ZEBRA CAPTURE YOUR EDGE

Put Your Trust in Technology

How Temperature Transparency Improves Public Confidence in the COVID-19 Vaccine

The overall success of the COVID-19 vaccine rollout is not solely contingent on ensuring supply meets demand or maximizing distribution speeds. While both are important aspects of the equation, the true determining factor that will ultimately make or break our ability to combat the pandemic is the concept of public confidence. A vaccine's impact is only as strong as the number of people willing to receive it. Without widespread public confidence in the COVID-19 vaccine, the finish line of this devastating global health crisis will remain far out of reach.

Enhancing public confidence in their readiness to receive the COVID-19 vaccine must be among our top priorities. In the current reality, it's a matter of life and death.

A general lack of public confidence in vaccines isn't new. In fact, the World Health Organization listed vaccine hesitancy as one of the top 10 threats to global health in 2019. The skepticism has only intensified during the pandemic, especially after the first two COVID-19 vaccine candidates from Pfizer-BioNTech and Moderna were researched, developed, and approved at an unprecedented pace. A Pew Research Center study released in December 2020 reported that just 60% of Americans intend to receive the COVID-19 vaccine. However, nearly half of the 40% who reported that they didn't intend to get vaccinated said they would potentially change their mind in the future once more information about the vaccine's safety and effect on recipients becomes available.

Considering public confidence in vaccinations is already a delicate issue, there's an extremely thin margin for temperature maintenance error on the COVID-19 vaccine cold chain. Public confidence in vaccines is directly linked to transparency, scientifically based decision making, and ease of use. In that sense, there's never been a greater need for Temperature Monitoring and Sensing Technology that confirms every COVID-19 vaccine is manufactured, stored, and distributed in optimal temperature settings that are guided by science. Because of varying profiles of COVID-19 vaccines, enhancing public confidence will require full transparency of its temperature handling requirements. The primary vaccine portfolios differ in temperature profiles and each require strict temperature maintenance protocols when shipped and stored amid multiple hand-offs along the cold chain. Failing to adhere to the mandatory temperature standards can result in heat excursions that damage the vaccine and potentially render it ineffective or unfit for use.

Temperature Monitoring and Sensing Technology can help identify potentially damaged vaccines by simplifying the complex nuances of temperature maintenance. Each member of the cold chain, ranging from manufacturers to distributors and ultimately healthcare workers, can leverage Temperature Monitoring and Sensing Technology to ensure that the vaccines in their possession remained unharmed from heat damage from one hand-off to the next. In turn, individuals who may have been skeptical about the handling of the vaccine will have the reassurance they need to feel comfortable receiving it – thus increasing vaccination rates across the global population.

Vial Level Visual Indication

A proactive way to foster trust at the point of vaccination is by offering visual evidence that confirms the administered vaccine has been handled according to the specified temperature requirements at each stage of distribution. Vaccine Vial Monitors, a form of Temperature Monitoring and Sensing Technology placed on each individual vial during manufacturing, provides a visual indication that reveals potential heat damage to healthcare workers and recipients. The simplified, easy-to-read label gives a visual cue to help access the potentially damaging heat exposure the specific vial has experienced. From a recipient's perspective, the Vaccine Vial Monitor is the only resource available for confirming the vaccine has not been damaged by heat exposure– serving as the last line of defense until it is administered.

Temperature Traceability

By heightening the temperature awareness of every COVID-19 vaccine handler, Temperature Monitoring and Sensing Technology establishes an increased level of accountability with the public. From detailed temperature records to actionable location insights, each level of technology adds its own source of transparency to the cold chain that provides vaccine visibility from the first to last mile. So instead of merely hoping that compliance protocols were followed, front line workers can take matters into their own hands by referencing electronic temperature sensors and single-use temperature indicator cards that closely monitor the temperature settings when vaccines are inside shipping containers or insulated packages. In turn, any doubt from recipients about the status of the incoming vaccines is eliminated.

Equal Vaccine Accessibility

The rate of vaccine accessibility is especially poor within unreachable rural areas and underserved inner-city neighborhoods that have minimal access to extensive healthcare systems, financial stability and basic amenities. These are communities with exceedingly low vaccination rates and, as we've seen during the pandemic, are among the hardest hit by the virus. Providing equal access to high volumes of effective COVID-19 vaccines involves several additional complexities inherent to their location and economic status. However, assuring their confidence in the vaccine's accessibility is highly critical to ending the pandemic. The integration of Temperature Monitoring and Sensing Technology can help bridge that resource gap to improve COVID-19 vaccine accessibility and increase vaccination rates within the regions that need it most. By utilizing Vaccine Vial Monitors and Temperature Indicator Cards, small healthcare facilities, pharmacies and pop-up clinics in these areas can preserve trust within their communities by ensuring safe distribution.

Zebra's Temperature Monitoring and Sensing Technology Helps Enhance Public Confidence

In an effort to help society reach herd immunity, Zebra Technologies is striving to increase public confidence in the COVID-19 vaccine by empowering cold chain operators with Temperature Monitoring and Sensing Technology that elevate the level of transparency with vaccine recipients. Our diverse product line of Electronic Temperature Sensors, TransTracker® Indicators, and HEATmarker® Vaccine Vial Monitors, which are manufactured by Temptime© Corporation, are critical components to ensuring the safe distribution of temperature-sensitive vaccines on a mass scale.

Learn more about the innovation behind Zebra's Temperature Monitoring and Sensing Technology today!

NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
contact.emea@zebra.com

Latin America Headquarters
+1 866 230 9494
la.contactme@zebra.com

Part number: POV-TEMP2-01.21, R1, Doc #3371, 01/2021