



Using a Data Logger to Ensure Proper Vaccine Management

Thermometers are a critical part of good storage and handling practices. A storage unit is only as effective as the temperature monitoring system inside. Accurate temperature history that reflects actual vaccine temperatures is imperative to effective vaccine management. Every freezer and refrigerator unit used to store vaccine is required to have a certified calibrated thermometer. The Centers for Disease Control and Prevention (CDC) now recommends the use of a data logger, a certified calibrated digital thermometer with a glycol-encased (or similar temperature buffer) probe that is able to provide and store temperature data.

CDC recommends that data loggers have the following specifications and functionality:

- Provides continuous monitoring information with an active display;
- Displays current temperature, as well as minimum and maximum temperatures (visible from the outside of the vaccine storage unit);
- Reset button for the maximum and minimum temperatures recorded in a period;
- Hi/Lo alarm for out-of-range temperatures;
- Low battery indicator;
- Memory storage for approximately 4,000 or more readings. (Data should be downloaded weekly and the logger cleared/reset to ensure adequate memory capacity.);
- Device will not write over old data-stops recording when memory is full;
- Detachable temperature buffered probe (or a logger that allows the probe to remain in the unit undisturbed while the temperature is displayed and data is recorded via computer);
- User programmable logging interval (or sampling rate) of 15 minutes or less;
- Accuracy of +/- 0.5 degree Celsius or +/- 1 degree Fahrenheit as certified by a current Certificate of Traceability and Calibration.

Please note that the Florida Department of Health, Immunization Section cannot endorse or recommend specific products or brands. Below is a list of vendors who sell products that adhere to CDC specifications. This vendor list is not all-inclusive and is only meant to aid you in your selection of a data logger. The terms and conditions related to your purchase are between you and the vendor you choose.

Data logger manufactures and distributors:

Vendor	Website
Control Solutions Inc.	www.vfcdataloggers.com
Berlinger USA, LLC	www.berlinger.ch/en/berlinger/main/ambient-tag/temperature-monitoring/fridge-tag2.html
Dickson	www.dicksondata.com/products/find/data-logger
Lascar Electronics	www.lascarelectronics.com/usb-data-logger.php?panelchooser=1&cat[]=63
Accsense	www.accsense.com