

# MDHHS Guidance on Vaccine Management Timeline

This handout provides guidance on vaccine management for healthcare providers. Proper vaccine storage and handling plays an important role in protecting individuals and communities from vaccine-preventable diseases. The Michigan Department of Health and Human Services (MDHHS) follows vaccine management recommendations set forth by the Centers for Disease Control and Prevention (CDC). Michigan Vaccines for Children (VFC) providers are **required** to follow additional guidelines outlined in the Michigan VFC Provider Manual which can be found at: [www.michigan.gov/vfc](http://www.michigan.gov/vfc).

## General Vaccine Management

Ensure the office has:

- An up-to-date Vaccine Management Plan, and Emergency Response Plan
  - Templates are available; visit [www.michigan.gov/vfc](http://www.michigan.gov/vfc)
- A vaccine coordinator and backup coordinator (i.e., persons responsible for routine vaccine storage and handling)
- Proper storage and handling training for anyone who works with vaccines
- Storage equipment recommended by the CDC and MDHHS:
  - Pharmaceutical-grade or purpose-built refrigerators and freezers are the best option for vaccine storage
  - Continuous temperature monitoring devices, typically known as digital data loggers (DDLs), are recommended for provider use to monitor vaccine temperatures. All VFC providers though, must use DDLs in their vaccine storage units and transport units.
  - All DDLs must have a current and valid Certificate of Calibration Testing (also known as a Report of Calibration)
  - Use DDLs with the following features:
    - A detachable probe in a buffered material (e.g., glycol, glass beads, sand, or Teflon)
    - Alarm for out-of-range temperatures
    - Low-battery indicator
    - Current, minimum, and maximum temperature display
    - Recommended uncertainty of +/-0.5° C (+/-1° F)
    - Continuous temperature monitoring and recording capabilities with a logging interval that can be programmed by the user to measure and record temperatures at least every 30 minutes
      - If no interval setting of 30 minutes, use an interval less than 30 minutes (every 5 minutes is highly recommended)
    - Temperature should be easily readable from outside the unit
    - Display current temperature, plus minimum & maximum (min/max) temperatures on an active display screen
  - For additional storage and handling guidance, refer to the MDHHS and CDC websites at: [www.michigan.gov/vaccinequicklooks](http://www.michigan.gov/vaccinequicklooks) and [www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html](http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html)

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## Complete Daily

- Assess and record current temperatures (with decimal point, including the tenth's place (i.e., 40.1°F), do not round up or down) on a temperature log twice daily, including exact time and initials
  - Refrigerator should maintain temperatures between 36.0°F and 46.0°F (2.0°C and 8.0°C)
    - Aim for 41.0°F (5.0°C)
  - Standard freezer should maintain temperatures between -58.0°F and +5.0°F (-50.0°C and -15.0°C)
  - Ultra-Cold freezers should maintain temperatures between -130°F and -76°F (-90°C and -60°C) (for the DDL it's essential to use an air-probe or a probe designed specifically for ultra-cold temperatures)
- If using a digital data logger: assess, record, and **RESET** (if required for your DDL) minimum/maximum temperatures every morning
  - For more guidance, review “MDHHS Digital Data Logger Tip Sheet”
- Make sure storage unit doors are tightly closed and sealed after opening and at the end of each workday
- Visually inspect to ensure the DDL probe is working and is centrally located with vaccines

## Complete Weekly

- Review vaccine inventory weekly; ensure there is enough vaccine in stock to vaccinate patients for 4 weeks without running out and to allow for vaccine delivery time
- Monitor vaccine and diluent expiration dates at least weekly; rotate stock so soon-to-expire vaccine is used first
  - If you are a VFC provider and determine you have VFC vaccine that will expire within 6 months and you cannot use it, contact your Local Health Department (LHD) for guidance
  - Remove expired vaccine or diluent **immediately** from the storage unit(s) and mark “EXPIRED”
    - If VFC vaccine is involved, contact your LHD
- Download and review temperature data from the digital data logger **at least weekly** and anytime it goes out of range to ensure timely identification
  - Document appropriate response to any temperature monitoring issues
  - Ensure digital data logger is properly set up and restarted after each download
- If more than one monitoring device is in place, such as alarm system and DDL—document weekly calibration checks to compare accuracy (REQUIRED FOR LHDs)
  - The 2<sup>nd</sup> temperature monitoring device must be within 3° of the control monitoring device (DDL)

## Complete Monthly

- Monitor and balance inventory monthly by maintaining an inventory log
  - If you are a VFC provider, perform a balance within the Vaccine Inventory Management (VIM) module in the Michigan Care Improvement Registry (MCIR)
- Test alarm systems on a monthly basis

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- Examine and clean the coils and motor of each storage unit per manufacturer guidance; clean units to discourage bacterial and fungal growth
  - Consider contracting with a local repair company for regular maintenance
- Check door seals of each storage unit
  - Visually inspect the seals for wear and tear – the seal should not be torn or brittle, and there should not be gaps between the seal and the body of the unit when the door is closed

## Complete Annually

- Perform yearly trainings to keep all staff up to date on vaccine management
  - Be sure to train all new staff, including temporary staff
  - If you are a VFC Provider, complete the required VFC Annual Training (at minimum, the primary and backup coordinators must complete these); guidance is available at [www.michigan.gov/vfc](http://www.michigan.gov/vfc)
- Complete yearly updates on all vaccine management documents, such as the Vaccine Management Plan and the Emergency Response Plan, and review these with all staff

## Key Points to Remember

- Dormitory-style storage units cannot be used to store vaccines; those units **must** be replaced
- VFC providers are required to follow the guidelines within the Michigan VFC Resource Guide and the VFC Provider Manual; these must be saved/bookmarked and can be found at [www.michigan.gov/vfc](http://www.michigan.gov/vfc)
- Be sure to take care of all vaccine shipments as soon as they arrive
- Keep a maintenance logbook to record any repairs or general maintenance to vaccine storage equipment
- Respond to any out-of-range temperatures and alarms including minimum/maximum temperature readings **immediately** by notifying the vaccine coordinator, backup coordinator or supervisor
- Always refer to the manufacturer’s product information for the most up-to-date storage equipment guidance
- Know the resources: review MDHHS guidance and CDC’s Storage and Handling Toolkit for current information, review CDC trainings “[You Call the Shots](#)” and “[Keys to Handling Your Vaccine Supply](#)” or the MDHHS Immunization Nurse Education “Vaccine Management” module

Complete the “[Checklist for Safe Vaccine Storage and Handling](#)” at the Immunization Action Coalition at [www.immunize.org](http://www.immunize.org) to ensure you are safeguarding your vaccine supply