



Application Note • Pharmaceutical August 2018

# How to secure your vaccine storage

### Background

One of the most significant topics of the public health community is today's vaccines and immunizations. Vaccines not only saves millions of lives, but they are also the reason for eradication of major diseases such as smallpox. Most people understand the basics of vaccines, but many are not familiar with the science and regulations behind them. Vaccines are classified as biological products that can become inactive over a period, e.g. if a vaccine is exposed to a temperature below or above the recommended range, the vaccine have a decreased potency, reducing its effectiveness and protection. Temperature control during vaccine storage and transportation, is therefore mandatory and the regulations must be followed strictly.

#### Vaccine storage challenges

One of the biggest concerns when handling vaccines is how much heat they are exposed to during their lifecycle. The storage temperature for most types of vaccines is +2 to +8°C, whereas only extremely few can tolerate sub-zero temperatures without losing potency or being destroyed. Therefore, it is extremely important to control the cold chain.

This has resulted in many pharmaceutical companies investing in refrigerators and cold storage facilities that can easily be transported. With strict regulations for providing adequate storage conditions, the companies are required to get regular inspections, complete annual calibrations of the temperature measuring systems and place the equipment in suitable areas, ensuring that the vaccines not are exposed to temperatures that could affect their performance.

#### Guidelines for vaccine storage

- Keep the vaccine storage temperature between +2 to +8°C.
- Secure the temperature limits by continuously monitoring the temperature in your vaccine refrigerator or cooler.
- Use a data logging system with high accuracy to ensure accurate temperature measurements within a tolerance of +/- 0.1°C.

For more information on <u>TrackSense Data Loggers</u> or to find the right solution <u>for your needs:</u>



#### Suitable Solutions from Ellab

Ellab provides a broad selection of <u>wireless data loggers</u> that ensures accurate temperature measurements within the requested tolerance of +/- 0.1°C. Furthermore, the loggers can be equipped with programmable <u>LED indicators</u>, providing <u>real-time assurance</u> that the equipment/product has maintained its temperature from start to finish. This is ideal for the continuous measurement and data logging of temperature sensitive vaccines or pharmaceuticals in refrigerators and coolers.

## Benefits of choosing Ellab data loggers for vaccine storage

- Stable and reliable <u>data loggers</u>
- Real-time data with <u>SKY option</u>
- <u>LED indicator</u> to provide instant logger status
- Reliable monitoring of vaccine refrigerators and coolers

