# Large-Scale Vaccination Clinic Output and Staffing Estimates: an Example

**Considerations and Guidance for State and Local Planning for Emergency, Large-Scale, Voluntary Administration of Influenza Vaccine**

## Introduction

This document describes the different activities needed for the administration of influenza vaccine as well as examples of personnel estimates for clinic staffing. The examples could be expanded or contracted, as needed, to address changes in vaccination administration goals for different population areas. The example staffing estimates were arrived at by: 1) review of previous large-scale-clinic models and publications, 2) computer modeling for clinic flow and output estimates with different example staff numbers. The time requirements for these activities may differ depending upon the overall demands placed on the vaccine clinic delivery system and could require adjustment of staffing estimates based on specific situations (for example need for security staff may be highly situation-dependant). State and local planners should evaluate these activity time estimates and consider what staffing or flow adaptations may be needed to accommodate increases or decreases in activity time requirements.

The numbers shown in the tables below are examples of the human resources needed with the above clinic assumptions and configuration. Alterations in the assumptions regarding clinic activity time estimates and staffing requirements can be explored to determine ways to further maximize clinic output and human resource utilization. Although staff numbers may vary depending upon the assumptions and clinic output requirements, the general tasks that must be addressed within the clinic (patient education, screening, counseling, vaccination, etc.) would not change.  The example models as outlined assume that clinics can be operating at near full efficiency to meet vaccination goals once the decision to offer voluntary vaccination is made. Planners may vary the vaccination rate per hour based on their own experience.

# Vaccinations Administered
## Clinic Estimate with 4 Vaccination Stations

| | | |
|---|---|---|
| Vaccination Clinics (VC) | 1 clinic site | More sites could be added to accommodate larger population bases |
| Vaccination Stations (VS) | ○ 4VS per shift<br>○ 1 vaccinator per station<br>○ 0.5 to 1 vaccine preparer per station (who can also alternate vaccinating)<br>○ 8 vaccinators/vaccine preparers per shift | |
| Hours of Operation | At a minimum 16 hours/day | Consider expanding hours for higher daily output or to address overflow |
| Vaccination Delivery | ○~ 30 vaccinations per VS/ hour<br>○~ 120 vaccinated hr/VC<br>○~1900 per day/VC<br>○~19,000 vaccinated in ~ 10 days | 30 vaccinations per VS/hour allows for variations caused by vaccinator rotation, resupply requirements, completing vaccination card, and other considerations |

# Breakdown of Clinic Personnel
## for Vaccination Clinic with 4 Vaccination Stations

| Position | Number per 8-h Shift | Number per 16-h Day | Experience |
|---|---|---|---|
| Forms (VIS) Distribution+ | 2 | 4 | Nonmedical |
| Orientation/Information | 2 | 4 | Nonmedical |
| Medical Screeners | 1 | 2 | Medical: nurse |
| Clinic Flow; Reviewer/ Forms Helpers | 4 | 8 | Nonmedical: to assist with forms completion, collection, and clinic flow |
| Vaccinators | 4 | 8 | RNs, LPN, others as dictated by state laws |
| Vaccine Preparer/Supply to VS | 4 | 8 | LPN, MT |
| Exit Review | 2 | 4 | RN or public health person for questions/instruction/ observation and form verification |
| Medical Records/Data Entry | 5 | 10 | Nonmedical, vaccine info and doses administered data processed |
| Clinic Manager | 1 | 2 | Nonmedical Public Helath/ Imm Programs Personnel |
| Supply Manager | 2 | 4 | Nonmedical |
| Security | 2 | 4 | Non-public health resource |
| Translator (not counted in total clinic staffing estimates) | At least one per major language per shift | Unknown | Language fluency with training |
| Float Staff | 1 | 2 | Nonmedical volunteers |
| EMT | On call | | Medical |
| IT Support | On call | | Nonmedical |
| Total Personnel | 29 | 58 | (does not include translators) |

# Vaccinations Administered
# Clinic Estimate with 8 Vaccination Stations

| Vaccination Clinics (VC) | 1 clinic site | More sites could be added to accommodate larger population bases |
|---|---|---|
| Vaccination Stations (VS) | ◷ 8 VS per shift<br>◷ 1 vaccinator per station<br>◷ 0.5 to 1 vaccine preparer per station (who can also alternate vaccinating)<br>◷ 16 vaccinators/vaccine preparers per shift | |
| Hours of Operation | At a minimum 16 hours/day | Consider expanding hours for higher daily output or to address overflow |
| Vaccination Delivery | ◷~ 30 vaccinations per VS/ hour<br>◷~ 240 vaccinated hr/VC<br>◷~5000 per day/VC<br>◷~38,000 vaccinated in ~ 10 days | 30 vaccinations per VS/hour allows for variations caused by vaccinator rotation, resupply requirements, completing vaccination card, and other considerations |

# Breakdown of Clinic Personnel
## For Vaccination Clinic with 8 Vaccination Stations

| Position | Number per 8-h Shift | Number per 16-h Day | Experience |
|---|---|---|---|
| Forms (VIS) Distribution+ | 3 | 6 | Nonmedical |
| Orientation/Information | 3 | 6 | Nonmedical |
| Medical Screeners | 1 | 2 | Medical: nurse |
| Clinic Flow; Reviewer/ Forms Helpers | 7 | 14 | Nonmedical: to assist with forms completion, collection, and clinic flow |
| Vaccinators | 9 | 18 | RNs, LPN, others as dictated by state laws |
| Vaccine Preparer/Supply to VS | 8 | 16 | LPN, MT |
| Exit Review | 4 | 8 | RN or public health person for questions/instruction/ observation and form verification |
| Medical Records/Data Entry | 8 | 16 | Nonmedical, vaccine info and doses administered data processed |
| Clinic Manager | 1 | 2 | Nonmedical Public Helath/ Imm Programs Personnel |
| Supply Manager | 2 | 4 | Nonmedical |
| Security | 4 | 8 | Non-public health resource |
| Translator (not counted in total clinic staffing estimates) | At least one per major language per shift | Unknown | Language fluency with training |
| Float Staff | 2 | 4 | Nonmedical volunteers |
| EMT | 1 | 2 | Medical |
| IT Support | On call | | Nonmedical |
| Total Personnel | 53 | 106 | (does not include translators) |