

Vaccines for Children Thermometer Requirements and Guide

Temperature Monitoring Devices

As of January 1, 2018 Oklahoma VFC providers must use continuous temperature monitoring devices (digital data loggers) with a valid and up-to-date certificate of calibration to monitor VFC vaccine temperatures during routine clinic storage, transport of vaccine between providers and during offsite vaccination clinics. A provider's back-up thermometer must also be a continuous temperature monitoring device. The use of digital data loggers is required as they provide more accurate and comprehensive documentation of storage unit temperatures.

To meet VFC program requirements, the device must be equipped with:

- A temperature probe
 - * A buffered probe is recommended
- An active temperature display which can be easily read from the outside of the unit
- Continuous monitoring and recording capabilities where the data can be routinely downloaded
 - * Beginning January 2018 Oklahoma VFC Providers will be required to check and record the minimum and maximum (min/max) temperature once per day, preferably at the beginning of the day. The min/max must be recorded on the Oklahoma Temperature Log
- A current and valid Certificate of Calibration Testing issued by an International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) accredited laboratory or, if not ILAC MRA-accredited, the certificate must contain the measurement results and a statement indicating it meets ISO 17025 standards

The following are additional recommended features for digital data loggers:

- Alarm for out-of-range temperatures
- Current temperature, as well as minimum and maximum temperature display
- Low battery indicator
- Accuracy of +/- 1°F (0.5°C)
- Memory storage of at least 4,000 readings (device will not rewrite over old data and stops recording when memory is full)
- User programmable logging interval (or reading rate) recommended to measure and record
- Records temperatures at a maximum time interval of every 30 minutes

Back-up Temperature Monitoring Devices

Oklahoma providers must have a readily available continuous temperature monitoring back-up device (digital data logger) with a current and valid certificate of calibration testing. Readily available means the thermometer is available to monitor temperatures as required. CDC recommends that the back-up thermometer be maintained on site.

Certificates of Calibration

Certificates of Calibration testing provide confidence that the temperature monitoring device is measuring temperatures accurately. All storage units containing VFC vaccine must have a calibrated thermometer with a current certificate of calibration. The Oklahoma Immunization Service policy requires calibration testing every two years.

All certificates of calibration must include:

- * Model/device name or number
- * Serial Number
- * Date of Calibration Testing (Report or Issue Date)
- * Instrument Passed Testing (Instrument in Tolerance) with a recommended uncertainty of +/-1°F (+/-0.5°C)

Manufacturer/Vendor Websites:

Control Company Thermometers available from Novatech USA

<http://www.novatech-usa.com/Products/Digital-Traceable-Thermometers>

VWR <https://us.vwr.com/store/catalog/product>

Delta TRAK Inc. <http://www.deltatrak.com/>

Control Solutions, Inc. <http://www.vfcdataloggers.com/>

Dickson Co. <http://www.dicksondata.com/products/VFC320>