

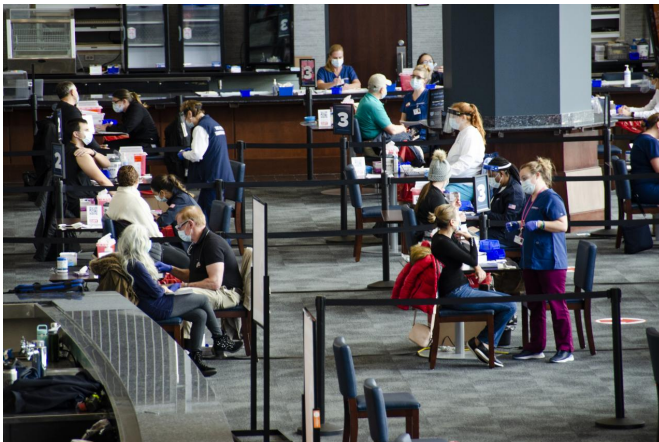


SECURITY AND RESILIENCE CONSIDERATIONS FOR MASS VACCINATION SITES

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EXECUTIVE SUMMARY

As more doses of the COVID-19 vaccine have become available, federal and state governments have continued to open large facilities and venues for the widest and quickest distribution of the vaccines. This paper will outline the unique security considerations of using these larger venues, often called Mass Vaccination Sites. While a great deal of work has been published on the protection of large venues and mass gatherings by the Department of Homeland Security’s (DHS) Cybersecurity and Infrastructure Security Agency (CISA), there are unique factors that should be addressed in the use of these facilities for mass vaccine distribution. The intent of this paper is to better inform planners, operators, and managers on unique security considerations for this task, ensure sufficient resources are available and in place, and ensure authorities have implemented appropriate protective measures for the recognized vulnerabilities.



INDOOR MASS VACCINATION SITE
GILLETTE STADIUM, FOXBORO, MA (Photo Credit: FEMA)



OUTDOOR MASS VACCINATION SITE
CLARKSVILLE, GA (Photo Credit: FEMA)

CHARACTERISTICS OF MASS VACCINATION SITES

For the purposes of this White Paper, the size of facilities considered as Mass Vaccination Sites include those top two levels (Type 1 and Type 2 Vaccination Clinics) identified by the DHS Federal Emergency Management Agency (FEMA) in its recently updated Community Vaccination Centers Playbook.¹ These centers would operate at venues (or situated in open spaces) large enough to process between 3,000 – 6,000 vaccine doses daily.² In Figure 1 (below), FEMA suggests parameters such as: minimum square footage; clinical and non-clinical support staff packages; as well as other specific support needed for different site levels (types). The particular setup of each Mass Vaccination Site, along with decisions pertaining to medical and support staff, will be made by federal, state, tribal, territorial, local or metropolitan authorities operating various sites across the Nation.

¹ Types of FEMA-designated Vaccination clinics. *Community Vaccination Centers Playbook V 3.0*, DHS FEMA, March 15, 2021, www.fema.gov/disasters/coronavirus/governments/community-vaccination-centers-playbook

² Ibid.

Type 1 Vaccination Clinic (Approximately 6,000 vaccinations/day capacity)

Federally supported site to include facility leasing, approximately 345 personnel (fixed site) or 369 (drive-through), equipment and supplies to meet throughput over a 12-hour shift.

Facility

Minimum of 15,000 sf. with adequate parking for at least 800 vehicles including accessible services and parking

Clinical Force Package

213 total clinical staff, including:
 - 100 vaccinators²
 - 20 Registered Nurses
 - 4 EMS personnel staffing two ALS/Paramedic Ambulances³

Non-Clinical Force Package

132 total non-clinical staff, including:
 - 5 command and control
 - 30 law enforcement/security
 - 7 IT support

Other Support

Additional Supply Cache:
 Gloves, masks, face shields
 Computer and internet access,
 Spare syringes, needles,
 alcohol preps

Type 2 Vaccination Clinic (Approximately 3,000 vaccinations/day capacity)

Federally supported site to include facility leasing, approximately 235 personnel (fixed site) or 254 (drive-through), equipment and supplies to meet throughput over a 12-hour shift.

Facility

Minimum of 7,500 sf. with adequate parking for at least 600 vehicles including accessible services and parking

Clinical Force Package

144 total clinical staff including:
 - 60 vaccinators²
 - 15 Registered Nurses
 - 4 EMS personnel staffing two ALS/Paramedic Ambulances³

Non-Clinical Force Package

91 total non-clinical staff including:
 - 3 command and control
 - 15 law enforcement/security
 - 4 IT Support

Other Support

Additional Supply Cache:
 Gloves, masks, face shields
 Computer and internet access,
 Spare syringes, needles,
 alcohol preps

FIGURE 1. — COVID-19 COMMUNITY VACCINATION CENTER TYPES³

COMMON THREAT VECTORS

The scope of threats that should be considered for Mass Vaccination Sites include those outlined in CISA’s Infographic on COVID-19 vaccination distribution physical security measures.⁴ State and local law enforcement are usually already involved and in regular collaboration with security forces or staff at large venues. These organizations regularly participate and exercise readiness and response to multiple threats with the owners and operators of large venues. State and local law enforcement is also regularly used as part of the security presence at large venues when dealing with events and activities attended by sizeable groups (e.g., sporting and entertainment events, as well as conventions and conferences).

While there is anecdotal evidence of individuals targeting Health and Public Health facilities, there is no definitive proof of attacks at Mass Vaccination Site locations. Some Mass Vaccination Sites have been disrupted by anti-vaccination protesters during the earlier phases of distribution.⁵ Beside possible disruptive activity, the greater threat may come just from the gathering of crowds at large venues. However, criminals prey on large crowds, and terrorists target masses of people and large venues to cause the widest possible damage and bloodshed. Thus, entities involved in the distribution of the vaccine at Mass Vaccination Sites should apply protective measures to their operations against a spectrum of threats.⁶

³ Ibid, Appendix A, Page 18.

⁴ *COVID-19 Vaccine Distribution Physical Security Measures Infographic*, DHS CISA, www.cisa.gov/sites/default/files/publications/COVID-19_Vaccine_Distribution_Physical_Security_Measures_508.pdf, March 2021

⁵ *Dodger Stadium’s COVID-19 vaccination site temporarily shut down after protesters gather at entrance*, Los Angeles Times, www.latimes.com/california/story/2021-01-30/dodger-stadiums-covid-19-vaccination-site-shut-down-after-dozens-of-protesters-gather-at-entrance, January 30, 2021

⁶ See above referenced Infographic for a more complete list of specific threats and awareness and mitigation products for Points of Distribution.

The DHS, FBI, and others have published a number of studies, job aids and threat awareness products concerning the security and protection of large venues and mass gatherings. The common threat vectors addressed in these cases include:

- Active Assailant
- Insider Threat
- Vehicular Assault
- Small Unmanned Aircraft Systems (sUAS)
- Improvised Explosive or Incendiary Devices
- Theft and Other Criminal Activity

While human-caused events are generally at the forefront of security, an All-Hazards approach should also be considered for the threats posed by weather events and accidents. Since most of these Mass Vaccination Sites will fall under the purview of state, local or metropolitan authorities, a lead security agency, office, or individual should be responsible for overall coordination of the entities involved in the protection of activities. At many locations, the response to human-caused and natural disasters would fall to the state, county, or metropolitan emergency management agencies and/or offices. This designated authority would be responsible to monitor, coordinate, and deconflict responses to any All-Hazard threats.

Considering all sites will vary by location, multi-disciplinary teams should be established to develop a holistic security plan; plan for emergency and evacuation procedures; and to analyze and identify single points of failure unique to their site. Consideration should be given to the training of staff and other support personnel with clear instructions and guidance on evacuation procedures and rally points in case of emergencies.

Not only should officials leading protection and response actions be knowledgeable of all participating agencies and organizations involved at Mass Vaccination Sites, they should also make use of available guides, playbooks, and guidance published by federal, state, and local authorities (see the Other Resources section at the end of this paper for the types of references available).

UNIQUE VULNERABILITIES FOR MASS VACCINATION SITES

The unique characteristics of large-scale distribution of COVID-19 vaccines could expose Mass Vaccination Sites to various additional vulnerabilities. No two venues are the same, even within the same state or locality. Federal, state, and metropolitan officials might utilize either indoor (e.g., convention centers and sporting facilities) or outdoor/drive-through (e.g., large parking lots) venues to accommodate the mass distribution of COVID-19 vaccines.

Both indoor and outdoor venues present advantages and disadvantages. While the outdoor/drive-through venues allow vaccine recipients to remain in their vehicles (thus better providing for social distancing protocols and increased personal safety), they expose medical and support staff to the threat of an attacker using a vehicle as a weapon. In addition, an outdoor/drive-through venue also increases the risk of vehicular mishaps and accidents involving staff. Indoors, COVID-19 distancing protocols result in greater separation of crowds that would otherwise be more vulnerable to common physical threats (e.g., Active Assailants). In both indoor and outdoor venues, the uniqueness of the mission at these Mass Vaccination Sites presents some additional vulnerabilities that should be considered, to include:

Crowd Control and Physical Security

- Disruption or closure of Mass Vaccination Site operations due to unlawful protest activity
- Rioting or trespassing by crowds seeking to acquire vaccines or disrupt the vaccination process
- Vulnerabilities at public transportation systems to/from Mass Vaccination Sites
- Safety and security from vehicle traffic at outdoor/drive-through venues

- Targeting of medical staff and/or support staff

Vaccine Assurance and Security

- Need for precise temperature handling, storage, and monitoring of most COVID-19 vaccines
- Need for continuous, sustained power (i.e., electricity, backup generators or batteries)
- Safeguards against the theft of vaccines to disrupt distribution, or for sale on the black market
- Theft of dispensed vaccine bottles or packaging and biohazard waste (e.g., discarded needles or syringes)
- Theft of vaccine documentation

Essential Supply Chain Security

- Security of Personal Protective Equipment (PPE); Sanitation/disinfectant; and vaccine dispensing supplies (e.g., syringes)
- Secured supply routes to/from temporary supply storage and distribution points
- Security of onsite supply storage areas

Cybersecurity

- Ensure uninterrupted communication lines (e.g., cellular, landline, and radio)
- Secure and protect Internet Wi-Fi and computer lines
- Security and protection of onsite computer systems
- Protection of Personal Identifiable Information (PII)
- Alignment with Health Insurance Portability and Accountability Act (HIPAA) practices

PROTECTIVE MEASURES AND MITIGATION

Indoor and outdoor Mass Vaccination Sites will generally be located in places easily accessible to the public—such as convention centers, sports stadiums, or other appropriate venues with large parking areas. As noted in a recent DHS CISA publication titled Physical Security for COVID-19 Vaccine Points of Distribution, it is vital all vaccine distribution venue operators “consider increasing security to reduce potential risks posed by anti-vaccination protesters, insiders, criminals, terrorists, or malicious cyber actors.”⁷ These concerns are heightened for organizations operating larger vaccine distribution venues.

In order to achieve a greater holistic security posture, Mass Vaccination Site managers and operators should study the unique requirements and characteristics of vaccine distribution, and coordinate with federal, state, and local officials to better understand potential vulnerabilities. Managers should also implement activities and actions to reduce risk and mitigate those potential vulnerabilities unique to this task, as well as to their specific location.

To effectively bolster security, the following protective measures provide an overview of best practices designed to assist site managers and operators in planning and managing security at their Mass Vaccination Sites.

⁷ *Physical Security for COVID-19 Vaccine Points of Distribution Action Guide*, DHS CISA, www.cisa.gov/sites/default/files/publications/POD%20Physical%20Security%20Action%20Guide_508.pdf, March 2021.

Crowd Control and Physical Security Vulnerabilities

- Identify and cordon off specific areas to allow for lawful, peaceful protest in locations that do not impede supply or customer traffic into or out of indoor and outdoor Mass Vaccination Sites
- Plan for overflow and/or disruptive crowds seeking to acquire vaccines or disrupt the vaccination process
- Increase security and surveillance at mass transportation stops/hubs near venues
- Implement aperiodic, continuous security sweeps, and use of roving security patrols in addition to stationary security locations for both indoor and outdoor venues
- Consider 24/7 security (to include security sweeps) for sites used to store vaccines, equipment, and supplies before and after operations begin and end
- Mass Vaccination Site managers need to establish a relationship with energy and Internet providers to provide reliable access at vaccination sites
- Plan and practice responding to vehicle threats at outdoor/drive-through venues
- For outdoor distribution venues, make use of solid barriers for the protection of medical staff and support personnel
- For outdoor distribution venues, consider prevention, mitigation, and response measures to protect against sUAS threats
- Consider use of scalable queuing layouts to slow down/control vehicle traffic threats at outdoor/drive-through locations
- Secure back-up power generation at venues that are not so equipped
- Ensure adequate lighting is available as regular venue lighting may not be sufficient for the necessary tasks, activities, and purposes of mass vaccination
- Implement access control systems for various zones within the venue or in the area
- Consider the posting of CCTV and signage indicating that premises are being monitored
- Train all staff on recognition of suspicious behavior

Vaccine Assurance and Security

- Ensure there is a continuous power supply for vaccine cooling
- Monitor and alarm vaccine storage containers for temperature control
- Use Closed-Circuit Television (CCTV) surveillance systems in vaccine storage areas
- Notify local law enforcement and security forces or staff of vaccine storage locations
- Create a secure disposal system for used vaccine bottles, packaging, documentation and bio-hazard waste

Essential Supply Chain Security

- Secure and monitor onsite storage of PPE, sanitation/disinfectants, and vaccine dispensing supplies (e.g., syringes)
- Plan and secure supply routes to/from temporary supply storage and distribution points
- Create back-up plans for supply route disruptions
- Notify law enforcement of supply routes and back-up plans

Cybersecurity Connectivity and Protection

- Confirm communication lines (landline/cellphone and computer/Internet) are operational and secure
- Consider employment of user activity monitoring software on systems used for the processing of vaccination operations
- Limit access to internet and communications in sensitive areas (e.g., do not allow the use of cellular devices where PII is being discussed, vaccines are stored, etc.)
- Ensure there is a private, secure, and reliable Wi-Fi system
- Maintain comprehensive data back-up on a secure remote server
- Ensure the security of supporting computer systems used for identification, medical histories, and vaccine administration
- Protect PII of those receiving, administering, or otherwise supporting the vaccination process⁸
- Health Insurance Portability and Accountability Act (HIPAA) safeguards need to be followed and implemented⁹

ADDITIONAL OPTIONS TO CONSIDER

Other considerations in this vaccination effort include:

- Venue security managers should ensure they seek and include the insights of venue security forces or staff and local law enforcement officials, as every site has unique physical and cyber vulnerabilities (of which venue-assigned security personnel are uniquely aware)
- Consideration should be given to the development of an event log of preparations, planning, and actions to be used in After Action Reports, Lessons Learned, and other historical documentation
- Ensure onsite and offsite emergency services are available for the spectrum of staff and public needs

⁸ Protecting and Handling Personally Identifiable Information Module, HHS, Sep 2020 www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/protecting%20and%20handling%20personally%20identifiable%20information_6.pdf

⁹ Information on HHS guidance for the protection of HIPAA information can be found at www.hhs.gov/hipaa/for-professionals/security/guidance/index.html

OTHER RESOURCES

As noted, the DHS, other federal agencies and private sector organizations have published guidance that can and should be used to help Mass Vaccination Site planners, managers, and operators mitigate the security risks in this effort. Some of these products include:

- **Community Vaccination Centers Playbook**, DHS FEMA, February 4, 2021
www.fema.gov/sites/default/files/documents/fema_community-vaccination-centers_playbook.pdf
- **COVID-19 Vaccine Distribution Physical Security Measures**, March 2021
www.cisa.gov/sites/default/files/publications/COVID-19_Vaccine_Distribution_Physical_Security_Measures_508.pdf
- **COVID-19 Vaccine: Security, Storage and Handling Resource Guide**, American Society of Health Systems Pharmacists, 2021
www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/Coronavirus/docs/Vaccine-storage-handling-safety-security-guidance.ashx?la=en&hash=E90A049D58B58C013D2BC75EE5E13E1805498C9A
- **Mass Gatherings: Security Awareness for Soft Targets and Crowded Places**, DHS CISA
www.cisa.gov/sites/default/files/publications/Mass%20Gatherings%20-%20Security%20Awareness%20for%20ST-CP.PDF
- **Security of Soft Targets and Crowded Places—Resource Guide**, DHS CISA, April 2019
www.cisa.gov/sites/default/files/publications/19_0424_cisa_soft-targets-and-crowded-places-resource-guide.pdf
- **Securing Public Gatherings Web Page**, www.cisa.gov/securing-public-gatherings
- **Physical Security for COVID-19 Vaccination Points of Distribution**, DHS CISA, March 2021
www.cisa.gov/sites/default/files/publications/POD%20Physical%20Security%20Action%20Guide_508.pdf
- **Insider Threat Mitigation Guide**, DHS, November 2020
www.cisa.gov/sites/default/files/publications/Insider%20Threat%20Mitigation%20Guide_Final_508.pdf
- **Protecting Infrastructure during Public Demonstrations**, DHS
www.cisa.gov/sites/default/files/publications/Protecting%20Infrastructure%20During%20Public%20Demonstrations_102220_FINAL_508.pdf
- **Vehicle Ramming: Security Awareness for Soft Targets and Crowded Places**, DHS CISA
www.cisa.gov/sites/default/files/publications/Vehicle%20Ramming%20-%20Security%20Awareness%20for%20ST-CP.PDF
- **Security and Resiliency Guide: Counter-Improvised Explosive Device (C-IED) Concepts, Common Goals, and Available Assistance**, DHS/FBI, www.cisa.gov/publication/security-and-resiliency-guide-and-annexes (Note: Includes links to annexes for Healthcare and Public Health Facilities, Lodging, Outdoor Events, Public Assembly, and Sports Leagues and Venues)
- **C-IED Training Courses**, DHS CISA www.cisa.gov/bombing-prevention-training-courses

For more information and resources or to reach your local Protective Security Advisor (PSA), please visit www.cisa.gov or email Central@cisa.gov. Call 9-1-1 immediately in the event of an emergency.