APPLICATION NOTE

CAS DATALOGGERS

Ten Best Practices For Proper Vaccine Storage

Accsense Monitoring Systems Help Protect Your Valuable Assets

Hospitals and clinics storing vaccine supplies are under ever-increasing regulatory pressure to not only protect inventory but also to produce electronic documentation of temperature data. At CAS DataLoggers we supply our Accsense Monitoring systems to give you peace of mind, whether you're protecting your vaccine storage, medical drugs, blood products, or cryogenic samples.

From a recent report from NBC News, in October 2017, the Ventura County Health Care Agency improperly handled a large number of vaccine doses which potentially reduced the effectiveness. This is far from a rare instance. Their list is long and includes:

1,552 families in Northern California in September 2015
4,000 patients in Los Gatos, CA in 2014/2015
2,000 patients in Ohio in 2009
35,000 does of Flu vaccine in Oregon/Washington in 2008

These types of situations are far too common and can easily be avoided by following proper storage, handling and transport of vaccines from the manufactuer to the displensing location. To ensure that the effectiveness of vaccines and pharaceuticals is maintained and eliminate the need to re-vaccinate thousands of patients and save the associated costs, temperature monitoring and alarming solutions should be utilized.

We have provided Accsense temperature monitoring systems for many customers including Stanford Hospital and Clinics, Boston Children's Hospital, the Cleveland Clinic Foundation, and Children's Hospital Los Angeles, among many others.

We also offer NIST-Traceable Calibration Certificates, Temperature Probes, and Thermal Buffers for your specific application. Read on to learn ten best practices for proper vaccine storage and how these can help protect your vaccine supply!

1. **Use an automated temperature monitoring system:** The Accsense A2-05 Temperature Data Logger connects to your facility's medical refrigerators and freezers to provide automated monitoring for every storage unit.

2. **Select a system with high accuracy:** Many available systems have such a low accuracy that they threaten vaccine safety (their total uncertainty may be as high as +/- 3°C for thermocouple-equipped devices).

3. **Match the system to the sensor type(s) you plan to use (thermocouples, etc):** Whatever sensor type or temperature range you need to monitor (for vaccines, 2-8°C), Accsense can cover it. Common temperature sensors include Thermocouples, Thermistors, and RTDs.

4. **Make sure your device has remote alarm capability:** Many existing systems only have a local LED alarm! If personnel arrive onsite and find that the LED is already flashing, it's probably already too late to save the vaccine supply inside. To prevent this, you need local AND remote alarm capability to notify users anywhere, anytime.

5. **Use a solution with internet connectivity:** If your system's not online, it can't provide voice messaging, emails or texts to users in the event of a temperature excursion during off-hours!

6. **Guarantee real-time data access:** Many systems log data, but can't relay it over a network. Staff have no way to view temperature data short of physically plugging the datalogger into a PC. By contrast, Accsense pods send their collected data to the secure Accsense cloud servers so you can store and see the data whenever you want.

7. **Electronic documentation:** By now, Regulatory Compliance via Electronic Documentation is a well-known necessity in life science. To this end, Accsense securely encrypts data in line with several industry regulations (HIPAA, etc).

8. **Plan for power & internet outages:** You'll want to ensure that you'll get an immediate notification of Power or Internet outages, and that your system will continue to log/buffer data.

9. **Specify a turn-key system:** Requesting a monitoring system with turn-key operation means you just have to plug in the pods and let them monitor your storage units.

10. **Find an experienced solutions provider:** At CAS DataLoggers we provide free on-call technical support on all our Accsense systems.

The Accsense A2-05 Temperature Data Logger

Given that most VFC refrigerators contain vaccines valued at $30,000 to $60,000, isn't a temperature monitoring system a low price to pay for peace of mind?

Often, just one Accsense A2-05 pod can cover all your monitoring points, with inputs for external sensors including 2 RTDs and a thermocouple. The A2-05 pod is available either as the A2-05 Ethernet Temperature Data Logger or as the A2-05W WiFi Temperature Data Logger.

The Accsense 3-Year Monitoring & Alarming Plan

With Accsense, temperature recording, alarming, and notification are all fully automated, and you can view data online from any Internet-enabled device—desktop, laptop or smartphone!

Our 3-Year Complete Monitoring Plan includes SMS text messaging, emails, and sequentially-dialed voice messages, with the ability to design custom callout lists for each monitoring point. 24/7 access to your data–that's the Accsense advantage.

For more information on the Accsense Vaccine Storage Temperature Monitoring Kit, vaccine storage, or to find the ideal solution for your application-specific needs, contact a CAS Data Logger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.