Hospital Operations Toolkit for COVID-19

Administration:

Vaccine Logistics

November 30, 2020
Updated January 21, 2021

UPDATE 11/2/2021: Vaccines to prevent COVID-19 are readily available to healthcare personnel. At this stage of the response, ASPR TRACIE expects hospitals have addressed the logistical issues discussed in this section of the Hospital Operations Toolkit for COVID-19. This section remains available for historical reference, but it is not being maintained or updated. Please refer to the Administrative Controls section for information on vaccination policies. Current information is available in ASPR TRACIE’s COVID-19 Vaccination Quick Links.

Availability of a safe and effective vaccine is one component of protecting the health and safety of hospital staff who are critical to reducing loss of life and ensuring continuity of care during the COVID-19 pandemic.

Alignment with COVID-19 Vaccine Allocation and Distribution Strategies

Several frameworks and recommendations exist to guide the distribution of vaccine across the nation and its allocation to priority groups. Hospital emergency planners should be aware of and understand where hospitals fit in the following to ensure alignment of the hospital’s plan with federal, state, and local recommendations and priorities:

- State COVID-19 vaccination plan
- Vaccine recommendations of the Advisory Committee on Immunization Practices
- Framework for Equitable Allocation of COVID-19 Vaccine
- COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations

While these guidelines identify healthcare workers as a priority group to be vaccinated during the first phase of distribution, each hospital should follow a plan that prioritizes staff into sub-groups as it is unlikely that a single hospital will receive a sufficient quantity of vaccine to immunize all staff in a short time window during the initial phase of distribution. Ideally, this should be consistent across the state, at minimum. Hospitals should assess their operational environment to identify staff who are integral to the facility’s functions and continuity of operations. All staff – both clinicians and the critical workers who support the hospital’s infrastructure – should be included in this assessment and prioritization.
Development of a hospital’s COVID-19 vaccine administration plan should include engagement of a broad group of stakeholders representing the diversity of hospital functions and priorities. The hospital’s plan should also be aligned with the planning of the healthcare coalition and other community partners and, if applicable, the enterprise plan of the larger health system, particularly if the health system crosses jurisdictional lines with different allocation priorities. Hospital leadership should ensure that all staff are aware the plan exists, know which prioritized subgroup they are in and why, and understand that adherence to the plan is important not only for the hospital, but also for the greater community it serves.

Hospitals should understand the legal protections in place through the Public Readiness and Emergency Preparedness (PREP) Act and any state protections or requirements. Hospitals should also ensure staff are aware of the mechanisms for reporting potential vaccine-related side effects both internally and to the state and the Centers for Disease Control and Prevention.

Hospitals should also determine whether COVID-19 vaccination is mandatory for all staff. If so, the vaccine administration plan should be accompanied by a policy that includes waivers and exemptions. The policy should include considerations for staff who are categorized as being in high-risk groups for which vaccination is not recommended. Many hospitals already have these types of policies for seasonal influenza vaccination, which can be modified for COVID-19.

Resources Related to Vaccine Strategy Alignment

- ASPR: Public Readiness and Emergency Preparedness Act
- Boulder County: Sample Employee Influenza Immunization Policy
- Centers for Disease Control and Prevention:
  - COVID-19 Vaccination Program Interim Playbook
  - Roadmap to Implementing Pandemic Influenza Vaccination of Critical Workforce
- Colorado Hospital Association Guidance for Developing a Mandatory Influenza Vaccination Program
- Hospital and Healthcare System Association of Pennsylvania: Universal Flu Immunization Programs for Health Care Personnel
- MedStar Health: Mandatory Influenza Vaccine Policy
- National Adult and Influenza Immunization Summit: Guidance for Facilities Who Plan to Improve Staff Influenza Vaccination Compliance through Vaccination Requirement Policies
- Oklahoma Hospital Association: Sample Influenza Vaccine Policy
- U.S. Department of Health and Human Services: Vaccine Adverse Event Reporting System
- U.S. Department of Labor, Occupational Safety and Health Administration: COVID-19 Hazard Recognition
Hospital Vaccine Administration Planning Considerations

Points of Dispensing (PODs) are a traditional mechanism to administer mass vaccine or mass dispense medical countermeasures to the public during a public health emergency. Closed PODs are a variation of the POD concept in which vaccination or dispensing activities are limited to a defined population within a community and the logistics of administration become the responsibility of the host organization/facility. Many hospitals have worked with their local or state health departments to be designated as a closed POD and developed plans, exercised those plans, and trained staff to operate a closed POD in response to an anthrax attack or other biological emergency in their community. These plans can be adapted to meet the unique needs of the COVID-19 pandemic with several considerations:

- The closed POD should allow for the vaccination of the maximum number of staff possible given the amount of vaccine available while maintaining worker safety, physical distancing requirements, and essential infection prevention measures.
- PODs may be located anywhere on the hospital campus, but they require basic utilities such as running water and electricity, proper ventilation, and adequate storage for vaccines and ancillary supplies. If the POD is located somewhere accessible to the public, security is also needed to restrict access to those in the prioritized group.
- The floor plan should accommodate many people with an orderly flow from the accessible entrance to exit while maintaining physical distancing requirements. Working areas for receiving, storing, and managing supplies should be separated from vaccination stations.
- The identified location must be available and ready to use with short-term notice. Particularly in the early distribution phase, vaccine supplies may be distributed with little advance notice and must be administered within a limited window of time.
- An alternate location should be identified in case the primary location becomes unusable or more space is needed.
- Receiving facilities need to understand the receipt (including who can sign for vaccine), storage (refrigeration or deep freezing), packaging, security, documentation, and other requirements of the vaccine they are receiving.
- A state-based strategy for equitable allocation of vaccine to healthcare facilities should be understood and agreed to.
- The facility must have a plan to notify staff when their priority group can be vaccinated and the available location(s) and times.

Closed PODs are not the only option for hospitals to consider. Many hospitals developed plans to support universal or recommended seasonal influenza vaccination of staff. Common approaches include walk-in clinics, drive throughs, and scheduled appointments. These plans can also be adapted for COVID-19 with some important considerations:
• Hospitals must be prepared to implement their plan on short notice due to the uncertain timing of delivery.
• Some vaccines require ultra-cold storage – as cold as minus 70 degrees Celsius – presenting challenges for shipping as well as cold chain storage and necessitating timely administration. Understanding these variables (including size, weight, and how long the vaccine is safe in the travel container and once removed from it) is critical to planning for administration.
• Multi-dose vials will be common and must be accounted for in the process of giving the vaccine to ensure sterility is maintained.
• Most of the vaccines in development require administration of two doses of the same vaccine with a set number of days between doses. It is likely that hospitals will receive more than one type of vaccine. Tracking the type and timing of administered vaccine to each staff member may be a considerable administrative effort.

Vaccination efforts for COVID-19 will be more complex than what hospitals may have planned for many other response scenarios. Regardless of the hospital’s approach to vaccine administration, extensive planning is essential for successful execution.

• Consider establishing a dedicated COVID-19 vaccination team to oversee preparation, planning, and execution. They would serve as the main points of contact for all matters related to vaccination and support continuity of other hospital operations. The team would be available to quickly respond and ramp efforts up and down based on expected vaccine delivery times.
• Stay in close contact with the local or state health department and other planning partners to ensure situational awareness as information and requirements change. Particularly in the earliest stage of vaccine distribution, there will be many unknowns including which vaccine will be received, the volume, timing, storage and handling requirements, efficacy, and dosing.
• Consider the need for vaccinators, administrative staff, and technical support when developing the staffing plan. Planning should assess whether current staff is sufficient for the effort or if external help is needed via contract or temporary staff, healthcare coalitions, volunteers, or other options.
• Train existing and supplemental staff supporting the vaccine administration effort on their designated roles and have job aids ready to guide their work. Staff need to understand vaccine storage and handling requirements, reporting and other administrative requirements, and staff safety requirements.
• Understand how the hospital will track vaccination compliance, second dose requirements, potential adverse events, and any reporting requirements of local, state, or federal agencies.
• Plan for implementation of on-site infection control measures such as biohazardous waste disposal, cleaning supplies, and additional PPE.
• Consider the need for vaccine cold chain storage and backup storage. Account for additional ancillary supplies, though supplies to draw and administer the vaccine should be provided with the vaccine kits. Secure vendors for resupply of dry ice and the supplies needed to safely handle it. Ensure training and job aids are provided to staff handling dry ice.
Estimate and plan for additional costs associated with implementing the vaccine administration plan (additional staff, medical equipment, facility costs). Consider where additional resources can be sourced from and have a process to track all costs.

Determine how the plan and changes to it will be communicated to all employees. Communication and messaging will be critical in achieving vaccination coverage, compliance, and confidence.

Prepare to provide handouts to vaccine recipients with vaccine information and information on reporting potential side effects to the Vaccine Adverse Event Reporting System (VAERS).

Exercise the plan to identify gaps and areas for improvement. Continue to update the plan as additional supply becomes available and planning considerations change.

Ensure the hospital’s vaccine administration plan aligns with enterprise policies if part of a larger health system. Centralized sign-up for provider enrollment at the enterprise level may ease some administrative burdens on individual hospitals.

Consider collaborating with other hospitals or medical facilities (especially in rural areas with smaller hospitals) to pool resources and consolidate efforts. Understand the expectations of healthcare coalitions and other community response partners. Identify what state, local, and jurisdictional resources may be available to support under-resourced hospitals. Hub and spoke models may be needed in the community for vaccine distribution and should be planned with state and local public health and healthcare coalition members.

Resources Related to Planning Considerations

- ASPR TRACIE:
  - COVID-19 and Seasonal Flu Vaccination Planning Resources
  - COVID-19 Vaccine Planning and Considerations
  - COVID-19 Vaccine Resources
  - Mass Distribution and Dispensing of Medical Countermeasures Topic Collection
- Bio-Defense Network: Developing a Closed POD Plan
- Centers for Disease Control and Prevention:
  - Best Practices for Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations
  - Guidance for Planning Vaccination Clinics at Satellite, Temporary, or Off-Site Locations
  - Health Care Closed Points of Dispensing
- Center for Infectious Disease Research and Policy: Resources and Training for Planning Closed Dispensing Sites
- Immunity Community: Healthcare Worker Immunization Toolkit
- Milken Institute: COVID-19 Vaccine Tracker