on the floor, next to the walls, in the door and near the cold air venting from the freezer may differ significantly from the temperature in the main body of the refrigerator. Ideally, vaccines should be kept on the middle shelves, away from these areas.

Vaccine Packing and Transport

How should vaccines be packaged for transport?

Contact the vaccine manufacturer and the Maine Immunization Program for detailed instructions on packing vaccine for transport. In general, vaccine should be packed and transported in properly insulated containers. When transporting vaccine, CDC recommends using portable refrigerator/freezers designed for biomedical transport (qualified containers). The thermometers in each container should be placed alongside the vaccine and should not be in direct contact with the refrigerated/frozen packs. Frozen vaccine require transport and equipment that can maintain the temperature between $(-58^{\circ}F \text{ and } +5^{\circ}F)$ (-50°C and -15°C). Vaccines may also be transported refrigerated, however, it is necessary to carefully monitor temperatures during transport. The manufacturers' storage guidelines should be maintained throughout packing and transport and vaccines should be transferred to refrigerators and/or freezers immediately upon arrival.

If you have any questions, please contact the Maine Immunization Program at: Phone (207) 287-3746 or (800) 867-4775.