

Using accurate [thermometers](#) protects your vaccine. It helps make sure you give viable vaccines to your patients. The Centers for Disease Control and Prevention (CDC) requires the use of thermometers with a current certificate of calibration for monitoring temperatures in each vaccine storage unit. The thermometers must be calibrated by an ILAC/MRA accredited laboratory or to ISO/IEC 17025 standards. Providers should recalibrate thermometers based on manufacturer recommendations. The CDC and most manufacturers recommend recalibration every one or two years.

This guide addresses two issues:

- What to do when a manufacturer doesn't give a recommendation for recalibration.
- The criteria for allowing trained staff to recalibrate thermometers.

When the manufacturer says a thermometer does not need recalibration:

If the owner's manual and the manufacturer don't have a recommendation for recalibration:

- The provider is required to recalibrate the thermometer within two years of the purchase date of the thermometer.
- In the case of built in thermometers, providers must have the thermometer recalibrated within two years of purchase OR purchase a separate thermometer that meets the CDC requirements and can be routinely recalibrated.

Required information on the certificate of calibration:

- If calibrated by an ILAC/MRA accredited laboratory, the certificate must contain:
 - Clearly identifiable laboratory accreditation
 - Name of device
 - Model number
 - Serial number
 - Date of calibration
 - Measurement results indicating unit passed test and uncertainty (recommended uncertainty is +/- 1°F (0.5°C))
- If calibrated by a laboratory that is not accredited by ILAC/MRA, the certificate must contain:
 - Name of device
 - Model number
 - Serial number
 - Date of calibration
 - Measurement results indicating unit passed test and uncertainty (recommended uncertainty is +/- 1°F (0.5°C))
 - Measurement results for the device
 - Statement that calibration testing conforms to ISO 17025

Organizations that routinely recalibrate medical instruments and have trained calibration staff:

Trained staff can recalibrate or validate thermometers if all of the following criteria are met:

- The person who recalibrates or validates thermometers routinely calibrates other medical instruments for the organization.
- The technician follows ISO 17025 testing standards. Just using a certified ISO 17025 thermometer to compare temperatures does not match ISO 17025 testing standards.
- The technician must create calibration certificates for the thermometers which match Vaccine For Children (VFC) requirements. Work orders are not valid calibration certificates.
 - Exact measurement results must be given on the certificate. Listing only Pass/Fail marks do not show the thermometer's actual uncertainty range.
 - The certificate must include a business header, as well as the name, title, and qualifications of the staff recalibrating thermometers.
 - The ISO-17025 statement must be visible on the certificate.
- The office has a written policy clearly documenting their practices, how they meet the required standards, and assure assigned staff are qualified to recalibrate medical instruments.
- Notify the Local Health Department or Office of Immunization and Child Profile to assure certificates meet requirements.

For listings of accredited laboratories:

A2LA: <http://www.a2la.org/dirsearchnew/newsearch.cfm>

L-A-B: <http://www.l-a-b.com/content/directory-accredited-labs>

ACLASS: <http://www.aiclasscorp.com/search-accredited-companies.aspx>

IAS: [http://www.iasonline.org/Calibration Laboratories/CL.html](http://www.iasonline.org/Calibration_Laboratories/CL.html)

PJLA: <http://www.pjlab.com/search-accredited-labs>

A listing of signatory bodies outside of the US can be found on the ILAC website: <https://www.ilac.org>