Role of Illinois Pharmacists in a Public Health Emergency

Garth K. Reynolds, BSPharm, RPh
Executive Director
Illinois Pharmacists Association

Disclosure and Conflict of Interest

Garth Reynolds, Masood Athar, Carla Little, Dawn Davis, and Jeannette Tandez declare no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, stock holdings and honoraria.

The continuing pharmacy education activity has received support from a CDC/ASTHO educational grant.

Pharmacist Objectives

At the conclusion of this program, the pharmacist will be able to:
1. Discuss the role of the pharmacist in public health emergencies.
2. Describe the memorandum of understanding (MOU) between public health and pharmacists/pharmacies.
3. Review major infectious diseases and the public health response.
4. Discuss the role of Strategic National Stockpile Medical Countermeasure and CHEMPACKS in public health emergencies.
5. Recall overview information of the State SNS, MCM, and CHEMPACK programs.
6. Outline the process for community mass prophylaxis.
7. Explain an overview of the federal Medical Reserve Corps (MRC) Program, including history, mission, and examples of activities during steady state and response.
8. Review the recruitment standards of the Illinois Pharmacy MCM Response Team and how that connects to the MRC Program.
2. Describe the memorandum of understanding (MOU) between public health and pharmacists/pharmacies.

3. Review major infectious diseases and the public health response.

4. Discuss the role of Strategic National Stockpile Medical Countermeasures and CHEMPACKS in public health emergencies.

5. Recall overview information of the State SNS, MCM, and CHEMPACK programs.

6. Outline the process for community mass prophylaxis.

7. Explain an overview of the federal Medical Reserve Corps (MRC) Program, including history, mission, and examples of activities during steady state and response.

8. Review the recruitment standards of the Illinois Pharmacy MCM Response Team and how that connects to the MRC Program.

What does SNS stand for?

- Simple Notification Service
- Special National Stockpile
- Strategic National Stockpile
- Strategic Network Solution

The IDPH MOU is an agreement between community pharmacy and which of the following?

- Illinois Department of Public Health
- Local Health Department
- Regional Health Department
- Centers for Disease Control

What is the name of the state volunteer management system?

- Illinois Volunteers
- Lincoln's Volunteers
- Illinois NOW
- Illinois HELP
- Volunteer Illinois
Who can volunteer with a Medical Reserve Corp (MRC) unit?

a) Anyone can volunteer  
b) Healthcare providers only  
c) Physicians only  
d) EMS and Nurses only  
e) Non-healthcare providers only

Why Pharmacists?

• Most accessible health care provider in our communities.
• Ideally located in our communities and set up to provide care.
• Encourage our patients and our team to prepare themselves for an emergency.
• Pharmacists have proven themselves capable to assist the public.

Role of the Pharmacist

Why Pharmacists?

• Most accessible health care provider in our communities.
• Ideally located in our communities and set up to provide care.
• Encourage our patients and our team to prepare themselves for an emergency.
• Pharmacists have proven themselves capable to assist the public.

Community Pharmacy Role in Seasonal and Pandemic Immunizations

• Pharmacists are already important routine immunizers across the United States
  – Approximately 260,000 pharmacists provide vaccinations
  – 20% of seasonal influenza vaccinations of adults are administered in a pharmacy or retail setting
• Pharmacists would become even more crucial during a pandemic
  – Pharmacists were underutilized during H1N1 (2009)
  – If vaccine were provided in a more timely way, the time to vaccinate the public could be reduced significantly
  – Widespread vaccination at or after the peak of disease would have little impact

https://www.astho.org/Programs/Infectious-Disease/Pandemic-Influenza/MOU-Resource-Toolkit/Training-PowerPoint
Services a Pharmacists Provide

- Administering vaccines
- Dispensing medications (on a mass scale)
  - Post-exposure or Prophylaxis
- Emergency refills needs
  - Chronic Medications
- Providing Medication Education and Patient Counseling
- Establishing their practice site (pharmacy) as a point of dispensing/care
- Participating as a volunteer in a Medical Reserve Corp
- Mitigating medication shortages

Unique Influenza Pandemic Logistics/Planning

<table>
<thead>
<tr>
<th>Influenza Pandemic</th>
<th>Seasonal Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal government works with vaccine manufacturers to develop pandemic vaccine supply for entire U.S.</td>
<td>Routinely handled as localized public health emergencies</td>
</tr>
<tr>
<td>State public health programs receive weekly pro rata allocations and manage orders/distribution within the state</td>
<td></td>
</tr>
<tr>
<td>Healthcare providers order pandemic vaccine from public health</td>
<td>Seasonal flu vaccine is distributed directly to healthcare providers</td>
</tr>
<tr>
<td>Higher levels of tracking may be required</td>
<td></td>
</tr>
<tr>
<td>Recommendations for use may differ for pandemic vaccines (e.g., multiple doses, matching/mixing adjuvant)</td>
<td>Administration is routine and familiar (repeated annually)</td>
</tr>
<tr>
<td>Affects all groups and ages, so public health response must be broad and sustained</td>
<td>Often focused on select age groups and subpopulations for a winter season</td>
</tr>
</tbody>
</table>

Related Literature

• Chronic Medications

http://www.astho.org/Programs/Infectious-Disease/Pandemic-Influenza/MOU-Resource-Toolkit/Training-PowerPoint
Defining Roles for Pharmacy Personnel in Disaster Response and Emergency Preparedness

- Developed Framework to Review and Assign Pharmacy Personnel
  - Identification of Core Capabilities
  - Development of a Classification Scheme for Pharmacy Personnel
  - Defining Roles and Responsibilities (Role-Mapping)
- Pharmacist
- Student Pharmacist
- Certified Pharmacy Technicians
- Pharmacy Technicians
- Non-Pharmacy Personnel

Integrating Pharmacies into Public Health Program Planning for Pandemic Influenza Vaccine Response

- To assess relationships and activities between pharmacies and public health departments.
- Examined three areas:
  - Engaging, Recruiting and Enrolling Pharmacists as Pandemic Vaccine Providers;
  - Vaccine Allocation and Distribution Planning;
  - Policy, Formal Agreements, and Memoranda of Understanding.
- Established recommendation for MOUs between Public Health Departments and Pharmacies
  - Increase coordination
  - Increase communication
  - Advances role of pharmacists in emergency response

Pharmacy Services After a Tank Car Derailment and Toxic Chemical Release in Blount County, Tennessee

- Assess impact on pharmacy services during a public health emergency.
- Survey of Pharmacies after the disaster to assess the following:
  - Disaster Preparedness;
  - Disaster Response;
  - Disaster Information Source Awareness;
  - Pharmacy Practice Act Amendment Preference;
  - Pharmacy Impact.
- “Disasters have the potential to affect all pharmacies in a locality but appear to have a significant impact on those located close to the scene.”
- The number of patients presenting to pharmacies and the total duration of the disaster also appear to influence the overall impact of disasters on pharmacies.
- Pharmacists would be benefited by an awareness of current disaster information sources and legal supports pertinent to pharmacy practice in times of disaster.”
Policy Review

IDPH and Pharmacists

• Together we have coordinated on the following emergency preparedness programs and initiatives:
  – Providing H1N1 vaccinations in 2009;
  – Developing strategies for H1N1 response;
  – Presentations on the role of pharmacists and pharmacies in public health emergencies
    • 2015 Illinois Public Health & Healthcare Coalitions Preparedness Summit

American Public Health Association

• Policy Statement - 200614 (November 2006)
• The Pharmacist and Public Health Preparedness
  – “A confluence of events has refocused attention on the role pharmacists can play in public health planning and emergency preparedness. The importance of medication distribution and patient care during disasters is vital.”

National Association of Boards of Pharmacy

• Creating an Emergency and Disaster Preparedness and Response Plan
• Work with State Legislature to Enact Emergency Dispensing and Other Related Provisions
• Develop and Maintain a Contact List of Local/State Government Agencies and National Pharmacy Organizations
• Develop and Maintain a Contact List of Local/Regional Pharmaceutical Manufacturers, Wholesale Drug Distributors, Pharmacies, Pharmacists, and Pharmacy Technicians
• Educate Licensees on Board Efforts Related to Emergency or Disaster Planning
American Pharmacists Association

- The Role & Contributions of the Pharmacist in Public Health (2011)
  - In concert with the American Public Health Association’s (APHA) 2006 policy statement, ‘The Role of the Pharmacist in Public Health,’ APHA encourages collaboration with APHA and other public health organizations to increase pharmacists’ participation in initiatives designed to meet global, national, regional, state, local, and community health goals.

- Disaster Preparedness (2015)
  - APHA encourages pharmacist involvement in surveillance, mitigation, preparedness, planning, response, and recovery related to terrorism and infectious diseases.

Addressing the Planning Gaps: MOU Template

- CDC and ASTHO Partnership (2013) to determine best practices for increasing coordination
- Template MOU (2015)
- Pilot project in three states to test implementing MOU (2015-2016)
  - Arkansas
  - Tennessee
  - Georgia
- Stakeholder meeting at American Pharmacists Association (APHA) Annual Meeting (March 2016)
  - APHA
  - ASTHO
  - CDC
  - NASPA
  - NACDS

Illinois Medical Countermeasure Pharmacy Workgroup

- Illinois Department of Public Health recipient of grant from CDC/ASTHO.
  - Goal: Develop/Establish MOU and investigate Pharmacy MRC
- Started meeting - Nov 2016
- Developed Draft MOU - Dec 2016 - Jan 2017
- Informational Sessions held via web and conference call to pharmacies throughout the state - Feb & March 3, 2017
- Informational Conference Call with National/Regional Chain Pharmacies and Wholesalers throughout the state - May 4, 2017
- MOU Finalize by IDPH - May 31, 2017
- Signing Phase for Pharmacies and LHDs - June 2017
Emergency Refills - SB1790

- Sponsor: Senator Steve Stadelman (D-Rockford)
- Medication for a chronic disease or condition
- Interruption of therapy might reasonably produce undesirable consequences or cause patient suffering;
- Pharmacy previously dispensed or refilled a prescription;
- Not a controlled substance;
- Informs the patient or the patient's agent authorization is required for future refills;
- Documented in the patient's prescription record and the pharmacist informs the prescriber of the emergency refill.
- Supply limited to the amount needed for the emergency period - not to exceed a 30-day supply.
- STATUS: Public Act 100-0237 - 08/18/2017

Steps to Establish an MOU

1) Internal State Health Department Alignment
2) Identify Community Pharmacy Partners
3) Complete a Community Pharmacy Review Process and Revise
4) Publicize and Celebrate Signing an MOU and Interim Accomplishments
5) Keep Up the Momentum

Memorandum of Understanding

Mutual Benefits: A Pandemic Preparedness MOU Serves Public Health and Community Pharmacies

- Improved coordination before and during pandemic
- Stronger partnerships overall
- Faster, more efficient access to vaccine for the public
### Specific Benefits

**For Public Health**
- Leverage strengths of all partners
- Use existing pharmacy infrastructure to increase public vaccine access points
- Reach full vaccine coverage of the public sooner
- Ensure equity among all pandemic vaccinators
- Strengthen partnerships and model approaches for other dispensing and clinical services

**For Community Pharmacies**
- Ensure early allocation of federal pandemic vaccine supply for community pharmacies
- Standardize operations and points of contact
- Develop a distribution approach in advance
- Educate public health about pharmacy planning and response
- Use public health infrastructure, as needed
- Reduce waste and improve efficiency
- Clarify expectations and plan for information sharing
- Strengthen partnerships for other public health emergencies as well as routine healthcare issues

### MOU Components

- Pharmacist vaccinator enrollment and training
- Pandemic vaccine allocation
- Pandemic vaccine distribution
- Pandemic vaccination documentation
  - Includes use of immunization information systems (IIS)
- Pandemic vaccine payment issues
- Communication

### Provider Enrollment and Training

- Pharmacy may enroll/register all pharmacy sites as pandemic vaccination sites (vs. registering each site separately).
- Pharmacy is responsible for ensuring vaccinators have appropriate training, certification and following all guidance from state/CDC.
- Pharmacy is expected to sign Pandemic Vaccine Provider Agreement Form, if and when available and required by CDC.
- State responsible providing technical assistance, material, information, and resources, as available to assist the pharmacy.

### Allocation

- Existing vaccination capacity of pharmacy, geography, pandemic epidemiology, supply, and other factors should be considered in making allocation decisions and may vary over time.
- Weekly pharmacy vaccine allocation from state should be considered in advance of response activation.
Distribution

- Once pharmacy’s pandemic vaccine allocation is determined, it may be shipped to one site by CDC’s contracted distributor.
- Pharmacy and/or its existing distributor may do secondary distribution to sites/stores, in consultation with state.
- Information on secondary distribution should be shared with state at least weekly or as determined by state law/policies for the duration of time requested by the state.

Payment

- Federal government will purchase all pandemic vaccine and constituent products.
- Pharmacy may seek payment for vaccine administration, cannot exceed the regional Medicare vaccination administration rate.
- Pharmacy encouraged not to turn patients away due to inability to pay for vaccine administration payment.
- If the Emergency Prescription Assistance Program (EPAP) is enacted by the Federal government, pharmacy may utilize the EPAP mechanism, if allowable.

Documentation

- Vaccine administration data from pharmacy sites should be submitted to vaccine registry/IIS within 1 week of date of administration, if applicable.
- System for assessing prior pandemic vaccination status should be planned for, if multiple doses are required.

Communications

State Responsibilities

- Provide planning and technical assistance to the Pharmacy
- Provide timely updates regarding vaccine allocations, releasable information regarding the emergency, and changes in guidance
- Coordinate with State Pharmacy Association and/or Board of Pharmacy in advance
- Coordinate with pharmacy to retrieve and/or dispose of any unused pandemic vaccine

Pharmacy Responsibilities

- Coordinate with State Pharmacy Association, so that a pharmacy representative participates in State Pharmacy Association meetings, if applicable.
- Coordinate with the state to ensure statewide consistency with implementation of screening forms, educational material, billing, and training
- Participate in all planning discussions and exercises with state, as applicable
- Document vaccinations administered in the state IIS or as required by the state
MOU Sections

- Purpose
- Local Health Departments
- Pharmacies

Purpose

- To expand the capacity to distribute, in a rapid fashion, Medical Countermeasures to citizens of Illinois in response to threats to the public health.
- Planning, training and coordinated execution of Medical Countermeasures (MCM) distribution.
- Pharmacy infrastructure to assist in rapid distribution and/or administration of MCM to an affected population during a Public Health Incident, Emergency or Disaster.
  - Coordinated and standardized methods statewide
  - Between Local Health Department and Pharmacy
Local Health Department

- Coordinate with IDPH and signatory pharmacies to ensure statewide consistency with screening forms, tracking, training, and other Pharmacy requirements.
- Provide planning and technical assistance to Pharmacy, including but not limited to, supply lists, fact sheets, dispensing algorithms, and applicable requirements.
- Provide medical screening forms to Pharmacy as a guidance for implementing dispensing operations.
- Activate community-wide mass vaccination and dispensing plans as pre-approved by IDPH within its geographic jurisdiction.
- Notify Pharmacy that IDPH-preapproved community dispensing plans should be implemented.
- Provide Pharmacy with medical protocols regarding the Pharmacy’s response including, but not limited to, dosing and follow-up procedures.
- Provide Pharmacy with releasable information regarding the public health emergency situation.

Pharmacies

- Participate in all training and exercise requirements of IDPH when offered.
- Coordinate with IDPH and/or signatory LHDs to ensure statewide consistency with screening forms, tracking, training, and other Pharmacy requirements.
- Comply with all lawful pharmacy standards in effect during the incident.
- Identify the approximate realistic number of medication doses that could be administered by Pharmacy in a specified time period and communicate that information to the LHD.
- Receive, securely store and track medication deliveries, consistent with all federal, state and local government requirements, at Pharmacy-identified facilities during incidents.
- Ensure that Pharmacy site locations serve the general public.
- At Pharmacy’s discretion, ensure that its own employees, including those employed by its parent company, and their families, are cared for.

Important Information for the MOU

- **LHD**
  - Health Department Name, Contact Person (Title), Address, Phone, Email
- **Pharmacy**
  - Pharmacy Name, Pharmacist-in-Charge, Address, Phone, Email
  - Chain: Each store will need to be listed separately, including Pharmacist-in-Charge
  - Chain: Corporate Contact, Phone, Email
Next Steps

- Sign of the MOU (Pharmacies and LHDs)
- Pharmacy Training in 2017
  - 2017 Integrated Public Health & Healthcare System Preparedness Summit
    - June 13, 2017 | Bloomington
  - Illinois and Missouri Pharmacists Annual Conference
    - September 7-10, 2017 | St. Louis
  - Additional Education and Training Webinars
    - Third and Fourth Quarter 2017
- Stay up-to-date with at ipha.org

Public Health Emergencies and Disasters

Masood Athar, MD, MPH
Office of Preparedness and Response
Illinois Department of Public Health

Contact Information/Questions

Garth K. Reynolds, BSPharm, RPh
Executive Director
grey Goulds@ipha.org

Illinois Pharmacists Association
204 West Cook Street
Springfield, Illinois 62704
P: 217/522-7300 | F: 217/522-7349
www.ipha.org

Like us on Facebook
Follow on Twitter
@ILPharmacists
@IPhAAnnual
@IPhAFoundation
Follow on Instagram
@ILPharmacists
Subscribe on Youtube

Public Health Emergencies and Disasters

Natural
- Major outbreak
  - SARS, MERS Co-V, EVD
  - Monkey pox
  - Pandemic Flu
- Hurricanes
- Earthquakes
- Blizzards
- Floods

Man made
- WMD- BT (CBRNE)
  - Chemical
  - Biological agent
  - Radiological
  - Nuclear
  - Explosive
Bioterrorism Agents

Category A
- **Anthrax** (Bacillus anthracis)
- Botulism (Clostridium botulinum toxin)
- **Plague** (Yersinia pestis)
- **Smallpox** (variola major)
- Tularemia (Francisella tularensis)
- **Viral hemorrhagic fevers** (e.g., Ebola, Marburg) and arenaviruses (e.g., Lassa, Machupo)

Category B
- **Brucellosis** (Brucella species)
- Epsilon toxin of Clostridium perfringens
- Food safety threats (e.g., *Salmonella* species, *Escherichia coli* O157:H7, *Shigella*
- Glanders (Burkholderia mallei)
- Melioidosis (Burkholderia pseudomallei)
- Psittacosis (Chlamydia psittaci)
- Q fever (Coxiella burnetii)
- Ricin toxin from *Ricinus communis* (castor beans)
- Staphylococcal enterotoxin B
- Typhus fever (Rickettsia prowazekii)
- Viral encephalitis (alphaviruses [e.g., Venezuelan equine encephalitis, eastern equine encephalitis, western equine encephalitis])

Past Out-Breaks
- 1901-03: Boston Outbreak
- 1947: New York
- 1963: Stockholm
- 1970: Germany
- 1972: Yugoslavia

Single case

Post Exposure Vaccination

**Ring Vaccination**
Because the (type of smallpox virus used in the vaccine) inoculated into the arm has a shorter incubation period (six to eight days) than variola virus acquired through respiratory inhalation, vaccination can alleviate or even abort smallpox if given soon after exposure.

*Joel G. Breman, National Institute of Health*
Recent Major Outbreaks ...

- Anthrax: 2001
- SARS: March 2003 - July 2003
- Monkey Pox: May 2003 - July 2003
- Pandemic Influenza: H1N1 2009-2010
- MERS-CoV: 2012-2016
- Zika Virus: on going

Where anthrax was found

Location of anthrax spores and infections from 2001 outbreak:

- Kansas City, Mo.
  Spores found in postal facility
- Indianapolis, Ind.
  Spores found in postal facility
- New York City
  Four confirmed cases; one death
- Princeton, Hamilton, N.J.
  Five confirmed cases
- Washington, D.C., area
  Three confirmed cases and two deaths
- Boca Raton, Lake Worth, Fla.
  One confirmed case; one death

Anthrax- 2001

22 cases of Anthrax
  - 11 Cutaneous (7 confirmed, 4 suspected)
  - 11 Inhalation (5 deaths)
    + 50% mortality

Bio-terrorism event
More than 10,000 were given medication

To prevent deaths
  - Medicate within 48 hours/60 days + Vaccination
  - Strategic National Stockpile (SNS)
  - Medication: Doxy, Cipro, Amox
  - Vaccine
Post Exposure Prophylaxis

- Prophylaxis for whole community for 10 days
- Prophylaxis for focused group for 50 days
- Anthrax Vaccine Absorbed (AVA) Three vaccinations: 0-14-28 day
- ACIP recommends a post-exposure regimen of 60 days of appropriate antimicrobial prophylaxis combined with three SC (subcutaneous) doses of AVA2 (administered at zero, two, and four weeks post-exposure) as the most effective protection against inhalation anthrax for previously unvaccinated persons aged ≥18 years who have been exposed to aerosolized B. anthracis spores

Severe Acute Respiratory Syndrome (SARS)

- Entirely new pathogen that has found its way from animal to human
- March 2003 - July 2003
  - Rapid onset and rapid decline
- 8,437 cases, 916 deaths, 26 countries
- Had social, economic, and humanitarian repercussions
  - Asia 30 billion
  - Canada 13 billion

Lessons Learned

- Hospital Exposure: 30% cases - Healthcare workers
- Heightened risk to health care workers, SARS appears to spread mostly through large respiratory droplets, requires close contact
  - ICU Medical Staff, Physiotherapists
  - During aerosol-generating procedures such as intubations
- 50% death in patients on ventilator
- Basic infection control measures worked well
Monkeypox

- May 2003 - July 2003
- Started abruptly ended quickly
- 72 cases
- 6 States
  - Illinois,
  - Wisconsin,
  - Indiana,
  - Kansas,
  - Missouri, and
  - Ohio

Lessons Learned

- From Animal to Human
- No deaths occurred in this outbreak
- Demonstrated how new diseases can emerge due to facile movement of species from one location to another (including the illegal transporting of species)

MMWR, 2003;52:642-6
Unpredictability

1918
- Second wave 10 fold increase in death rate
- Young and healthy individuals 15 - 35 yrs
- Deaths were from Pneumonia - Influenza infection

1957
- Outbreak explosive but fatalities much lower
- Infants and elderly, illness concentrated among school children
- Close contacts and overcrowding
- Second wave concentrated in elderly

1968
- Milder and mortality still lower than 1957 Epidemic
- Death concentrated among elderly

2010
- Low virulence, mortality low, young adults and people >60 we less infected
- Estimated 61 million infected in USA, deaths 12,470

Lessons Learned

- Unpredictability: through-out
- Pandemic could be caused by the same subtype (as a seasonal virus)
- Risk Factors
  - Obesity: severe flu
  - Age: Below 60
- Wave pattern:
  - Late April-May → Late October early November
- Stressed: Health Care System - ER
- Danger for pregnant women
- Early intervention with anti-viral

Burden: Health Care System

- Based on extrapolation of the 1957 and 1968 pandemics suggests
  - 839,000 to 9,625,000 hospitalizations,
  - 18-42 million outpatient visits, and
  - 20-47 million additional illnesses, depending on the attack rate of infection during the pandemic
- **2009-2010**
  - 0-17 yrs: 87,000
  - 18-64 yrs: 160,000
  - 65 yrs: 27,000

Middle East Respiratory Syndrome CoV
Middle East Respiratory Syndrome (MERS-CoV)

- Most MERS patients developed severe acute respiratory illness with symptoms of fever, cough and shortness of breath.
- Saudi Arabia: September 2012. (Retrospective MERS occurred in Jordan in April 2012).
- USA: May 2014: 2 cases.
- Republic of Korea 2015: The largest outbreak outside the Arabian Peninsula
  - All cases have been linked through travel to, or residence in, countries in and near the Arabian Peninsula.

MERS CoV

- Countries in or near the Arabian Peninsula with MERS cases: Bahrain, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, United Arab Emirates (UAE), and Yemen
- Countries outside of the Arabian Peninsula with travel-associated MERS cases: Algeria, Austria, China, Egypt, France, Germany, Greece, Italy, Malaysia, Netherlands, Philippines, Republic of Korea, Thailand, Tunisia, Turkey, United Kingdom (UK), and United States of America (USA).

MERS CoV

- January 2017: 1,888 lab-confirmed cases
- Sept 2012 to Dec 2016: 670 (30%) deaths
- 27 countries
Ebola Virus Disease

- 2014-2016 outbreak in West Africa was the largest and most complex Ebola outbreak since the virus was first discovered in 1976.
- Animal-borne: bats are the likely reservoir
- Spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.
- Spread between countries, starting in Guinea then moving across land borders to Sierra Leone and Liberia.

Lessons Learned

- Animal to Human
- Unprecedented: both in scale and impact
- Global Health Security: attention
  - International Health Regulations
  - definition, meaning, and the practical implications for programs and policy.
- Large scale transmission in the community beyond the index family was prevented by early case identification and isolation as well as quarantine imposed by the community.
- Health-care workers have frequently been infected while treating patients with suspected or confirmed EVD.
- 28,616/11,310 (40%)
Animal to Human

- Zoonotic diseases:
  - Monkey pox, SARS, Flu, MERS CoV, EVD, Seoul Virus
- **Monkey Pox:** Demonstrated how new diseases can emerge due to *facile movement of species from one location to another* (including the illegal transporting of species)
- Stronger and more integrated coordination between animal health and human public health
- Businesses and import laws

Challenges

- **9-11:** *Challenged National Security System*
- **Anthrax:** *Challenged the US Postal and Health System*
- **Monkey Pox:** *Challenged animal and human public health*
- **SARS, MERS CoV, EVD, and Zika Virus:** *Internationally challenged public trust and government, and health system capacity to address public health issues*

**How quickly does it spread?**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Reproduction Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mers</td>
<td>0.7</td>
</tr>
<tr>
<td>Ebola</td>
<td>1.7</td>
</tr>
<tr>
<td>Smallpox</td>
<td>7</td>
</tr>
<tr>
<td>Measles</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: ECDC, UMIC, Lancet

Message

- Emerging infections and animal pathogens can produce outbreaks of significant public health and economic impact.
- The “lessons learned” during past outbreaks provide the framework for better planning and readiness in the public health sector to respond to future challenges.
“Disasters are unpredictable but your response shouldn’t be!”

Strategic National Stockpile (SNS)

The SNS is a national repository of large quantities of medicines, vaccines, and other medical supplies stored in key locations throughout our nation.

These assets are designed to supplement state and local public health departments in the event of a large-scale public health emergency (terrorist attack, natural outbreaks, earthquakes, etc) that causes local supplies to run out.

Illinois Stockpile (Cache)
- State
- Hospitals/health departments

12-Hour Push Packages

- So named because this asset can be delivered anywhere in the United States within 12 hours of the Federal decision to deploy.
- First line of SNS support when the disease or agent is unknown.
- Makes of only 2% of available SNS inventory.
12-Hour Push Packages

- Each 12-hour Push Package is 50 tons of broad spectrum of medical assets in 130 containers.
  - Oral antimicrobials
  - Medical/surgical supplies
  - Respiratory supplies
  - Pediatric supplies
  - Intravenous supplies and medications, including controlled substances
- Additionally, pediatric oral antimicrobials suspensions will be shipped separately.

Managed Inventory

- The majority of SNS assets are kept as Managed Inventory (MI).
- Deployment is situation dependent:
  - Sent as an initial response to a known event or agent
  - Sent when an event requires additional or more specific supplies, following the deployment of the 12-Hour Push Package.
- State of Illinois has plans to receive SNS assets and distribute them as quickly as possible to local jurisdictions, and hospitals which then can dispense to/treat the local communities.

State of Illinois Strategic National Stockpile

REQUESTING SNS
Requesting SNS

- Confirmation
- State decision
- Federal and State authorities agree that the SNS is needed:
  - medicines are delivered to the state, within 12 hours of the decision to do so.

Both sexes, all age, all races

SNS Request - Distribution

- Governor’s Office
- IDPH
- IEMA
- CDC
- Hospitals
- Public Health
- First Responders
- RSS

Receiving, Storage and Staging (RSS)

- Orders to Dispatch SNS
- IEMA
- PH EOC
- Local EOC
- Local EMA
- RDC
- Coordination
- Hospital SNS Request
- Local Health Department

Event

COMMUNITY AFFECTED
Regional Distribution Center (RDC)

State SNS (Distribution) Planning Team

- IEMA - Overall Coordination
- IDPH - MCM Lead Agency; Biological Surveillance; Resource Allocation
- ISP (Illinois State Police) - Security at Warehouse and Convoys
- IDOT - Transportation
- CMS (Central Management Services) - Emergency Procurement; Assists with Transportation
- ING (National Guard) - Warehouse Mgmt; Back up Security; Back up Transportation
- IDOC (Illinois Department of Correction) - Regional Warehouse Ops; Illinois Pharmaceutical Stockpile; Back up Security and Transportation
- AGR (Agriculture) - IL Veterinary Stockpile Program

Aerosolized Anthrax Attack 48 Hour Mission

Point of Dispensing (POD)

Local Public Health Jurisdictions may opt to dispense medications via:

Open PODs
- Sites opened to the general public. Usually are pre-identified, planned sites.

Closed PODs
- Sites designated for a specific population, i.e. First Responders and critical infrastructure personnel responding to a public health emergency, hospitals, nursing homes, businesses, schools, etc.
POD- Dispensing Authorities: EUA; EUI; IND; and Standing Orders

Emergency Use Authorizations (EUAs):
- Issued by the US Food and Drug Administration.
- Allows for the wide-scale use of unapproved, uncleared, or unlicensed medical products and unapproved use of approved medical products in an emergency when there are no adequate, approved, and available alternatives.
- Allows for the use of expired medical countermeasures under certain/specific criteria.

Emergency Use Instructions (EUIs):
- Streamlined drug information fact sheets
- Issued by the US Food and Drug Administration during a public health emergency
- Allows for the wide-scale use of approved medical supplies, to be used as approved without a prescription and without issuing the drug package insert

Investigational New Drug (IND):
- Issued by the US Food and Drug Administration
- Allows for the use of medical supplies for purposes that have not be specifically approved
- Requires extensive informed consent by those receiving the drugs
- Requires those receiving the drugs to be monitored for adverse side-effects

Standing Orders:
- Pre-written medication orders and specific instructions from a licensed, independent practitioners to administer a medication to a person in clearly defined circumstances
- Commonly used practice in public health clinics
### Inventory Management and Tracking System (IMATS)

- Local Health Departments and hospitals receiving SNS from the State of Illinois are required to request, track, receive, and maintain their inventory in the CDC IMS called IMATS.
- Also must maintain a backup IMS that can be electronic or paper system.
- Local jurisdictions must ensure that the IMS activities can be tracked to all sites receiving SNS, including both the open and closed PODs.
- The next IMATS training is June 29, 2017. Registration will be available in ITRAIN.
- In the new Project Period, beginning in BP1, IMATS training will be offered monthly to local jurisdictions via their Healthcare Coalitions.

### Introduction/Learning Objectives

- Describe of the national CHEMPACK Program.
- Summarize CHEMPACK Roles and Responsibilities for Federal, State, and local partners.
- Define chemical nerve agents and nerve agent antidotes.
- Outline the CHEMPACK Activation protocols-types of situations during which CHEMPACK assets are deployed.

### State of Illinois CHEMPACK Program

**POD- Medication Fact Sheets**

**Medication Fact Sheets:**
- A required Hand-out
- Details:
  - Date medication is prescribed
  - Name of the medication / vaccination
  - Name of the prescribing authority
  - Name of the person to whom the medication is prescribed
  - Possible side effects
  - Medication Regimen
    - route, once / twice a day / for X days
    - To whom to call in case of emergency?
CHEMPACK Program

- Chemical Nerve Agent Antidotes
  - Designed to mitigate the effects of chemical weapons such as Sarin gas and organophosphates found in fertilizers and insecticides.
  - Three medications: atropine, pralidoxime (2-PAM), and diazepam, help to restore nerve functioning by blocking and reducing the effects of acetylcholine in the body.

- Overview of CHEMPACK Program:
  - Administered by CDC DSNS and the IDPH OPR
  - Forward placement of chemical nerve agent antidotes.
  - Consists of two types of containers
    - EMS: single-dose auto injectors
    - Hospital: multi-use vials

CHEMPACK Program

- What are nerve agents?
  - Highly poisonous chemicals that prevent the nervous system from working properly
  - Can be either chemical warfare agents or organophosphate agricultural pesticides
  - Immediate treatment with pharmaceutical intervention required, followed by long-term care

CHEMPACK Program

Nerve Agents Are Organophosphates

Chemical Weapons
- Sarin
- Tabun
- Soman
- Cyclosarin

Pesticides/Herbicides
- Parathion
- Malathion
- Chlorpyrifos
- Diazinon

Activation of CHEMPACK

- CHEMPACK assets are activated when:
  - local supplies will be exhausted quickly.
  - more than 50 people are affected.
  - the health of the community is threatened.
- Determination made by EMS in the field and/or a hospital.
- Cache sites notifies the IDPH Duty Officer via the IEMA Communications Center.

- Based on protocol for requesting, transferring and transporting assets
- Requires involvement of authorized, trained personnel at local level
- Depends on specific flow of communication at all levels
Resources

- State of Illinois Strategic National Stockpile Plan
- State of Illinois CHEMPACK Plan

IDPH Volunteer Manager

- Assist and collaborate to recruit, identify, and train volunteers who can support the public health agency’s response to an incident. Volunteers identified prior to an incident are encouraged be registered with the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP), Medical Reserve Corps, or other pre-identified partner groups (e.g., Red Cross or Community Emergency Response Teams).
- The role involves assessing the needs and then assisting/coordinating with IDPH’s partners on meeting those needs through recruitment, placement and retention of volunteers.
- Coordinate and collaborate with Illinois Emergency Management Agency Volunteer coordinator via several venues; i.e., Illinois Terrorism Task Force (ITTF) coalition voting member and Volunteer and Donation coalition committee to formulate an all-inclusive volunteer management approach.

Illinois Helps

Dawn M. Davis RN, BSN, MSN, APRN-BC
ESAR-VHP, MRC, and Volunteer State Coordinator

www.illinoishelps.net
Illinois Helps System

- How does Illinois Helps work?
  As a secure, web-based system used to register, verify and credential volunteer health care professionals prior to or during an emergency or disaster with links to state and national registries
- Allows health care volunteers to register prior to or during an emergency
- Provides a database of pre-credentialed volunteers who can be called on to help during an emergency
- Allows health care organizations to instantly verify the licenses and credentials of both registered and spontaneous volunteers during an emergency
- Applies emergency credentialing standards to registered and spontaneous health care volunteers

How does an individual register as a volunteer?

- In order to become a pre-registered Illinois Helps volunteer, individuals must visit www.illinoishelps.net
  Using the “Register Now” button on the website, volunteers will be prompted to enter preliminary registration information, including name, address, occupation, license info, etc. Volunteers will be asked to select an organization. We recommend selecting your local city or county MRC.

  After preliminary registration, volunteers will be notified when the organization administrator accepts them. At this time, volunteers can log into the system and complete the profile information. A complete and detailed profile (training, certifications, etc) very important! Completed profiles ensure the most appropriate, efficient use of the system.

  Volunteers are under no obligation. Illinois Helps volunteers retain the right to decline deployment for any reason, at any time.

Response to an Emergency Activation

- State Declared Disaster
  In the event of a state declared disaster or public health emergency, authorized Illinois Helps representatives will notify Illinois Helps volunteers using the contact information they provided during the Illinois Helps registration via the web site. Volunteers should obtain employer consent prior to accepting deployment. The email request from Illinois Helps may be utilized as proof of deployment. Notification will include all pertinent information such as the nature of the emergency; sleeping, eating and travel arrangements; and expectations of the length of deployment and hours of operation.

Volunteers

- In coordination with the IDPH State Incident Response Center (SIRC) and CDPH, Public Health Emergency Operations Center (PHEOC), authorized Illinois Helps representatives will activate communication and deploy volunteers through Illinois Helps during emergency operations.
Requesting Illinois Helps Volunteer Assistance

- Hospitals requesting volunteers will contact their Regional Hospital Coordinating Center (RHCC) IDPH per the Regional ESF 8 Plan.
- If volunteers are not available within the region, then RHCC requests will be forwarded to IDPH for approval for interregional transfer from RHCCs and other Public Health and Medical Service Response Regions.
- If volunteers are available the RHCC’s will notify IDPH.
- If volunteers are not available then the hospital submits the request to local Emergency Management Agency.
- IDPH will contact CDPH to coordinate response.

Is this for the oath to give protection to volunteers?

Illinois Helps Volunteer Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4859</td>
</tr>
<tr>
<td>2016</td>
<td>5450</td>
</tr>
</tbody>
</table>

Medical volunteers cannot accept assignments outside their scope of practice!

- Authorized Illinois Helps representatives will collect as much information as possible regarding a volunteer request before contacting Illinois Helps volunteers. Illinois Helps administrators will work to make sure that the volunteers they select are most suited for the response. However, volunteers should be aware that situations can rapidly change and that they should plan for worst-case scenarios when considering volunteering for a deployment.
Medical Reserve Corps (MRC)

- MRC volunteers include medical and public health professionals, as well as other community members without healthcare backgrounds.
- MRC units engage these volunteers to strengthen public health, improve emergency response capabilities and build community resiliency. They prepare for and respond to natural disasters, such as wildfires, hurricanes, tornados, blizzards, and floods, as well as other emergencies affecting public health, such as disease outbreaks.

MRCIL

- Medical Reserve Corps of Illinois (MRCIL) Volunteers Uniting for Better Prepared Communities-

- The Medical Reserve Corps of Illinois (MRCIL) was formed in 2004 as a means of sharing information between units in Illinois. Since that time our coalition has grown significantly with the addition of many more units, 76 units and 7050 volunteers in Illinois

- The objective of MRCIL is to bring together all of the established MRC units in the state to work together and to share valuable information on Medical Reserve Corps activities and events. To coordinate the efforts of its members to protect the lives and property in their respected area.

Good Samaritan Act Amendment

- HB2628 Amends the IL Good Samaritan Act
  - Provide liability protection to Volunteer Medical Reserve Corps members who assist local health departments during public health events that do not reach the level of a declared disaster.
- Rep. Laura Fine sponsored HB2628
- Senator Ira Silverstein introduced SB1498
- 3/10: Out of House Judiciary Committee
  - Unanimous yes vote!
- 84 organizations slipped in support
- PASSED and signed January 1, 2016
MRCIL AT ITS BEST!!!

THANK YOU

Dawn M. Davis RN, BSN, MSN, APRN-BC, CNS
ESAR-VHP, MRC and Volunteer Manager Coordinator
Illinois Department of Public Health
Office of Preparedness and Response
dawn.davis@illinois.gov
630-432-4517 | 312-814-1092 | 312-793-7267
122 S. Michigan Ave. 7th Floor Chicago, IL 60603

The Medical Reserve Corps (MRC)

Jeanette Tandez, MPH
MRC Region 5 Liaison
September 8, 2017

Resilient People. Healthy Communities. A Nation Prepared.

Disclosure

• The content of this presentation/document does not represent the official views or policies of the MRC Program/Office of the Assistant Secretary for Preparedness and Response, nor of the Department of Health and Human Services. Unless otherwise noted, the content represents solely the advice, views, and opinions of the speaker as presented.
What is the MRC?

- A national network of volunteers, organized locally to improve the health and safety of their communities
- Created after the events of September 11, 2001
  - Started with MRC units in 42 communities
  - Today, the network comprises approx. 200,000 volunteers & nearly 1,000 units across the U.S. and its territories

What does the MRC do?

No MRC unit is the same — specific engagement activities vary by community need, volunteer skills and interest, and partner support

- Emergency Preparedness & Response
- Public Health

At a glance: Top MRC activities

- **Emergency Preparedness**:
  - Personal preparedness and National Preparedness Month information campaigns: 90%
  - Mass vaccinations / mass dispensing services: 85%
  - Emergency Operations Center support: 81%

- **Public Health**:
  - Community outreach: 89%
  - Seasonal flu vaccination: 78%
  - Health education: 75%

Medical Reserve Corps

- Other Examples of Activities:
  - Disaster behavioral health
  - Animal preparedness and response
  - Large animal evacuation planning
  - Radiological preparedness and response
  - General community preparedness
  - Youth involvement
  - Search and Rescue - surge capacity
  - Acupuncture - NADA protocol
  - National Special Security Events
Where are MRC units located?

MRC units by region

Who volunteers with the MRC?

At a glance: MRC volunteers
How are MRC volunteers trained?

- Unit/agency/mission specific
- Recommended MRC Core Competencies are based on Competencies for Disaster Medicine and Public Health (DMPH)
  - MRC Training Plan

At a glance: MRC housing organizations

- Emergency Management Agency: 10%
- Hospital/Health System: 4%
- Non-Governmental Organization: 3%
- Board of Health: 3%
- College/University: 2%
- Medical Society: 1%
- Other: 13%

At a glance: Competency-based training

- 93% of all MRC units offer in-person CPR/first aid/AED training
- 91% of units offered Introduction to the Incident Command System
- 80% of units also offer Psychological First Aid training

Source: 2015 MRC Network Profile

How can the MRC benefit your community?

- Bolster public health and emergency response infrastructures
- Strengthen resiliency
- Meet health needs/gaps identified locally
- Provide mechanisms for information sharing between partner organizations
- Allow for national recognition of local efforts
- Give community members an opportunity to give back
MRC Responds

A Look at MRCs in Action

Resilient People. Healthy Communities. A Nation Prepared.

Zika

MRC units nationwide have reported activities in support of Zika virus education, prevention, testing, treatment, and door-to-door outreach

Opioid Crisis

MRC units across the country continue to serve as a valuable resource in combating the opioid crisis in local communities

- Offer training opportunities for MRC volunteers on the scope of the opioid crisis
- Present on opioid addiction and disseminate flyers at local high schools and community events
- Participate in anti-drug coalitions and initiatives
- Hold “Drug Take Back Days”
- Train local law enforcement on the administration of nasal naloxone, as well as provide nasal naloxone kits for law enforcement to have on-hand

At a glance: MRCs in the community

Nearly 20% of MRC units participated in an emergency response last year

- Natural Disasters: 64%
- Infectious Outbreaks: 30%
- Hazardous Materials Spills: 5%
- Foodborne Illness: 1%
- Other Emergencies: 26%

Source: 2015 MRC Network Profile

Zika

MRC units nationwide have reported activities in support of Zika virus education, prevention, testing, treatment, and door-to-door outreach

Opioid Crisis

MRC units across the country continue to serve as a valuable resource in combating the opioid crisis in local communities

- Offer training opportunities for MRC volunteers on the scope of the opioid crisis
- Present on opioid addiction and disseminate flyers at local high schools and community events
- Participate in anti-drug coalitions and initiatives
- Hold “Drug Take Back Days”
- Train local law enforcement on the administration of nasal naloxone, as well as provide nasal naloxone kits for law enforcement to have on-hand

Source: 2015 MRC Network Profile
### 2015 Papal Visit

MRC units supported medical stations, first aid tents, and family reunification centers during the Papal visit.

![Images of medical stations and family reunification centers](image1.png)

### Valley Fire

California MRC volunteers from seven units supported the medical and sheltering needs of citizens and pets during the Valley Fire Disaster.

![Image of medical care during Valley Fire](image2.png)

### Ebola

- In 2014, 169 MRC units reported 180 Ebola-related preparedness and response activities.
- Volunteers provided an estimated 13,897 service hours.

![Images of Ebola response activities](image3.png)

### NE MN Floods June 2012

![Images of flooded areas](image4.png)
Texas Floods

From April to May 2016, several Texas MRC units were actively engaged in flood response activities in their communities

- Many MRCs deployed volunteers to set up and support shelters
- Veterinary MRC volunteers ran companion and large animal emergency shelters
- Volunteers supported resource distribution centers and managed phone banks
- Volunteers also assisted with performing damage assessments for effected counties

2015 HIV Outbreak

- 13 Indiana MRC units were activated and deployed to respond to the HIV outbreak among injection drug users in Scott County, IN from April 1 through June 19, 2015

- Units were deployed daily with an average of two people performing immunizations, outreach, miscellaneous logistical missions, and assisting the Scott County Needle Exchange Program
Until Help Arrives Training

- [https://community.fema.gov/until-help-arrives](https://community.fema.gov/until-help-arrives)

Finding an MRC

- Serving Your Community

Why Join?

- Additional training.
- Be part of a field you may be interested in.
- Sense of accomplishment.
- To have fun!
- Mechanism for preparedness for self, family and community.
- Service to your community!
- Sense of pride/ personal growth.
- Personal benefit.
- Be PREPARED.
- You can bring credibility to the MRC and help them attract good quality volunteers.
IL Pharmacy MCM Response Team

• Members must join a local MRC Unit first before joining the state team.
  – Local and State resource.

• Integrated into local planning as well as part of the state structure.

• Success of your own local MRC Unit → resilience of your own community.

How to Find an MRC Unit in Your Area

Got to: [https://mrc.hhs.gov/HomePage](https://mrc.hhs.gov/HomePage) ; click on the “Volunteer” tab. Then enter your zip code.

How to Find an MRC Unit in Your Area

To find an MRC unit near you, visit [http://mrc.hhs.gov/FindMRC](http://mrc.hhs.gov/FindMRC)

MRC Contact Information

• Connect with the MRC
MRC Program Communications

- Visit us at https://mrc.hhs.gov
- Follow us on Twitter: @MRC_ASPR
- Join our listservs:
  https://mrc.hhs.gov/pageViewFldr/MRCListservs
- Like us on Facebook:
  https://www.facebook.com/medicalreservecorps
- Join MRC-TRAIN:
  https://www.mrc.train.org/DesktopShell.aspx

The IDPH MOU is an agreement between community pharmacy and which of the following?

- a) Illinois Department of Public Health
- b) Local Health Department
- c) Regional Health Department
- d) Centers for Disease Control

Thank You!

Jeannette Tandez, MPH
MRC Region 5 Liaison (IL, MN, WI, IN, MI, OH)
jeannette.tandez@hhs.gov
202-997-6462
What does SNS stand for?

a) Simple Notification Service
b) Special National Stockpile
c) Strategic National Stockpile
d) Strategic Network Solution

What is the name of the state volunteer management system?

a) Illinois Volunteers
b) Lincoln’s Volunteers
c) Illinois NOW
d) Illinois HELPS
e) Volunteer Illinois
Who can volunteer with a Medical Reserve Corp (MRC) unit?

a) Anyone can volunteer  
b) Healthcare providers only  
c) Physicians only  
d) EMS and Nurses only  
e) Non-healthcare providers only

Take Home Points
- Review the MOU and sign up your pharmacy  
- Engage with your Local Health Department; participate in programs; become a community resource  
- Stay up-to-date with information around this project and other trainings (ipha.org, dph.illinois.gov, illinoishelps.net)  
- Consider joining the Illinois Pharmacy MCM Response Team

Resources & References
- Illinois Department of Public Health - IDPH  
dph.illinois.gov  
- Illinois Pharmacists Association - IPhA  
ipha.org  
- Association of State and Territorial Health Officials - ASTHO  
www.astho.org/Programs/Infectious-Disease/Pandemic-Influenza/  
- Illinois HELPS  
illinoishelps.net