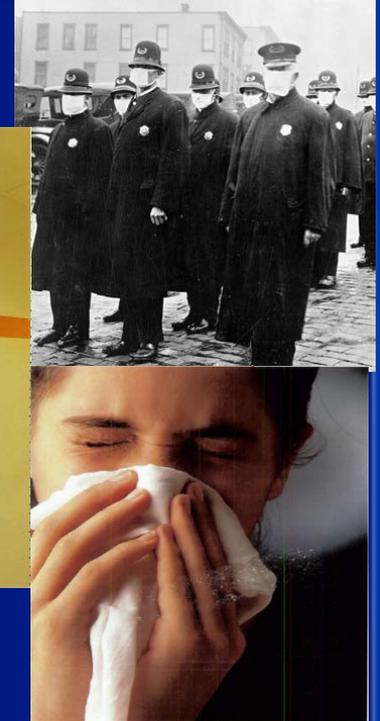
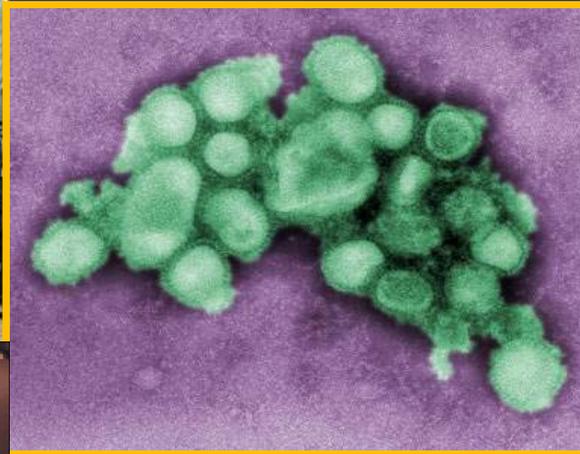
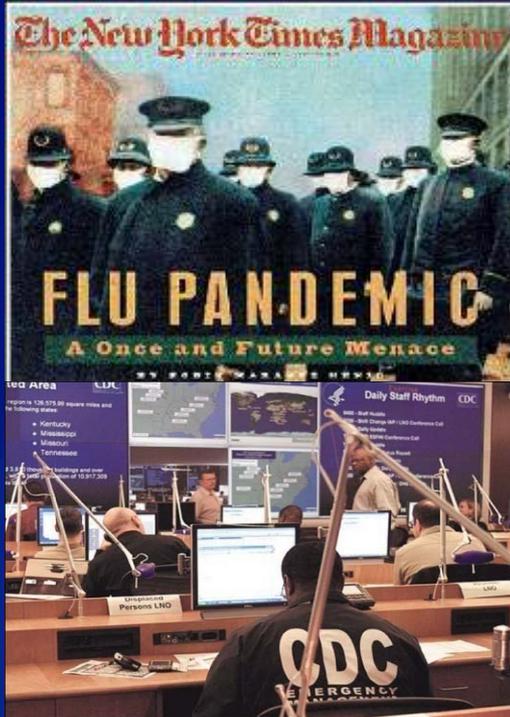


# Lessons from the Field: CDC



Nancy J. Cox, PhD

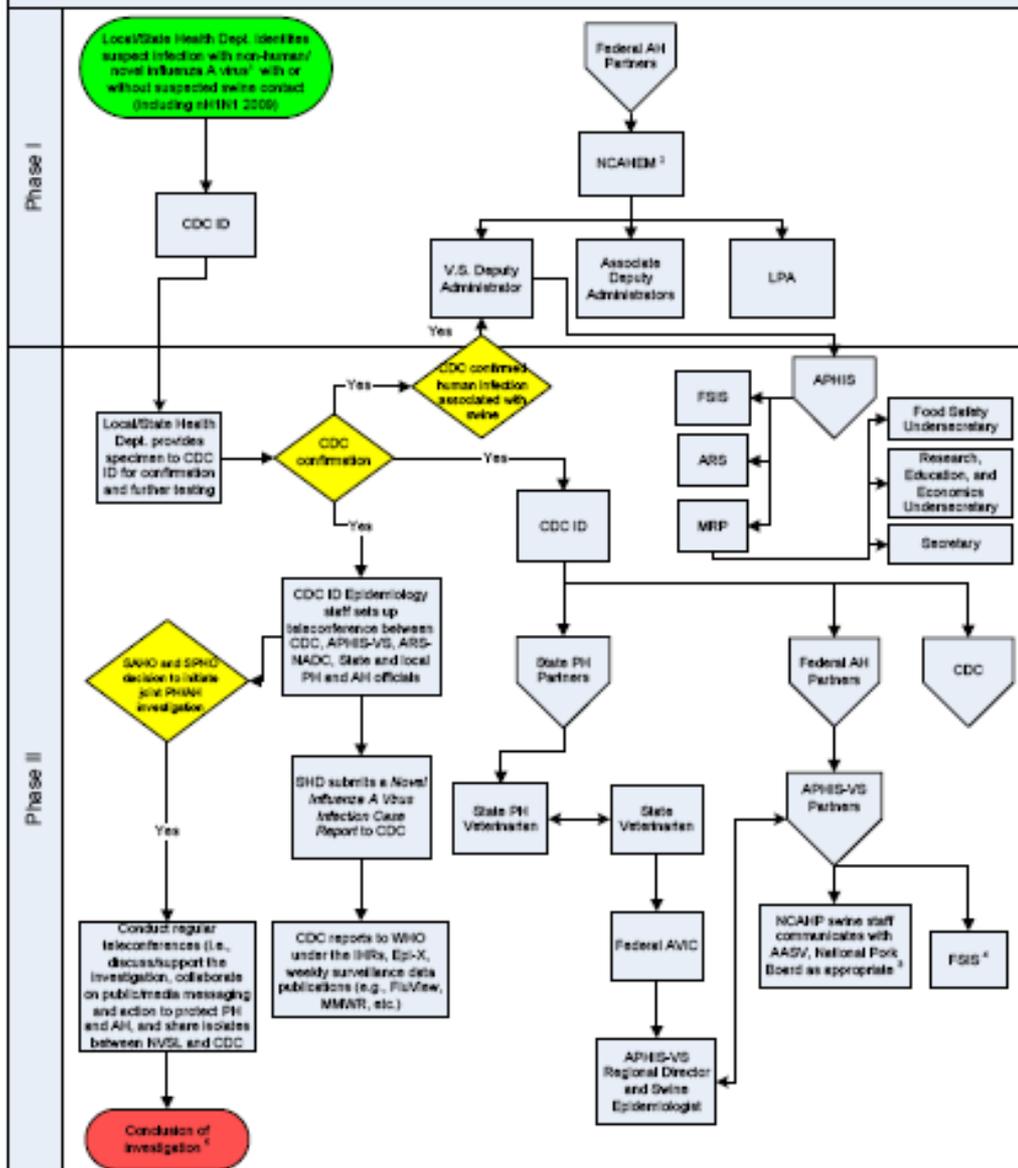
Director, Influenza Division

National Center for Immunization and Respiratory Diseases  
Centers for Disease Control and Prevention

# Work Being Done in The U.S. – Challenges and Successes

- CDC provided \$1.5 M to USDA as part of an interagency Agreement in September 2008
  - Pilot to expand SIV surveillance and expand collaboration
  - Potential benefits for animal health
    - Improved vaccines
    - Improved diagnostics and reagent exchange
  - Provided funding for pathogenesis to NADC/USDA
  - Provided funding to SEPRL for vaccine candidate safety testing
- Other interactions with veterinary counterparts on an ongoing basis
  - Often center on pandemic planning
  - Frequent interactions during investigations of human cases and animal outbreaks

Appendix H: Notification guidelines for potential or confirmed human SIV cases ID'd through public health (PH) channels that may be associated with swine \*



# Algorithm for Notification and Communication Between Human and Animal Health When Novel Influenza A Viruses Identified in Humans

# Challenges for Improving SIV Surveillance

- ❑ Emergence of the 2009 H1N1 pandemic caused flow of SIV samples to “dry up”
- ❑ So .....what could be done with the funding provided?
- ❑ Retrospective analysis of diversity of SIV collected over the past 10 years – hundreds of viruses available
  - Genetic diversity- total genome sequencing
  - Add to baseline knowledge of influenza gene pool in swine and its evolution
- ❑ SIV is not a “program disease” so no funding stream from government....uncertainty about sustainability

## Recent Success Story: Swine tr H3N1 Human Cases

- ❑ Four documented human infections of swine tr H3N1 virus since September 2010
- ❑ Joint Public Health – Animal Health and federal-state / academic interactions
- ❑ Case 3 – A Fascinating Story
  - Chapter 1
  - Chapter 2
  - Risk Assessment and vaccine candidate development
  - To be continued.....

We have a new “player” in the ecology of flu - H1N1pdm

likely to be endemic in pigs; don't forget

H3N2sw, H2N2/N3, H5N1, H7N7/N3, H9N2, H6N2,

The next pandemic may not wait 40 years or even 10 years

**This is No Time for Complacency or Flu Fatigue**

