

# Checklist for Safe Vaccine Storage and Handling

Here are the most important things you can do to safeguard your vaccine supply. Are you doing them all? Review this list to see where you might make improvements in your vaccine management practices. Fill in each box with either  YES or  NO.

## Establish Storage and Handling Policies

- YES  NO 1. We have designated a primary vaccine coordinator and at least one back-up coordinator to be in charge of vaccine storage and handling at our facility.
- YES  NO 2. Both the primary and back-up vaccine coordinator(s) have completely reviewed either CDC's online vaccine storage and handling guidance or equivalent training materials offered by our state health department's immunization program.
- YES  NO 3. We have detailed, up-to-date, written policies for general vaccine management, including policies for routine activities and an emergency vaccine-retrieval-and-storage plan for power outages and other problems. Our policies are based on CDC's vaccine storage and handling guidance and/or on instruction from our state or local health department's immunization program.
- YES  NO 4. We review these policies with all staff annually and with new staff, including temporary staff, when they are hired.

## Log In New Vaccine Shipments

- YES  NO 5. We maintain a vaccine inventory log that we use to document the following:
- YES  NO a. Vaccine name and number of doses received
- YES  NO b. Date we received the vaccine
- YES  NO c. Condition of vaccine when we received it
- YES  NO d. Vaccine manufacturer and lot number
- YES  NO e. Vaccine expiration date

## Use Proper Storage Equipment

- YES  NO 6. We store vaccines in refrigerator and freezer units designed specifically for storing biologics, including vaccines. Alternatively, we keep frozen and refrigerated vaccines in separate, free-standing freezer and refrigerator units. At a minimum, we use a household-style unit with a separate exterior door for the freezer and separate thermostats for the freezer and refrigerator. We do NOT use a dormitory-style unit (a small combination freezer-refrigerator unit with a freezer compartment inside the refrigerator).
- YES  NO 7. We use only calibrated thermometers with a Certificate of Traceability and Calibration\* that are recalibrated as recommended by the manufacturer.
- YES  NO 8. We have planned back-up storage unit(s) in the event of a power failure or other unforeseen event. We perform regular maintenance to assure optimal functioning.

## Ensure Optimal Operation of Storage Units

- YES  NO 9. We have a "Do Not Unplug" sign next to the electrical outlets for the refrigerator and freezer and a "Do Not Stop Power" warning label by the circuit breaker for the electrical outlets. Both include emergency contact information.
- YES  NO 10. We keep the storage unit clean, dusting the coils and cleaning beneath it every 3–6 months.

## Maintain Correct Temperatures

- YES  NO 11. We always keep at least one accurate calibrated thermometer (+/-1°C [+/-2°F]) with the vaccines in the refrigerator; ideally, we have a continuous-temperature logger and/or temperature-sensitive alarm system.
- YES  NO 12. We maintain the refrigerator temperature at 35–46°F (2–8°C), and we aim for 40°F (5°C).

(Maintain Correct Temperatures continued on page 2)

\*Certificate of Traceability and Calibration with calibration measurements traceable to a testing laboratory accredited by the International Organization of Standardization, to the standards of the National Institute of Standards and Technology, or to another internationally recognized standards agency.

**(Maintain Correct Temperatures** continued from page 1)

- YES  NO 13. We keep extra containers of water in the refrigerator (e.g., in the door, on the floor of the unit where the vegetable bins were located) to help maintain cool temperatures.
- YES  NO 14. We always keep at least one accurate calibrated thermometer (+/-1°C [+/-2°F]) with vaccines in the freezer.
- YES  NO 15. We maintain the average temperature in the freezer at +5°F (-15°C), preferably colder but no colder than -58°F (-50°C).
- YES  NO 16. We keep ice packs or ice-filled containers in the freezer to help maintain cold temperatures.

**Store Vaccines Correctly**

- YES  NO 17. We post signs on the doors of the refrigerator and freezer that indicate which vaccines should be stored in the refrigerator and which in the freezer.
- YES  NO 18. We do NOT store any food or drink in any vaccine storage unit.
- YES  NO 19. We store vaccines in the middle of the refrigerator or freezer (never in the doors), with room for air to circulate.
- YES  NO 20. We have removed all vegetable and deli bins from the storage unit.
- YES  NO 21. If we are using a combination refrigerator-freezer unit, we do not store vaccines in front of the cold air outlet that leads from the freezer to the refrigerator (often near the top shelf).
- YES  NO 22. We check vaccine expiration dates and rotate our supply of each type of vaccine so that we use the vaccines that will expire soonest.
- YES  NO 23. We store vaccines in their original packaging in clearly labeled uncovered containers with slotted sides that allow air to circulate.

**Maintain Daily Temperature Logs**

- YES  NO 24. On days when our practice is open, we document refrigerator and freezer temperatures on the daily log twice a day — first thing in the morning and right before our facility closes.
- YES  NO 25. We consistently record temperatures on the log in either Fahrenheit or Celsius. We NEVER mix in any way how we record our temperatures. For example, if the log prompts us to insert an "x" by the temperature that's preprinted on the log, we do not attempt to write in the actual temperature.
- YES  NO 26. The logs show whom to call if the temperature in the storage unit goes out of range.
- YES  NO 27. When we change the thermostat setting, we document it in the daily log sheet's note section.
- YES  NO 28. If out-of-range temperatures occur in the unit, we document in the daily log sheet's note section who responded and when.
- YES  NO 29. Trained staff (other than staff designated to record the temperatures) review the logs weekly.
- YES  NO 30. We keep the temperature logs on file for at least 3 years.

**Take Emergency Action As Needed**

31. In the event that vaccines are exposed to improper storage conditions, we take the following steps:
- YES  NO a. We restore proper storage conditions as quickly as possible; if necessary, we move the vaccine to our planned back-up storage unit. We address the storage unit's mechanical or electrical problems according to guidance from the manufacturer or repair service.
- YES  NO b. In responding to improper storage conditions, we do NOT make frequent or large changes in thermostat settings. After changing the setting, we give the unit at least a day to stabilize its temperature.
- YES  NO c. We temporarily label exposed vaccines "Do not use" and keep them separate from any unexposed vaccines. We do not use exposed vaccines until our state health department's immunization program or the vaccine manufacturer gives us approval.
- YES  NO d. We document exactly what happened, noting the temperature in the storage unit and the amount of time the vaccines were out of proper storage conditions. We contact our state health department's immunization program or the vaccine manufacturer to determine how to handle the exposed vaccines.
- YES  NO e. We follow the health department or manufacturer's instructions and keep a record detailing the event. Where applicable, we mark the exposed vials with a revised expiration date provided by the manufacturer.

If we answer  YES to all of the above, we give ourselves a pat on the back! If not, we assign someone to implement needed changes!