

Using appropriate thermometers protects vaccine and provides safe and effective vaccines for patients. This guide shows federal and Washington State requirements for vaccine thermometers.

Thermometer Requirements

Clinics storing state-supplied vaccine must:

- Have a primary thermometer for each storage unit compartment.
- Have at least one backup thermometer for the clinic.
- Existing clinics must use digital min/max thermometers, data loggers or temperature monitoring systems
- Newly enrolling clinics must use data loggers or continuous temperature monitoring systems

Thermometers must meet the following specifications:

- Be a digital min/max thermometer, data logger or temperature monitoring system
- Have a fluid filled or buffered probe
- Have a digital display
- Temperature systems must allow temperature monitoring access on site
- Have a current certificate of calibration with:
 - Identifiable accreditation from an ILAC lab or by ISO 17025 standards
 - The name, model, and serial number of the device
 - The date of calibration
 - Measurement results indicating the thermometer passed testing and has an undocumented uncertainty within +/-1F
- **In 2018, the use of data loggers or temperature monitoring systems will become a requirement, and all other thermometers will not be allowed.**

Clinic Thermometer Practices

- Record storage unit temperatures on a temperature log twice a day
- If using a digital min/max thermometer, record min/max temps once a day in addition to twice a day temperature recording.
- If using a data logger or temperature system, view temperature graph once a day in addition to twice a day temperature recording. Download data once a week.

Recertification

The Centers for Disease Control and Prevention (CDC) requires thermometers be recertified every 2 years or earlier, based on manufacturer guidelines. This assures thermometers maintain their

accuracy after purchase. When a thermometer is recertified, clinics must receive a new certificate of calibration.

Since 2014, the CDC has recommended providers use digital data logger thermometers or temperature monitoring systems. These thermometers store temperature information which can be saved and viewed on a computer. The Office of Immunization and Child Profile requires providers to move to data loggers/temperature systems in order to meet the CDC's 2018 requirement.

Providers who aren't using digital data loggers/temperature monitoring systems, digital displays and buffered probes during a compliance site visit will receive follow-up education.

Recommended Digital Data Logger Characteristics:

- All thermometer features listed on this guide
- Programmable temperature logging interval which stores at least 4,000 readings
- Low battery indicator
- Software which saves data to the computer and clears the data logger memory
- Alarm for out of range temps

Recommended Temperature Monitoring System Characteristics:

- All thermometer features listed on this guide
- Programmable temperature monitoring interval
- Alarm for out of range temps

Below is a sample list of data loggers or temperature monitoring systems meeting thermometer best practices. Providers can purchase any thermometer from any manufacturer if it meets requirements.	
Model VFC5000-TP LogTag TRED-30-7	Control Solutions www.vfcdataloggers.com
Control Company 6400	Control Company http://www.control3.com/6400p.htm
Fridge Tag 2	Berlinger http://www.berlingerusa.com/sitemonitoring/
Model T5b	STANLEY Healthcare www.stanleyhealthcare.com
PharmaWatch System with buffered probe	AmericanPharma Technologies, Inc. www.ameri-pharma.com
SensoScientific Data Logger	SensoScientific, Inc. www.sensoscientific.com/vaccine-vfc/