GIS approaches to Emergency Field Response at DOHMH

POINTS OF DISPENSING (PODS)

By: Mustafa Ali (Moose) MPH, CPH
New York City Department of Health and Mental Hygiene’s Office of Emergency Preparedness and Response (OEPR)
Emergency Field Operations – Topics to Discuss

- POD Assignment
  - GIS assignment
  - POD reporting
  - Public sharing
POD Assignment Background

- Points of Dispensing (PODs) are located strategically in all 5 boroughs
- 165 active PODs
- Can serve the public during a health emergency
- DOHMH staff and volunteers are assigned to each POD
POD Assignment Process

- Agency staff and POD Responder Volunteers are geocoded
POD Assignment Process

- Agency staff and POD Responder Volunteers are geocoded

- A python script that utilizes Network Analyst assigns staff
  - Location Allocation
  - Closest Facility

- NY State are assigned first
POD Assignment Process

- Agency staff and POD Responder Volunteers are geocoded

- A python script that utilizes Network Analyst assigns staff
  - Location Allocation
  - Closest Facility

- NY State staff are assigned first

- Out of NY State are assigned after
POD Assignment Workflow

- **ArcGIS**
  - Geoprocessing
  - Online layers

- **GIS FGDB**
  - Geoprocessing
  - Export

- **OEPR Staffing Database**
  - All volunteers
  - Dynamic Emergency Notifications
  - Automated flow

- **DOHMH Employee Database**
  - All staff
  - Messaging to staff
  - Automated flow

- **Vesta**
  - All volunteers
  - Emergency Notifications
  - Automated flow

- **GAL**
  - All volunteers
  - Dynamic emergency notifications
  - Export

- **NYCAPs**
  - Citywide Database
  - Emergency Roles
  - Citywide Training
  - Ad-Hoc Load

- **Notification**
  - POD OC
  - POD Staff

- **Alternate Staffing flow**
  - Leadership

- **Situational Awareness**
  - Reporting

- **ArcGIS Online**
  - All volunteers
  - Emergency Notifications
POD Management Tool

Background

- Staff are assigned to different roles at each POD site
  - Manage the ins and outs at the POD
  - Trained to mobilize sites rapidly
  - Stations under Administration Manager will report out to the POD Operations Center (POD OC)
Survey123

- Survey123 for ArcGIS is a form-centric application from ESRI that allows users to share and analyze survey information
- Works on smartphones, tablets, and the web
- POD Staff can download the application onto their device and download surveys to report out to the POD OC
- Data can be collected without connectivity
Survey123

- Users select the applicable tile from Survey123
- The event is controlled by the Operations Center and is not editable
- The borough and POD are selected
- Reporting is conducted
Data Flow

165 POD Sites

Smart Phone Survey 123

ArcGIS Online

SQL Server Database

DOHMH

Desktop ArcGIS Online

POD Operations Center
Form Count Dashboard
Med Count Dashboard
How do we share data with the public?

August 1, 2014: Point of Dispensing staff distributes medication during a preparedness exercise.
Emergency Medication Distribution: Points of Dispensing (PODS)

During a pandemic flu outbreak, bioterrorism attack or other public health emergency, you can get free medication, vaccinations and medical supplies at one of the City’s Point of Dispensing (POD) sites. PODs can quickly distribute medication and supplies to a large number of people in a short period of time in order to prevent illness.

PODs are designed to prevent healthy people from getting sick during a public health emergency. You should only go to one if you have been potentially exposed to an agent or disease. They will not treat people who are already sick.

PODs will only open during a public health emergency that requires the Health Department to quickly hand out medication to a large number of people.

Visiting a POD
If you visit a POD during an emergency, you will not need identification to receive medication or supplies.
If a POD is distributing pills, one person may pick up medicine for themselves and up to five other people. If PODs are vaccinating people, then every person requiring a vaccine must go to a POD.

Be sure you have the following information for yourself and anyone for whom you are picking up medicine before you go to a POD:
- Medical conditions
- Current medications
- Allergies
- Weights and ages

PODs will be located at schools throughout the five boroughs. Not every school is a POD site, but there will be at least one POD site located at a school near you.

Anthrax Screening Forms
If PODs are activated in response to an anthrax attack, you will need to complete a screening form to get medication at a POD.

You can download a form below to print and fill out before going to a POD, or you can pick up a form once you get to a POD site.

- Point of Dispensing Antibiotic Screening Form for Anthrax Medication (PDF)
- Anthrax Response Guide (PDF)

POD Updates During an Emergency
To get up-to-date information about how to get medication and supplies during a public health emergency:

- Public facing web app, linked on the DOHMH site
- Allows members of the public to search and find POD Sites near them
- Can view information such as operations status and wait time
POD Locator (public facing)

- Production: [https://maps.nyc.gov/pods/](https://maps.nyc.gov/pods/)
Future Steps

- **POD Assignment**
  - Apply a more equity based framework for POD placement
  - Recruit from City Agencies

- **Forms:**
  - Consolidate forms for ease of use
  - Revise forms as operating plans evolve
  - Incorporate notification structure for users

- **Dashboards:**
  - Aesthetic updates, optimize widget selection
  - Annual process of User Acceptance Testing

- **POD Locator Tool:**
  - Incorporate 11-60 day planning
Questions?