

CASE STUDY

From Zero Vaccinations to
500 per hour: How the City of
Corpus Christi Became a COVID-19
Vaccination Hub Overnight

LUMINARE

Overview

During the height of the COVID-19 pandemic, there was an unprecedented urgency to protect individuals against the coronavirus. The City of Corpus Christi was a leader in its efforts to provide COVID-19 vaccinations to its citizens. With a population of over 300,000 residents, they needed to quickly create an efficient vaccination mega site that would support the deployment of up to 2,000 vaccines per day. A quick calculation of 2,000 vaccines considering 5 minutes to capture demographic and health information, 5 minutes to document required vaccine information, 5 minutes to update the state vaccination database, and 5 minutes to place calls for booster reminders would require a team of 600-800 people per day.

Therefore, not having an automated system to manage each aspect was not an option.

In order to meet this demand, multiple leaders from Emergency Management, the Department of Health and IT, county and city leadership, Emergency Management, the Police, and Fire Departments established a partnership with LUMINARE to implement a new vaccination mega site that included a vaccination drive-thru embedded with state-of-the-art technology.

Through the implementation of a new process (described below), vaccination goals were not only met but exceeded within the first day.

Key considerations for deployment of the COVID-19 vaccine included:



ACCESSIBILITY



**DOCUMENTATION
AND REPORTING**



**HIGH DEMAND
FOR VACCINES**



STAFFING

Approach

SOFTWARE: DOCUMENTATION, REPORTING, INTEROPERABILITY, ACCESSIBILITY

Innoculate™ supplied a single platform which managed the registration and scheduling for the population to request vaccinations and included a workflow and data management portal for documenting required vaccine data, reporting requirements, and an automated SMS/email notification system. Having a single platform removed all the data integration and interoperability challenges that would be needed if using multiple systems. The registration system ensured the complete capture of all needed personal and demographic information, health survey, consent for minors, acknowledgement of the vaccine manufacturers' Emergency Use Authorization (EUA) Fact Sheets and scheduling. The complete solution managed not only the registration, but vaccine data capture and state vaccine reporting. Another side benefit is that each person receiving a vaccine is supplied a QR code to a COVID-19 digital passport for proof of vaccination.



A LUMINARE QR code gives a Corpus Christi resident quick service with easy access in and out of the Mega Center



A City of Corpus Christi Public Health employee using LUMINARE to manage and distribute vaccinations during the height of the pandemic.

LOCATION & COORDINATION

With a Vaccine Management System, the city then turned to choosing a location and designing a process for efficient flow. The first decision was to set up a drive-through vaccination center, which had worked well for the COVID-19 testing process. The Richard Borchard Regional Fairgrounds was chosen as the vaccination site based on its size, ability to accommodate thousands of vehicles, and a covered pavilion to perform the inoculations. To create a streamlined and efficient flow, multiple stations and lanes were created.

Approach

STAFFING:

Dividing up responsibility by station, like a lean manufacturing process, helped to limit the number of trained medical personnel required.

- **STATION (1)** was used to separate those that pre-registered from walk-ins. Walk-ins were allowed, but the time to process pre-registered individuals was much shorter than those that had not yet completed registration and health care questions.
- **STATION (2)** was a check-in station to verify the accuracy of the registration information.
- **STATION (3)** was the vaccination station. Based on the number of people in a vehicle and any health risks, vehicles were directed to 1 of 6 lanes for receiving the vaccine. Post vaccination, vehicles moved to
- **STATION (4)** for monitoring and documenting any adverse reactions.



STATION 1 SORT & SEPERATE



STATION 2 CHECK-IN



STATION 3 VACCINATION



STATION 4 MONITORING

Exception Management

The goal was to deploy technology for pre-registration, consent, approval, health documentation, and scheduling through a web-based system to capture registration of most of the requests for vaccination. Language, age, and access to technology create challenges for a small percentage of the population. Innoculate™ is available with multi-language support which solved most of the language barriers related to registering. For those individuals who are unable to register electronically, two methods were put into place: a call center was set up and the operators were able to enter the required information directly into Innoculate™, a similar process managed by staff onsite at the vaccine center to handle walk-up registrations.



LUMINARE CEO & Co-founder Sarma Velamuri MD volunteering by administering vaccinations during the pandemic at the Corpus Christi Vaccination Mega Center.

The Outcome

The city had planned on 10-14 hours to distribute the first 2,000 vaccines on day one. Due to planning, process, and the Innoculate™ solution, the city was able to vaccinate 500 people in the first hour and completed the first 2,000 in less than 4 hours. In the first week of receiving the vaccine, the City of Corpus Christi was able to vaccinate 9,000 individuals with praise and accolades from the citizens and all the departments that worked so hard to plan and make this such a success.

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Innoculate has given us the ability to efficiently manage vaccine distribution and eliminate manual processes. We're excited to partner with LUMINARE in distributing vaccines to the citizens of Corpus Christi. Especially since we are now designated as a Mega Center we are fully confident the software platform will easily handle the increased volume, without increasing our administrative burdens.

- PETER COLLINS

**CHIEF INFORMATION OFFICER
CITY OF CORPUS CHRISTI**



500

**PEOPLE VACCINATED
IN THE FIRST HOUR**



2,000

**PEOPLE VACCINATED
ON DAY ONE**



9,000

**PEOPLE VACCINATED
IN THE FIRST WEEK**

“

We are so excited to be receiving COVID vaccines for our community and having the Luminare system has helped facilitate the registration process as well as fulfilling all the state reporting requirements!

- ANNETTE RODRIGUEZ, MPH

**DIRECTOR OF PUBLIC HEALTH CORPUS CHRISTI
- NUECES COUNTY PUBLIC HEALTH DISTRICT**

LUMINARE

For more on how you can incorporate our
backend workflow management solutions for your
community or hospital go to **www.luminare.io**.

888.587.9653

sales@luminare.io

2450 Holcombe Blvd, STE X
Houston, TX 77021