

# Integrating Infection Prevention and Control Science into POD-based Planning

## Module 2: Site and Operations



Climate and Crisis  
Preparedness

# Objectives

- Describe POD vaccination site modalities and considerations
- Summarize POD site set up, direction, and basic operations
- Examine real-life POD tips and lessons learned

**Goal:** Expedite countermeasure dispensing

# General POD-based Facilities

- Identifying and securing locations for MCM dispensing or vaccine administration can be challenging for local jurisdictions during an infectious disease pandemic
- Open POD sites should (among others):
  - be well-known to the population being served
  - be easily accessible for all population members
  - be able to accommodate large volumes of pedestrian traffic both inside and outside of the facility(-ies) as well as vehicle traffic and parking.
- Examples of Open POD sites include:
  - Convention Centers
  - High school gymnasiums
  - City-based recreation facilities

# Hospital and Clinic POD-based Operations

- Identifying internal space for vaccine administration can also be challenging in hospitals and clinics during an infectious disease pandemic
- For mass vaccination strategies, consider using:
  - Unused / underused wing of hospital
  - Hospital conference center
  - Parking lot for drive through (being careful not to disrupt emergency bays and access to the facility altogether)
  - Closed (even temporarily closed) waiting areas and lobbies
  - Adjacent, off-site spaces to decompress crowded clinic or hospital areas
    - Coordinate visits at shift-change for staff and providers, etc.



## Lobby area transformed into Observation Area during COVID-19 vaccination rollout at the JBJ Research Building for Tulane Health Sciences

Credit: Tulane News | Photo by Paula Burch-Celentano  
<https://news.tulane.edu/news/photos-tulane-rolls-out-covid-19-vaccine>

# Set-up and operational considerations – processes are our friend

- **Map the process and actual flow** – from site receipt of vaccines / countermeasures to the individual exiting the POD / site.
  - Resource supply and re-supply are crucial require real-time monitoring and accurate forecasting
  - For a vaccination example: map the entire MCM delivery process — from “vaccine arrival in pharmacy” to “vaccine delivery to the POD” — outlining this with a process map will allow the operational team members to visualize potential obstacles, define roles, and plan efficient storage and preparation of the vaccine.
  - Consider exercising the operational model – tabletop/guided discussion, functional, for perhaps full-scale (as many performed using the flu vaccine in advanced of COVID-19 vaccine rollout)

# Set-up and operational considerations – processes are our friend, cont.

- **“Signs, signs, everywhere signs”** – provide more than enough to eliminate confusion regarding POD flow and progression to different areas
  - Signs should reflect languages commonly spoken by population served
- **Time is your enemy – minimize wasted time**
  - Consider stocking each visitor vaccine administration area with standard supplies and a printed set-up *diagram* to hang in each. Vaccinators will likely rotate, so this will make it easy for the people on duty to assemble the space and maximize time while there.

# When MCMs (and time) are limited...

- Consider templates to document countermeasure counts and train everyone on what they are, and how they are to be used
- For vaccines:
  - Consider counting syringes (POD manager) each time they are received from the pharmacist; both verify the count number and document this in a log (ICS 214 possibly )
  - Consider permitting a fixed number of syringes at a time for each vaccinator
- Have dedicated staff track and compare the number of doses or regimens given with the number remaining in the locked cabinet or refrigeration several times each day



## When MCMs (and time) are limited...(cont.)

- Establish coordinated process for estimating the amount available each day so MCM is not wasted
- Understand and rehearse specific storage requirements among all POD staff and consider expiration dates of specific lot numbers, using first-to-expire first
- In planning the POD operations, consider prioritization of who receives the MCM (e.g., most likely to be exposed such as healthcare workers, high risk healthcare workers or community members due to preexisting medical conditions, frontline responders, etc.)

# Example of Mass Vaccination Operations: General Core Stations

## Queue Management

- Maintain safe distancing with stanchions, etc.
- Try to avoid early arrivals and close queuing if possible
- Staff adequately for control and have flex staff ready to address issues.

## Check-in or Registration

- Online pre-registration works best with QR code to be scanned at arrival.
- Phone-in pre-registration
- Maintain safety while queuing and proceeding to next area.

## Vaccination / Treatment

- Ensure enough vaccine stations and healthcare providers are available to avoid bottle necking and queuing.
- Consider software programs to assist through state and/or healthcare coalitions
- Solicit examples from successful sites and operations

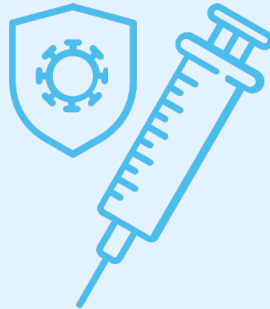
## Observation Area

- If using a multi-dose vaccine, schedule the follow-up visit during this time
- Provide ample seating and staff for observation
- Apply recommended observation waiting period per Federal or manufacturer guidance.

## Discharge / Exit

*Maintain safety and Infection Prevention and Control protocols!*

# **Mass Vaccination Operations:** **Larger Sites and Community Vaccination Sites**



# Vaccination Facilities – Community Vaccination Sites

Facilities can be pre-existing and outfitted for vaccination, or new facilities can be established.

Possible modalities:

- Fixed Facility
- Drive Through Facility
- Mobile Vaccination Clinic

Examples of Facility Size Models					
	Type 1	Type 2	Type 3	Type 4	Type 5 (mobile)
<i>Capacity (doses/day)</i>	6000	3000	1000	250	250
<i>Size (sq. ft.)</i>	15,000	7500	4500	2500	2500
<i>Available Parking</i>	800	600	250	130	130

# Logistics and Site Set-Up

Be sure to designate areas for the following (away and secure from those without approved clearance):

- **Vaccine receiving / Supply line:** supply unloading and resupply areas
- **Vaccine Storage (onsite):** supplies kept in climate-controlled storage
- **Vehicle line and parking:** where the public drives and parks to receive supplies
- **Walk-up and entry lines:** where the public queues at pre-registered times to receive the vaccine

Signs and traffic cones are used to define areas and direct traffic accordingly to prevent traffic flow concerns regarding arrival of vaccine/resupply and population traffic receiving vaccines.

# Operations: General Core Stations

## Queue Management

- Maintain safe distancing with stanchions, etc.
- Try to avoid early arrivals and close queuing if possible
- Staff adequately for control and have flex staff ready to address issues.

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# Set-Up: Reducing Exposure Risk for Clients in Contagious Infectious Diseases

- Pre-register individuals to arrival time slots
  - Prevent bottlenecking
- Create line of flow
  - Separate entrance and exit
  - Avoid congregation/turning past one another in potentially cramped areas
- Stagger stations
  - Improves visibility
  - Improves physical distancing
- Ample space for individuals waiting/filling out paperwork to safely distance
- Safely distanced observation area

# Set-Up: Reducing Exposure Risk for Clients in Contagious Infectious Diseases (cont.)

- Safety equipment
  - Multiple hands-free hand sanitizer locations
  - Spray/wipes for surfaces including electronic scanning devices (tablet, etc.), pens for registration, tables, etc.
- Separation of materials
  - Reuse v. decontamination pen baskets
  - Extra clipboards/cardboard pieces for writing surfaces
- Proper signage, such as:
  - Masks required
  - Physical distancing stanchions and/or tape/floors signs



# Set-up: Tips and Lessons Learned

- Pre-register individuals to 15-minute time slots to reduce bottlenecks
- Stagger interior receiving tables in a chevron model
  - This allows people to see which stations are open (improves throughput and reduces bottlenecks)

Full-Scale Exercise Pictures (2015 vs 2016)



# Set-up: Tips and Lessons Learned

- Avoid overcrowding and bottlenecking
  - Interior operations
    - Functional and well-spaced layout is paramount
  - Exterior queuing and crowd management strategies must prevent situations like the one depicted here, which is typical of traditional POD-based operations since most of these have been based on a non-communicable disease threat such as *Bacillus anthracis* (which causes Anthrax)







JAZZ

Hall J

Let's  
create  
a future,  
we can  
look  
forward  
to



## Controlled entry in conjunction with pre-registration

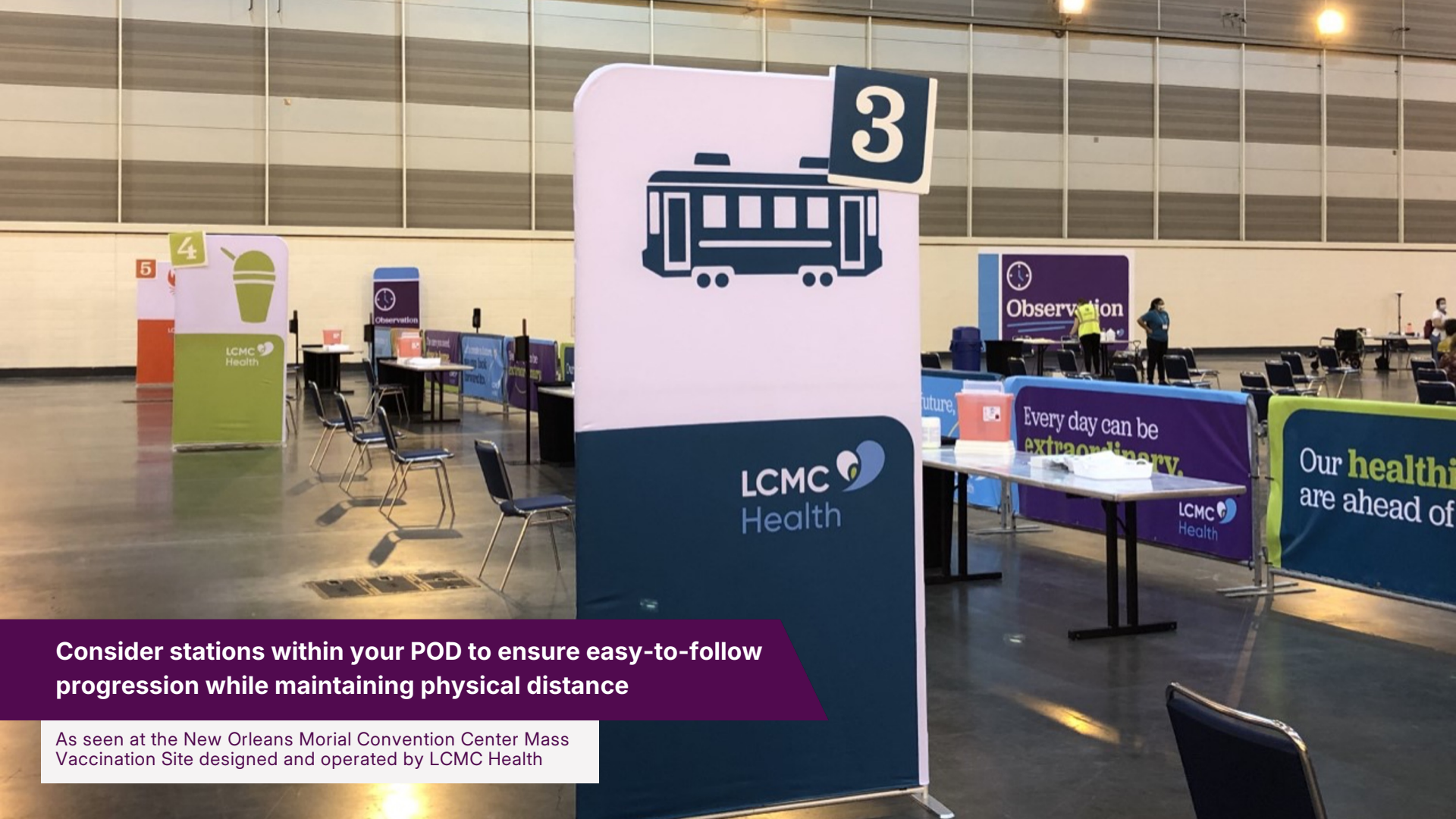
As seen at the New Orleans Morial Convention Center Mass Vaccination Site designed and operated by LCMC Health



# Space, Space, and More Space

As seen at the New Orleans Morial Convention Center Mass Vaccination Site designed and operated by LCMC Health





**Consider stations within your POD to ensure easy-to-follow progression while maintaining physical distance**

As seen at the New Orleans Morial Convention Center Mass Vaccination Site designed and operated by LCMC Health

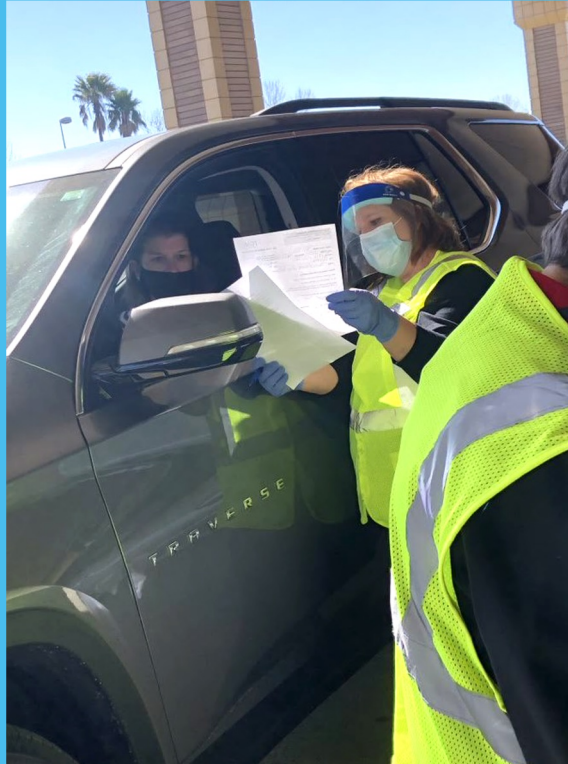




Spacing and rapid vaccine administration are cornerstones of a successful mass vaccination site, as seen here at the Mercedes Benz Superdome in Atlanta, GA, where a record 12,726 vaccines were administered in a single day in 2021 (served as FEMA Type I CVC).

## Innovation is welcomed – drive-through PODs can be an effective strategy to deploy to accelerate your countermeasures

Photo: Terrebonne Parish, LA during the COVID-19 mass vaccination rollout





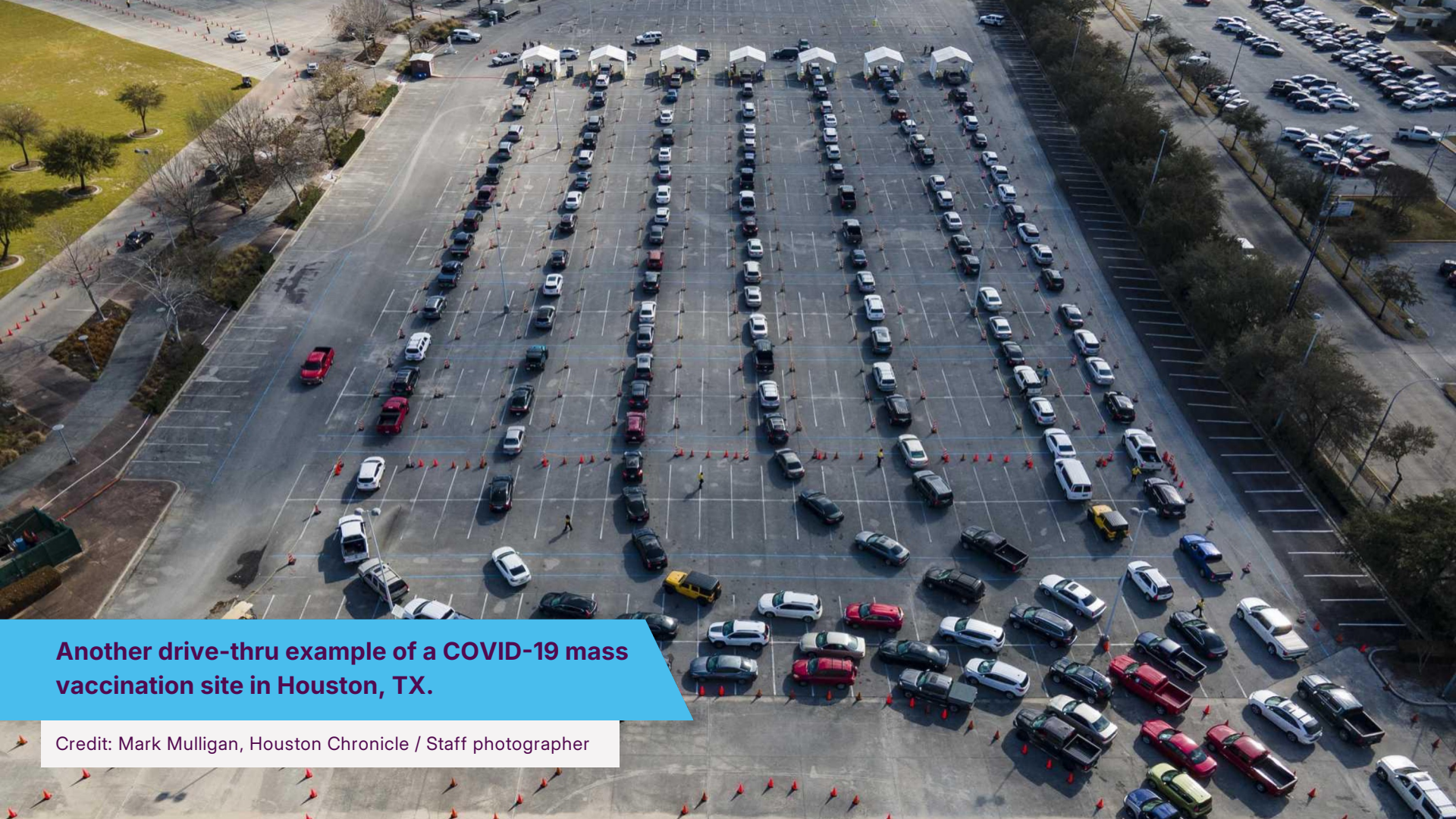
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Photo by Lady of the Sea in Louisiana for the COVID-19 mass vaccination rollout

**NOTE:** Outdoor operations require advanced planning for weather-related threats. Beyond the logistical challenges experienced with COVID-19 vaccine (re)supplies, site operations might encounter flash flooding, high winds which could impact tent-based structures, wintry weather mix which can cause icy road conditions, etc. Beyond contingency planning for these threats, establish strong communications with the national weather service (for example), and the emergency operations centers supporting the site(s).







**Another drive-thru example of a COVID-19 mass vaccination site in Houston, TX.**

Credit: Mark Mulligan, Houston Chronicle / Staff photographer

# Innovation

- Pandemics are challenging situations
- Preparedness plans are likely more of a guide rather than tactical or operational response protocols due to the novel situation caused by the pathogen, etc.
- Don't panic
- Stay focused
- Get creative with how your agency/department and/or facility can be best positioned to fulfill the mission
  - Coordinate with POD-planning stakeholders to offer your locations, as appropriate
  - Utilize internal subject matter experts in your own closed POD
  - Offer SMEs to assist other POD-based planning or operations in your jurisdiction

# General: Tips and Lessons Learned

- Practice, practice, practice!
- Stadiums make great PODs and mass vaccination sites because they are designed for moving large numbers of people
- Large distribution operations should align well with public transit routes
  - Consider establishing vouchers with driver-services like Uber for example
- Volunteers are crucial to successful POD-based operations
- Students are an untapped resource

# General: Tips and Lessons Learned

- Drive-through PODs have proven effective
  - Factor in winds and confined spaces, as vehicle exhaust could be an issue
  - It will potentially be hot or rainy – shelter for those receiving the countermeasure
    - Protect the countermeasure too!
  - Communication and traffic patterns are paramount
    - Cones and easy-to-follow progression – consider dedicated staff to oversee traffic
    - Disruption to local daily commerce?
    - Disruption to daily operations onsite?
  - Sharps and hazardous waste onsite – proper disposal and pick-up strategies
  - Cold chain concerns, if applicable
    - Early stages of the COVID-19 mRNA vaccines indicated an extensive cold chain challenge
    - Distribution site capable of keeping countermeasures safe? Power needs – onsite and/or portable?

**For more information and training on  
Infection and Prevention Control,  
visit *[ipc.nnphi.org](https://ipc.nnphi.org)*.**



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