## A Step-By-Step Guide to Selecting and Using a Data Logger for Vaccine Inventory

Follow CDC recommendations & Follow manufacturer instructions for **VFC** requirements set up http://www.cdc.gov/vaccines/recs/storage Detachable buffered probe /toolkit/storage-handling-toolkit.pdf Current/valid ISO17025 certificate Use Immunization program of calibration testing resources Device stores data Keep staff skills and capabilities in mind Take immediate Read Min/Max/ action when alarm **Current temperature** is triggered. twice daily Check for out of range • If needed, move temperature alarms vaccines to correct temperature Download and review data weeklv • Call immunization program Stop & check when alarm triggered Call vaccine manufacturer Assure probe is with vaccine in center File monthly reports for three years

of unit

For more information go to: immunizationmanagers.org/VSH

Educational resource created with support from Berlinger USA

## **USING A DATA LOGGER – THE DETAILS**



- Detachable temperature probe in buffered material (e.g. bio-safe glycol)
- Check for availability of training tools to support providers and staff before purchasing
- ISO 17025 calibration certificate
- Continuous temperature recording: Minimum every 15 minutes
- Memory: Minimum 4,000 readings or 39 days
- Operating range: -25<sup>°</sup>c to +55<sup>°</sup>c (-13<sup>°</sup>F to +133<sup>°</sup>F)
- Uncertainty/Accuracy: ± 0.5°c
- Resolution: 0.1≌c (or 1 decimal point)
- Place probe in the middle of the unit with vaccines.
- Thread probe wire through door hinge and tape in place (inside & outside the unit).
- First week: reveals storage equipment temperature issues right away
- Read and record temperatures 2x daily noting data/time/temp/initials
  - Note: Initials may be in a separate log book
  - Some data loggers offer this feature
- Download and review reports weekly

   PDF reports simplify record keeping
- Take immediate action: when there is an alarm
- Move vaccines to a storage unit operating at the correct temperatures
- Print report and look for clues to the problem
  - E.g. Is the ave. temperature 5.0<sup>2</sup>c (41<sup>2</sup>F)? If not it is too cold or too warm in the unit
- Send alarm information to immunization program and vaccine manufacturer
- Alarm reports require the duration of the alarm period and the highest or lowest temp. during the alarm
- Store monthly reports per state/VFC requirements

- Battery life: Minimum 6 months
- Track when temperatures are checked: Minimum 2x/day
- LCD display with: current, Min and Max temperatures visible PLUS alarm status OK or Not OK
- Report: Shows alarms, temperature ranges and duration of excursions
- Assess custom software to avoid installation issues especially with hospitals and clinics
- Data export capability: Excel, CSV, Txt
- Know where to find the ISO certificate
   Check for an expiry date on the data logger
- Both audible and visual alarms are preferred

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Stabilize

vial with

probe on

shelf

09.16.20 12 Ext. Sensor



Thread flat wire through gasket on hinged side of unit

## Duct tape wire to wall

L' Pres SC

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