

Prevent Vaccine Spoilage: Temperature Monitoring Systems

BLOG

Temperature Monitoring Systems to Prevent Vaccine Spoilage

Josette Weinstein, Marketing Coordinator

In the past 60 years, vaccines have helped eradicate diseases and prevent more than 2.5 million deaths each year.¹ However, the history of vaccines has been far from glamorous; mostly due to the recent controversy that has caused vaccinations to be the hottest debate topic on parenting Internet forums and playgrounds nationwide.²

Ensuring Proper Vaccine Temperature Conditions In-Transit

Every August, the Centers for Disease Control and Prevention (CDC) celebrate National Immunization Awareness Month (NIAM) highlighting the benefits that vaccines have, not only for an individual but for the entire human population. Just in time for NIAM, the 2015 Google Science Fair finalist, Anuradh Ganesan, has designed a futuristic device that will save the lives of 1.5 million children each year.³ Growing up in a remote area of India, Ganesan experienced first-hand the horrors of going without proper vaccinations. To make things worse, more often than not, when these vaccines did arrive, they were spoiled due to improper temperature conditions that occurred in-transit.

Now, only 15 years old, Ganesan was inspired to create a mobile vaccine refrigeration device that could successfully transport life-saving vaccines across long distances without the need for ice or electricity. His revolutionary device is called the VAXXWAGON and has the ability to use vapor compression to keep vaccines at between 2 and 8 degrees Celsius for extremely long periods of time. ⁴ With the ability to attach to the back of a bike, this machine could change the way vaccines are transported into remote areas around the world.

Preventing Vaccine Product Loss

Whether you're trying to ensure the correct temperature of vaccines traveling by bike to remote areas or more conventional methods such as a cooler traveling between hospital departments, the message is still the same; it doesn't take much for a vaccine to spoil. The CDC estimates that hundreds of thousands of vaccine doses are thrown out each year due to improper refrigeration resulting in over \$20 million in annual product loss across US hospitals. ⁵ The wasted doses could have been administered to help fight against dangerous diseases such as Polio, Mumps, Measles, Whooping cough, and the flu which can be fatal if contracted. This leaves people vulnerable and allows for the diseases to spread to others who have not been vaccinated.

Eliminate Manual Data Collection and Meet Compliance Standards

Implementing a Vaccine Compliance Sensor would enable pharmacies to ensure that vaccines and other medications are stored and handled at safe temperatures to avoid possible infection or spoilage while in the pharmacy or during transportation. To ensure compliance standards such as the CDC and the Joint Commission are met, facilities should implement a temperature and environmental monitoring system. These systems automatically record and track data ensuring vaccines and other strict

temperature-controlled assets like blood, lab samples, and tissues are safe for patient use. A temperature monitoring solution would eliminate the need for manual reporting, which is often unreliable and inaccurate. The system would automatically send alerts when environmental conditions are sensed at above or below safe parameters, 24/7.

[Learn More](#)

To learn more about temperature and environmental monitoring solutions and how they can help your facility meet compliance standards and prevent vaccine spoilage, download the [CenTrak Environmental Monitoring Overview](#).

References:

1. [11 Facts About Vaccines](#)
2. [12 Myths and Facts about Vaccines](#)
3. [VAXXWAGON: An Innovative Eco-Friendly, "No Ice, No Electric" Active Refrigeration System for Last-Leg Vaccine Transportation](#)

Related Blogs

\\
\\
[Protecting Clinicians: Best-Practice Playbook for Staff Duress Systems](#)\\

\\
[Read More](#)

\\
\\
[Seeing Beyond the Technology: AI and RTLS as a Catalyst for Human-Centered Care](#)\\

\\
[Read More](#)

\\
\\
[BLE Asset Tracking: A Comprehensive Guide to Optimizing Hospital Operations](#)\\

\\
[Read More](#)

\\
\\
[Clinical Excellence Consulting Program: Driving Sustainable Transformation Through Technology and Partnership](#)\\

\\
[Read More](#)

\\
\\
[BLE Staff Duress Systems: A Comprehensive Guide to Protecting Healthcare Workers](#)\\

\\

[Read More](#)

\\

\\

[Bosch Security Escort System Is Ending - Discover the Best Replacement Technology\\](#)

\\

[Read More](#)

\\

\\

[Enhancing Workplace Safety in Senior Care: The Joint Commission's New Accreditation Criteria\\](#)

\\

[Read More](#)

[Contact Us](#)

CenTrak provides facilities with data-driven insights, creates a safe and efficient environment for staff, and enhances the healthcare experience for patients, residents, and their families.

[Get in touch](#)