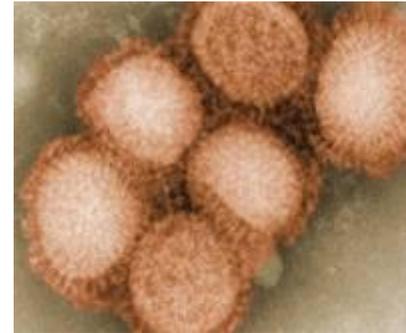


Perspectives on H1N1: Some Lessons Learned



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Lessons Learned

- "Plans are of little importance but planning is essential"
--Winston Churchill
- The influenza virus and the disease it causes are unpredictable
- Influenza vaccine production is also unpredictable
- Timing is everything
- Partnerships are crucial
- Communication is even more crucial...and more challenging
- We live in the "Misinformation Age"

The Pandemic We Planned For and The Reality of 2009 H1N1

Prepandemic planning built around H5N1 or 1918-like scenarios

- Illness not as severe as 1918 scenario
- Epidemiology of disease different
- Virus emerged in North America
- ?Larger amounts of vaccine predicted than in planning scenarios
- Confluence of seasonal and pandemic vaccination

Planning Pays Off

- Antiviral stockpile distributed nationally late-April and early-May
- Specific diagnostic testing (RT-PCR) available nationally before end of May
- Despite advances in cell-based vaccine research, all licensed H1N1 influenza vaccines are egg-based
 - FDA licensure based on “strain change” as is done with seasonal vaccine
 - First doses of H1N1 vaccine were administered to US public on Oct 5, 2009; <6 months after initial isolation of A/California/7/2009

Health Impact of H1N1 Pandemic

- US (estimated)
 - 60 million ill
 - 25% in children age <18 years
 - 270,000 hospitalizations
 - 12,270 deaths
 - 1,270 in children age <18 years
 - 9,420 in persons age 18-64 years

Vaccine Distribution

- **Centralized distribution by contractor receiving**
 - vaccine from 5 manufacturers
 - ancillary supplies from up to 4 manufacturers
- **Orders placed by providers with state health agency, allowing prioritization based on state and local needs**
- **Orders transmitted electronically to CDC**
- **Orders processed and forwarded to contractor for shipping**
- **System similar to VFC with greatly enhanced capacity**
 - Shipping capacity up to 30M doses weekly
 - Contractor ships to up to 150,000 “provider” sites

Vaccine Safety Pop-Quiz

- Q: recipients of what vaccine will experience:
 - 2 cases of Guillain-Barré Syndrome within 6 weeks per 1,000,000 persons vaccinated
 - 43 spontaneous abortions within 24 hours per 100,000 women vaccinated
 - 26 deaths within 24 hours per 100,000 persons age 15-60 years?
- A: placebo

“Policy decisions regarding influenza rest on judgments about the behavior of the virus, the impact of the disease and our ability to interdict its course. But the virus is capricious, the disease elusive, and our remedies imperfect”

Neustadt RE, Fineberg HV.

The Swine Flu Affair: Decision Making on a Slippery Slope

1977