“Why is 1918 a significant year when it comes to public health?”
“I had a little bird, its name was Enza. I opened the window, and In-Flu-Enza!”
1918 Influenza Pandemic
Affected most in 1918

• Children under 5
• Adults over 65
• *And unusually*, people between the ages of 20 and 40 years
• Could be healthy in the morning and dying in the evening
1918 Influenza Pandemic

Be A Nurse

Earn $15 to $25 per week

Thousands are taking up this congenial respected vocation. Offers unusual social advantages. Excellent income. Any woman of 18 or over can learn under our simple, perfected system.

LEARN AT HOME

Our system founded 1902 is endorsed by leading physicians. Dr. Perkins, the founder, will personally instruct you, assures thorough training yet saves a lot of time. Low tuition; small monthly payments. Send for 32 lesson pages and large illustrated catalog today—ALL FREE upon request. Write now. Dept. 14.

CHICAGO SCHOOL OF NURSING
116 South Michigan Boulevard, Chicago
1918 Influenza Pandemic
Containment Strategies

- Rest
- Use Handkerchiefs
- Discouraged:
  - Standing in crowds
  - Spitting on floors and sidewalks
  - Sharing drinks or towels

- Closed
  - Public spaces (by government)
  - Schools, libraries, dance and pool halls, theaters, bowling alleys, churches, and lodges
  - Public events banned
    - Parties, meetings, funerals
  - St. Paul banned elevator use
    - In buildings less than 7 stories
1918 Influenza Pandemic

**FIRST WAVE**
Spring 1918

**SECOND WAVE**
Fall 1918

**THIRD WAVE**
Winter 1918
Mid-Century Pandemics

1957
700,000 deaths worldwide
Abnormally high death rate in pregnant women in MN

1968
Over 1 million deaths worldwide
“What about 2009?”
2009 H1N1 Flu Pandemic
2009 H1N1 Flu Pandemic
2009 H1N1 Flu Pandemic

H1N1 clinic for healthy children ages 2-9
Flu Mist only
10:00 am to 4:00 pm

PHEP Oversight Work Group | SCHSAC December Meeting | December 2019
Vaccination Rates by Age and Geographic Distribution in MN

<table>
<thead>
<tr>
<th>Age</th>
<th>% of Population</th>
<th>% Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mos to 4 years</td>
<td>6.7</td>
<td>41.2</td>
</tr>
<tr>
<td>5 to 19 years</td>
<td>22.5</td>
<td>28.0</td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>6.6</td>
<td>13.9</td>
</tr>
<tr>
<td>25 to 49 years</td>
<td>37.8</td>
<td>16.2</td>
</tr>
<tr>
<td>50 to 64 years</td>
<td>14.4</td>
<td>32.8</td>
</tr>
<tr>
<td>65+ years</td>
<td>12.1</td>
<td>33.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geographic setting</th>
<th>% of Population</th>
<th>% Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>25.5</td>
<td>22.6</td>
</tr>
<tr>
<td>Rural</td>
<td>74.5</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Source: Population characteristics from Census 2000 data, vaccination rates from MIIC
2009 H1N1 Flu Pandemic
Minnesota Vaccinated A LOT of People!

- 8th in U.S. of eligible residents
- 1st in vaccine coverage for persons ages 25 to 64 years with medical conditions
- Led other states in the region (IL, IN, MI, OH, WI)
  - MN vaccinated 41% in the initial target group compared to 33% for the region and 33% for the country.
- 23% of eligible people in MN received at least one dose as of June 22, 2009

Source: 2009 H1N1 vaccination in Minnesota: an evaluation by Zip Code (Minnesota Medicine, September 2013)
2009 H1N1 Flu Pandemic
### Local and Tribal Health Vaccinations

<table>
<thead>
<tr>
<th>Type of Provider Organization</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal/HIS</td>
<td>2,989</td>
<td>8,149</td>
<td>11,138</td>
</tr>
<tr>
<td>Public health / community vaccinators</td>
<td>163,416</td>
<td>186,680</td>
<td>350,096</td>
</tr>
<tr>
<td>Correctional facilities</td>
<td>1,720</td>
<td>867</td>
<td>2,587</td>
</tr>
<tr>
<td>Clinics, hospitals, nursing homes, long-term care facilities, pharmacies, etc.</td>
<td>738,880</td>
<td>222,097</td>
<td>960.977</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>907,005</td>
<td>417,793</td>
<td>1,324,798</td>
</tr>
</tbody>
</table>

Source: 2009 H1N1 vaccination in Minnesota: an evaluation by Zip Code (Minnesota Medicine, September 2013)
2009 H1N1 Flu Pandemic
Future Pandemic Work

• Lessons learned – MANY!

• PHEP Oversight Work Group filled an identified gap/challenge

• 10 years of continued work to prepare

• CDC shifting federal direction from anthrax to pandemic
References


• How Minneapolis and St. Paul responded to 1918 Pandemic: https://www.influenzaarchive.org/cities/city-minneapolis.html#

• MDH: https://www.health.state.mn.us/diseases/flu/stats/2009h1n1.pdf

• MNOPEDIA: https://www.mnopedia.org/event/influenza-epidemic-minnesota-1918

• NPR: ) https://www.npr.org/sections/health-shots/2013/11/26/247379604/2009-flu-pandemic-was-10-times-more-deadly-than-previously-thought
Full-scale Exercise  June 17, 2020

- Test response plans and capabilities
- Demonstrating:
  - Medical countermeasure dispensing
  - Public messaging
  - Emergency operations coordination
  - Information sharing between key partners
Full-scale Exercise June 17, 2020

• Planning includes 4 full-scale exercise teams:
  
  • Overall Coordinating Work Group
    • MDH St. Paul and PHPC representatives, Health Care Coalition coordinators representatives, local and tribal public health representatives from Cities Readiness Initiative (CRI) and Non-CRI jurisdictions.

  • CHB/THD Work Group
    • Representative from each region (8)

  • MDH Work Group
    • MDH staff - focused on the MDH Department Operations Center and MDH response staff exercise

  • Health Care Preparedness Work Group
    • Regional health care preparedness coordinators, hospital representatives, MDH Health Care Preparedness program representatives.
Local and Tribal Health Full-Scale Activities

- Set up and operate a Point of Dispensing (POD)
- Pre-identified physical site in own jurisdiction
- Distributing candy ‘pills’ to a minimum of 50 people (more is good)
- Recruiting volunteers (check with your local and tribal health departments)
PUBLIC HEALTH CRISIS:

PHEP Oversight Work Group | SCHSAC December Meeting | December 2019
Dear Commissioner:

We have recently heard about an outbreak of the flu at the middle and high school. Should we be closing the mall?

From: Your Mall Director
Opportunities Identified for Improvement during Public Health Emergencies

• Improve Coordination between emergency response partners and at all levels of government

• Increase all agencies understanding of response to better direct aid to impacted communities

• Clarify lines of authority, communication, and workforce surge and address legal and administrative barriers

• Increase understanding of Emergency Declarations
  • Multi-layered and multi-part process at the state and local levels
Elected Official Playbook for Public Health Emergencies

• Minnesota invited to participate in workshop
  • Sponsored by the National Governors Association (NGA).

• MN team included
  • Governors’ senior staff
  • County Commissioners: Susan Morris – Isanti County and Dave Lieser, Chippewa County
  • MDH staff: Cheryl Petersen-Kroeber and Deb Radi, Center for Emergency Preparedness and Response

• Team Goal
  • Create and promote a playbook on public health emergencies
  • Describes role of elected officials.
Elected Official’s Checklist for a Public Health Emergency

• During a public health emergency
• Preparedness activities prior to an emergency
• What is a public health emergency
• Public health emergency response
• Crisis and Risk Emergency Communications
• Legal Powers