

# Pandemic Influenza in New York City: Understanding the impact on continuity

Jessica Cole, MA

Senior Incident Specific Planner

NYC Department of Health and Mental Hygiene

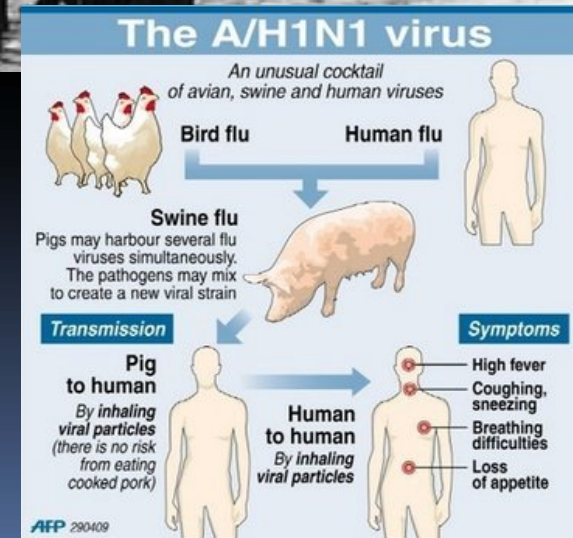
November 18-21, 2013



- What is pandemic influenza?
- What is the role of public health?
- What is the potential impact on continuity?
- Questions?

# What is pandemic influenza?

- A pandemic is a global disease outbreak.
- An influenza pandemic occurs when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide.



# What is pandemic influenza?

“All that is called *flu*, is not necessarily *flu*”

## Pandemic characteristic:

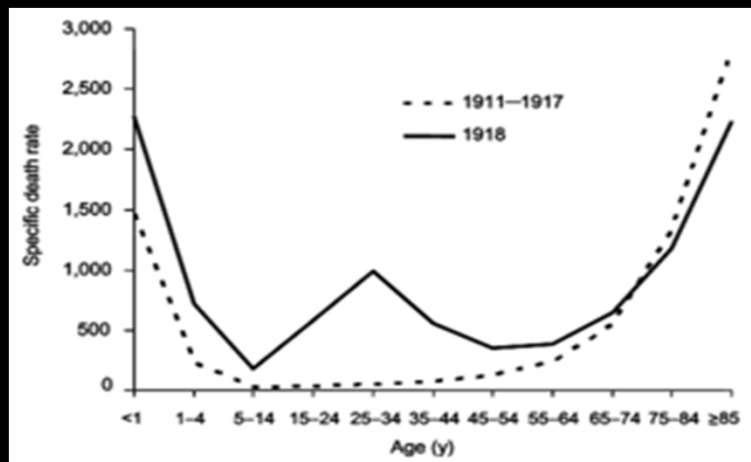
- Occurs in waves (approximately 3, 8-12 weeks each)
- Attack rate of up to 40% in school-aged children and 20% in working adults
- Fatality rate of up to 2% in infected



## Symptoms:

- Fever (usually high)
- Headache
- Extreme tiredness
- Dry cough
- Sore throat
- Runny or stuffy nose
- Muscle aches
- Stomach symptoms, such as nausea, vomiting, and diarrhea, also can occur but are more common in children than adults
- Lasts up to 5 days, with some symptoms lasting up to 2 weeks
- Approx 1,100 New Yorkers die every year from seasonal flu and pneumonia

# 1918- The 'Spanish Flu'



- 1918-1920
  - First identified in Ft. Riley, KS
  - Within a month, 1,100 soldiers were ill
- Took approx. 6 months to travel worldwide – before commercial air flight!
- Approximately 40-70 million deaths worldwide
  - Mortality rates as high as >5% among some groups
- Unusual pattern of mortality
  - young, otherwise 'healthy' adults

# 1957 & 1968



- Known as the 'Asian' and 'Hong Kong' flus
- Far less deadly- approximately 1-2 million global deaths each
- More localized outbreaks
- 1957 noted for increased susceptibility and mortality in children

# 2009 H1N1 aka “Swine Flu”: Rapid response, long-term impacts

**April 15:**

CDC report on CA/TX H1N1 cases

**April 23 (Thurs):**

CDC call re: Human-Human trans. in CA

DOHMH sends Lab Alert requesting all flu A isolates be sent to PH Lab

Report of school cluster of “strep throat”

**April 24 (Fri):**

1<sup>st</sup> reports received of H1N1 in Mexico

Increasing # cases at school outbreak

DOHMH team sent to obtain swabs

**April 25 (Sat):**

Lab identifies non-subtypeable flu A

DOHMH Incident Command System activated

**April 26 (Sun):**

CDC confirms novel H1N1

NYC press conference with Mayor and Commissioner of Health



# Many infections, particularly in children

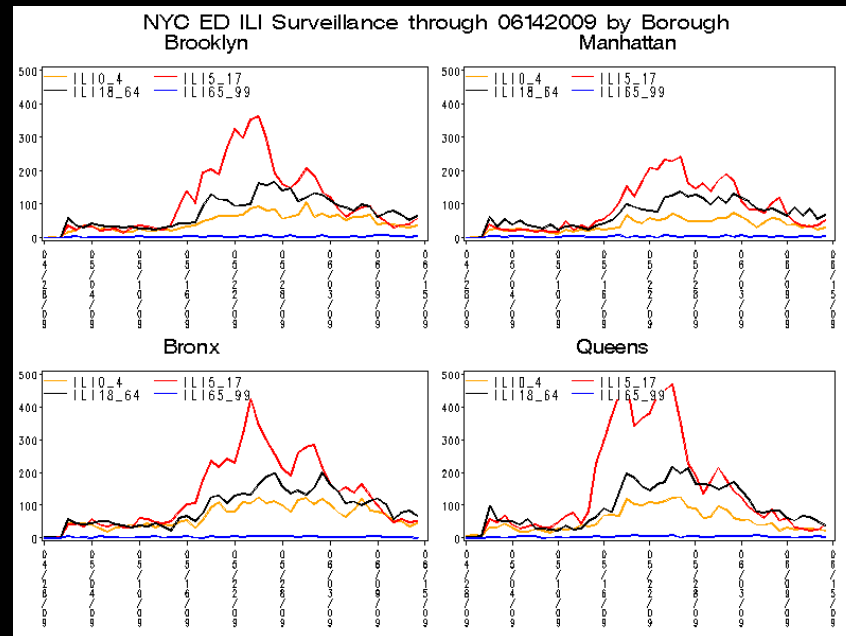
- In NYC, an estimated 750,000 to 1 million people became ill with H1N1, with 65 identified deaths (April-Sept. 2009)
- Approximately half saw a health care provider
- Most recovered completely within 4 to 5 days
- Rapid spread, high rates of illness in children
- Low rates among elderly
- Outbreak period was approximately 2 months, with 2<sup>nd</sup> wave in the Fall





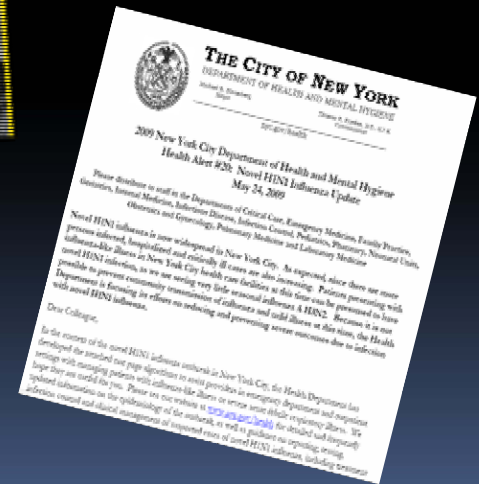
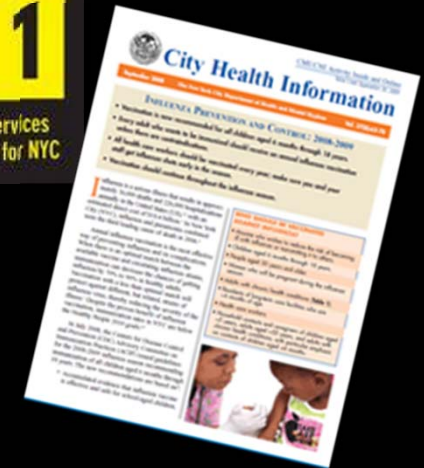
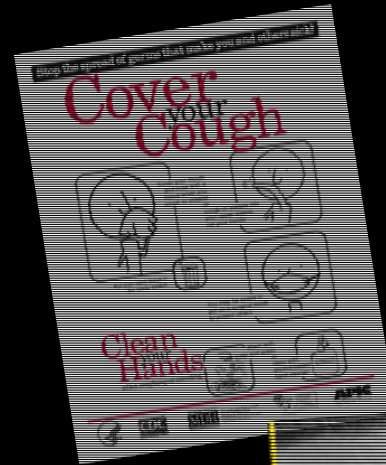
# What is the role of public health?

- Surveillance & Epidemiology
  - What is it, who gets it, how bad will it be?
- Vaccine Management
  - School clinics, provider access
- Antiviral Distribution
  - Pharmacy distribution, access
- Healthcare Systems Support
  - Coordination & information
- Non-Pharmaceutical Interventions
  - Public health recommendations
- Mental Health
  - Support and guidance for providers
- Communication And Outreach
  - Public, community, and provider focused



# Outreach

- Public messaging during event
  - In three languages (English, Spanish, Chinese) with capacity for many more
- Ready NY
  - In collaboration with OEM
  - 'Branded' preparedness campaign
  - Over 15,000 downloads; 300k printed
- Provider outreach
  - "HANs"
- 311
  - Over 54,000 calls (H1N1)
- Website
  - [www.nyc.gov/flu](http://www.nyc.gov/flu)



# Preparing for a pandemic

## Before:

- Know your staff
  - Are they vulnerable?
  - How can you assist them?
- What will your demand be?
  - Not all transactions will be impacted equally
  - Can you step-up/ cut back?
- Who do you work with?
  - Who are your partners/ contractors?
  - What is their plan?
- What is your 'breaking point'?
  - What are your critical processes?
  - At what point do you fail?

## During:

- Emphasize preventive measures:
  - Stay home from work if they have fever and cough and not to return to work until 24 hours after symptoms resolve
  - Wash/sanitize hands often
  - Avoid touching mouth and nose
  - Encourage social distancing
  - Cover coughs and sneezes
- Be an information leader
- Encourage seasonal and pandemic influenza vaccinations
- Disasters are a time of increased vulnerability. Be present!

# Questions?

I think it's best if I work from home today rather than risk infecting people with my paralyzing fear of swine flu.

someecards



Jessica Cole, MA  
[joneill@health.nyc.gov](mailto:joneill@health.nyc.gov)