Presentation Overview

- Emergency Responsibility
  - Public Health and Medical Services
  - Emergency Medical Service
  - Public Health Preparedness & Planning
  - Preparedness Programs
Presentation Overview

- DPH’s Response
  - Modular Medical Expansion System
  - State Health Operations Center
  - Medication Mass Distribution
  - Alternate Care Facilities
- Pandemic Influenza & Novel H1N1
- Delaware Medical Reserve Corps
Emergency Responsibilities
Delaware Division of Public Health (DPH)

Our mission is to develop, implement, and maintain a comprehensive program to prepare for, mitigate against, respond to, and recover from public health threats and emergencies.
Emergency Responsibilities

Authority

- Title 20 Public Health Emergencies
  - Authority and responsibility to respond to or plan for public health emergencies
  - Control of Health care supplies
  - Vaccination & Treatment
  - Isolation and Quarantine
Public Health Threats

As one considers the many unique and distinct threats challenging us....

.....public health preparedness is a cross discipline need and requires integrated planning across all sectors.
Emergency Responsibilities

- DPH is lead agency
  - Public Health and Medical Services
  - Emergency Medical Services
- Command and control
- Representatives at State and Local Emergency Management Agencies (EMAs)
Emergency Responsibilities

- Mechanism for coordinated assistance
  - i.e. Evacuation of hospitals
- Supplement and support local resources
  - Medications and medical supplies
Emergency Responsibilities

Preparedness Programs

- Mass Medication Distribution & Countermeasure
- Medical Surge
- Surveillance
- Evacuation Support
- Mass Fatality Management
- Risk Communications & Call Center
Emergency Responsibilities
Preparedness & Planning

- Stockpile
  - Medications
  - Medical Supplies
- Plans
  - All Hazards
  - Multiple planning scenarios
  - ‘At risk’ community
  - Risk communications to the public
Emergency Responsibilities
Preparedness & Planning

- Outreach
  - Pandemic Influenza Outreach
Emergency Responsibilities

Partner Agencies

- Delaware National Guard
- Delaware State Police
- Hospitals
- Emergency Management Agencies – local and state
- Delaware Department of Transportation
DPH’s Response

Modular Medical Expansion System (MMES)
The Delaware Modular Medical Expansion System

Client/Patient Enter NEHC, Hospital, or MNS

Neighborhood Emergency Help Center (NEHC)
- Mass prophylaxis/immunization
- SNS dispensing point
- Counseling
- Community outreach
- Mobile asset
- 1000 to 2000 per hour dispensing
- 600 per hour vaccination

Medical Needs Shelter (MNS)
- Minor medical conditions
- 4 facilities for a total of 200 beds
- Mobile asset
- Operated by Delaware National Guard in conjunction with DPH
- Stand alone or part of the general shelter system

Hospital

Acute Care Center (ACC)
- Mass inpatient care
- 400 beds
- Auster care
- Mobile asset
- Operated by hospitals

EMT Transportation To MNS
EMT Transportation To Hospital
EMT Transportation To Home
EMT Transportation To ACC
EMT Transportation To and From ACC & Hospitals

Home
Morgue

Mobile Medical Facility (MMF): Division of Public Health's MMF can operate as a ACC, NEHC, MNS, or a morgue

Key:
Green arrows & person represent well person (not sick).
Red arrows & person represent sick or person who needs medical attention.
State Health Operations Center (SHOC)

- Command & Control
- Centralizes coordination
- Staffed by DPH and DHSS employees
- Technical Expertise
Neighborhood Emergency Help Center (NEHC)

- Mass prophylaxis & immunization
- SNS dispensing point
- Counseling
- Community outreach
- Mobile asset
- 1000 to 2000 per hour dispensing
- 600 per hour vaccination
In-State Stockpile (ISS)

- Countermeasure stockpile of medications to treat essential workers and the public during a public health emergency
- Medications stockpiled are:
  - Antiviral Medication
  - Antibiotics
  - Nerve agent anti-dotes
  - Medication for Radioactive Exposure
- Designed to counter the effects of:
  - Pandemic influenza
  - Biological agents (i.e. Anthrax)
  - Nerve agents
  - Radioactive exposure
- Other medical equipment
Acute Care Center (ACC)

- Mass inpatient care
- 400 beds
- Austere care
- Mobile asset
- Hospitals operate in conjunction with DPH
Acute Care Center

Photo Courtesy of United States Department of Health and Human Services:
http://1918.pandemicflu.gov/pics/photos/Iowa_Flu2.jpg
DPH Alternate Care Facilities
Medical Needs Shelter (MNS)

- 4 facilities for a total of 200 beds
- Mobile asset
- Operated by Delaware National Guard in conjunction with DPH
- Stand alone or part of the general shelter system
- House individuals who require support with their medical needs and can’t be accommodated in a regular shelter
Medical Needs Shelter (MNS)
Mobile Medical Facility (MMF)

- Portable medical facility
  - HVAC
  - Oxygen delivery
  - Hygiene stations
  - Plumbing

- Operate as a:
  - Alternate care facility
  - Command Center
  - Mobile Morgue
Mobile Medical Facility (MMF)
MMF – Mobile Morgue
Pandemic

- A disease outbreak that spreads easily as most people are susceptible
- Effective human to human transmission is necessary
- Measure by how fast the virus spreads
- Wide geographic spread
Seasonal vs. Pandemic Flu

- The seasonal flu usually occurs annually between December and March.
- Pandemic flu is caused by a novel virus strain that humans have no resistance against.
- Pandemic flu infects large numbers of people of different ages globally and can cause serious illness and deaths.
Influenza Pandemics of the 20th Century

1918 “Spanish Flu”  
20–40 Million Deaths  
675,000 U.S.

1957 “Asian Flu”  
1–4 Million Deaths  
70,000 U.S.

1968 “Hong Kong Flu”  
1–4 Million Deaths  
34,000
Pandemic Waves

- Pandemics occur in multiple waves of disease outbreaks
- Waves can last six to eight weeks
- The time between pandemic waves varies and cannot be easily predicted
Novel H1N1 Influenza “SWINE FLU”
On March 18, 2009 the World Health Organization (WHO) reported an outbreak of Influenza Like Illness in Mexico. Laboratory analysis confirmed (Novel) Swine Influenza A/H1N1virus had emerged.

April 24, 2009 – WHO reported Influenza Like Illness in Mexico & U.S.
- Mexico (854 cases / 59 deaths)
- U.S. (7 cases / 0 deaths)
Healthy Young Adults

April 28, 2009 – University of Delaware – Public Health Responds
June 11, 2009 – WHO Reported:
- 74 Countries
- 28,744 Cases
- 144 Deaths
- **U.S. 13,217 Cases (46%) / 27 Deaths (19%)**

WHO Declares “Global Pandemic”

51 Reporting States & Territories as of 8/13/2009
- 7511 Hospitalized Cases
- 477 Deaths
H1N1 Facts & Figures

- Occurred very late in the flu season
- Affected young people disproportionately
- Caused widespread illness; some severe or fatal
- Socially disruptive, especially for schools – closures and canceling of events
- Thousands of healthcare and public health workers respond in the U.S.
Mortalities

Novel H1N1 Confirmed & Probable Case Rate in the United States, By Age Group

*Excludes 6,741 cases with missing age.
It’s Not Over . . .

- Continuing spread in U.S.
  - Outbreaks in summer camps, some colleges, and communities across the U.S.

- Southern Hemisphere Patterns
  - Substantial disease in Argentina, Chile, and Australia
  - Reported cases from Africa & Asia
  - Reported strain on health care system in some localities

- CDC anticipates pattern will continue in the U.S. this fall.
Preparing for a Pandemic

What can you do? It’s a Shared Responsibility

- Develop, Review & Update Emergency Plans & Policies
- Medical & healthcare providers should take PPE Precautions Seriously
- Institute & Practice Healthy Hygiene
  - Have employees stay home if they are sick!
- Develop Continuity of Operations Plans
- Follow Delaware & CDC issued guidance
- Get vaccinated when H1N1 vaccine is available
- Keep yourself informed
Preparing for a Pandemic

What are we doing?

- Preparing for a vaccination campaign
- Enhanced Surveillance
- Communicating accurate and timely information
- Enhancing policies and plans
- Enhancing stockpiles
Delaware Medical Reserve Corps (DMRC)

Purpose

- Supplement existing medical and public health staff during and after an emergency
- Emergency roles performed by DMRC members may include:
  - Mass vaccination
  - Dispensing medications
  - Administrative duties
DMRC Volunteer Members

- >400 Volunteers
- Medical
  - 7 Dentists
  - 4 EMT Basic & Paramedics
  - 140+ Pharmacists
  - 32 Physicians
  - 14 Licensed Practical Nurses
  - 69 Registered Nurses
- Many others – language interpreters, accountants, IT, etc.
DMRC Participation Activities

- Bi-monthly meetings
- Exercise participation with DPH and other state agencies
- Response to H1N1
- Training
- Outreach event
- DMRC Leadership Team
  - Chair & Co Chair
  - Focus Groups (Recruitment & Training)
Additional Information

- For Public Health Preparedness Section:
  - Contact Timothy O’Hea at (302) 223-1720 or at Timothy.O’Hea@state.de.us
  - Get additional information about Public Health Preparedness, Health Alerts, and Influenza information at:

- For Pandemic/Influenza Planning and Information go to:

- For Delaware Medical Reserve Corps:
  - Contact Public Health Preparedness at (302) 223-1720 or at servde@state.de.us or register at www.servde.org
Questions