Cold Chain Vaccine Storage Monitoring and Alarming

Single-Use Temperature Loggers Safeguard Supplies

In light of the [Center for Disease Control and Prevention's](#) guidelines for safe cold chain vaccine storage, pharmacies have an increasing need for electronic temperature monitoring and alarming. The new measures are aimed at keeping these fragile supplies stored at a constant of 35-46°F (2-8°C) to avoid spoiling, which the CDC claims occurs in 20-33% of providers. CAS DataLoggers received a call from a pharmacy director storing children's vaccines who wanted a temperature monitoring product in line with the latest CDC recommendations. The leading question was, "What have you got that's easy to use?"

INSTALLATION

In response, CAS DataLoggers provided the customer with 25 SwiTrace I-Plug USB Temperature Data Loggers. Using the provided adhesive pouches, staff placed one into each of the pharmacy's two vaccine storage refrigerators storing the vaccine supplies. Each data logger used an internal sensor ranging from -22°F to 158°F (-30°C to +70°C) to record temperature at a 90-second response time, closely monitoring even slight changes in temperature. All recordings are accurate to 0.5°C.

Before installation, the product could be slowly damaged by low temperatures without any signs of freezing, but now the smart LEDs on the loggers provide clear visibility to offer staff the temperature status at a glance.

USAGE

Each temperature logger is started with a quick button press and stopped the same way. When the product is in normal temperatures, the OK status light is clearly shown, and alarm status is indicated by either the Under or Over lights whenever safe temperatures are exceeded. Their small size and light 15g weight makes them easy to place and transport and installation is over quickly since staff don't have to deal with any cables or interfaces.

Users can set sampling rates for the I-Plug loggers from as often as every second to once every 24 hours: in this case the director has set them for a temperature check every 15 minutes. Each temperature logger's 5,000 sample memory and 1-year battery life (rechargeable via PC) ensure long recording periods.

To get the data after recording is finished, staffers just use the built-in USB interface to plug the data loggers into the office PC and read the data, with no USB drivers required. Each single-use device carries a 1-yr warranty, and after use, staff just recycle them and place another in the fridge.

Software

Using the free downloadable software, staffers send the data online in a database where they can view and print out detailed reports showing all the relevant temperature data. These visualizations not only prove best practices and improve product safety but also identify temperature fluctuations within the fridges so employees can take additional measures to stabilize their vaccines.

Compliant with Guidelines

The SwiTrace I-Plug data loggers also included a free Calibration Certificate available online expressly for the pharmaceutical industry, which further complies with the CDC guidelines. Additionally, direct-to-Web data transmission and traceability portals are also available for tracking and tracing settings, readings and displaying graphs online. This can be useful in cases when staff need to ship any of their products and prove to receivers that it was kept at safe temperatures throughout the trip.

Benefits

The customer's pharmacy has streamlined their medical monitoring and alarming with the I-Plug temperature loggers which help safeguard their cold chain vaccine storage. Ideal both for their fixed application and also for any transport in the future, the single-use temperature loggers ensure accurate monitoring for their temperature-sensitive products and services, increasing product safety. The built-in USB interface simplifies downloading data to a PC, and there's no registration required or software drivers to install, which saves considerable time during setup.

For more information on SwiTrace I-Plug USB Temperature Data Loggers, cold chain vaccine storage or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.