Checklist for Safe Vaccine Storage and Handling

Are you doing everything you should to safeguard your vaccine supply? Review this list to see where you might make improvements in your vaccine management practices. Check each listed item with either YES or NO.

Establish Storage and Handling Policies

- YES NO 1. We have designated a primary vaccine coordinator and at least one alternate coordinator to be in charge of vaccine storage and handling at our facility.
- **YES NO** 2. Both the primary and alternate vaccine coordinator(s) have completely reviewed either CDC's Vaccine Storage & Handling Toolkit (www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf) or equivalent training materials offered by our state or local health department's immunization program.
- VES NO
 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 & Handling Toolkit 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

- 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 separate, self-contained units that refrigerate or freeze only. If we must use a house-hold-style combination unit, we use it only for storage of our refrigerated vaccines, maintaining frozen vaccines in a separate stand-alone freezer.
- **YES NO** 7. We store vaccines in units with enough room to maintain the year's largest inventory without crowding.
- **YES NO** 8. We never store any vaccines in a dormitory-style unit (a small combination freezer-refrigerator unit with the freezer compartment inside the refrigerator).
- YES
 NO
 9. We use only calibrated thermometers that have a Certificate of Traceability and Calibration Testing* ("Report of Calibration") and are calibrated every 1 to 2 years from the last calibration testing date or according to the manufacturer's suggested timeline.
- **YES NO** 10. We have planned back-up storage unit(s) in the event of a power failure or other unforeseen event.

* Certificate of Traceability and Calibration Testing ("Report of Calibration") with calibration measurements traceable to a laboratory with accreditation from the International Laboratory Accreditation Cooperations (ILAC) Mutual Recognition Arrangement (MRA) signatory body. continued on page $2 \triangleright$

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Ensure Optimal Operation of Storage Units

- **YES NO** 11. We have a "Do Not Unplug" sign (e.g., www.immunize.org/catg.d/p2090.pdf) next to the electrical outlets for the refrigerator and freezer and a "Do Not Stop Power" warning label (e.g., www.immunize.org/catg.d/ p2091.pdf) by the circuit breaker for the electrical outlets. Both signs include emergency contact information.
- **YES NO** 12. We perform regular maintenance on our vaccine storage units to assure optimal functioning. For example, we keep the units clean, dusting the coils and cleaning beneath the units every 3–6 months.

Maintain Correct Temperatures

- **YES NO** 13. We always keep at least one accurate calibrated thermometer (+/-1°F [+/-0.5°C]) with the vaccines in the refrigerator and a separate calibrated thermometer with the vaccines in the freezer.
- YES NO 14. We use a thermometer that
- **YES NO** a. uses an active display to provide continuous monitoring information
- **VES NO** b. is digital and has a probe in a glycol-filled bottle
- **YES NO** c. includes an alarm for out-of-range temperatures
- **VES NO** d. has a reset button with a min/max display (applies only to thermometers that have a data logger)
 - **NO** e. is capable of showing the current temperature, as well as minimum and maximum temperatures
- **YES NO** f. can measure temperatures within +/-1°F (+/-0.5°C)
- **YES NO** g. has a low-battery indicator

YES

- **YES** NO 15. We maintain the refrigerator temperature at 35–46°F (2–8°C), and we aim for 40°F (5°C).
- **YES NO** 16. We maintain the freezer at an average temperature of +5°F (-15°C) or colder, but no colder than -58°F (-50°C).
- **YES NO** 17. We keep extra containers of water in the refrigerator (e.g., in the door and/or on the floor of the unit where the vegetable bins were located) to help maintain cool temperatures. We keep ice packs or ice-filled containers in the freezer to help maintain cold temperatures.

Maintain Daily Temperature Logs

- **YES NO** 18. On days when our practice is open, we visually inspect the vaccine storage unit twice a day (first thing in the morning and right before our facility closes) and document refrigerator and freezer temperatures on the appropriate log. (See selections at www.immunize.org/clinic/storage-handling.asp.)
- **VES** NO 19. We document the minimum and maximum temperature readings in the refrigerator and freezer once each day, preferably in the morning.
- **YES** NO 20. We consistently record temperatures on the log either in Fahrenheit or Celsius. We never mix temperature scales when we record our temperatures.
- **YES** NO 21. If the temperature log prompts us to insert an "x" by the temperature that's preprinted on the form, we do not attempt to write in the actual temperature.
- **YES** NO 22. We follow the directions on the temperature log to call appropriate personnel if the temperature in a storage unit goes out of range.
- **YES** NO 23. If out-of-range temperatures occur in the unit, we complete the Vaccine Storage Troubleshooting Record (www.immunize.org/catg.d/p3041.pdf) to document actions taken when the problem was discovered and what was done to prevent a recurrence of the problem.
- YES NO 24. Trained staff (other than staff designated to record the temperatures) review the temperature logs weekly.
- **YES NO** 25. We keep the temperature logs on file for at least 3 years.

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Store Vaccines Correctly

YES NO 26. We post signs (e.g., www.immunize.org/catg.d/p3048.pdf) 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** 27. We do not store any food or drink in any vaccine storage unit.
- **YES** NO 28. We store vaccines in the middle of the refrigerator or freezer (away from walls and vents), leaving room for air to circulate around the vaccine. We never store vaccine in the doors.
- **YES** NO 29. We have removed all vegetable and deli bins from the storage unit, and we do not store vaccines in these empty areas.
- **YES NO** 30. If we must use a combination refrigerator-freezer unit, we store vaccines only in the refrigerator section of the unit. We do not place vaccines in front of the cold-air outlet that leads from the freezer to the refrigerator (often near the top shelf). In general, we try to avoid storing vaccines on the top shelf, and we place water bottles in this location.
- **YES NO** 31. We check vaccine expiration dates and rotate our supply of each type of vaccine so that vaccines with the shortest expiration dates are located close to the front of the storage unit, facilitating easy access.
- **YES NO** 32. We store vaccines in their original packaging in clearly labeled uncovered containers.

Take Emergency Action As Needed

- 33. In the event that vaccines are exposed to improper storage conditions, we take the following steps:
- a. We restore proper storage conditions as quickly as possible. If necessary, we label the vaccine "Do YES NO Not Use" and move it to a unit where it can be stored under proper conditions. We do not discard the vaccine before discussing the circumstances with our state/local health department and/or the appropriate vaccine manufacturers. YES NO b. We follow the Vaccine Storage Troubleshooting Record's (www.immunize.org/catg.d/p3041.pdf) instructions for taking appropriate action and documenting the event. This includes recording details such as the length of time the vaccine was out of appropriate storage temperatures and the current room temperature, as well as taking an inventory of affected vaccines. YES NO c. We contact our clinic supervisor or other appropriate clinic staff to report the incident. We contact our state / local health department and / or the appropriate vaccine manufacturers for consultation about whether the exposed vaccine can still be used. d. We address the storage unit's mechanical or electrical problems according to guidance from the YES NO unit's manufacturer or a qualified repair service. NO e. In responding to improper storage conditions, we do not make frequent or large changes in thermo-YES stat settings. After changing the setting, we give the unit at least a day to stabilize its temperature. f. We do not use exposed vaccines until our state / local health department's immunization program or YES NO the vaccine manufacturer has confirmed that the vaccine is acceptable for use. We review this information with our clinic medical director before returning the vaccine to our supply. If the vaccine is not acceptable for use, we follow our state/local health department instructions for vaccine disposition.

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

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