

U.S. Pandemic Influenza Preparedness and Response: Update & Progress Report

“The pandemic influenza clock is ticking.
We just don’t know what time it is.”

“This is the one health threat we’re
preparing for that we know will happen”

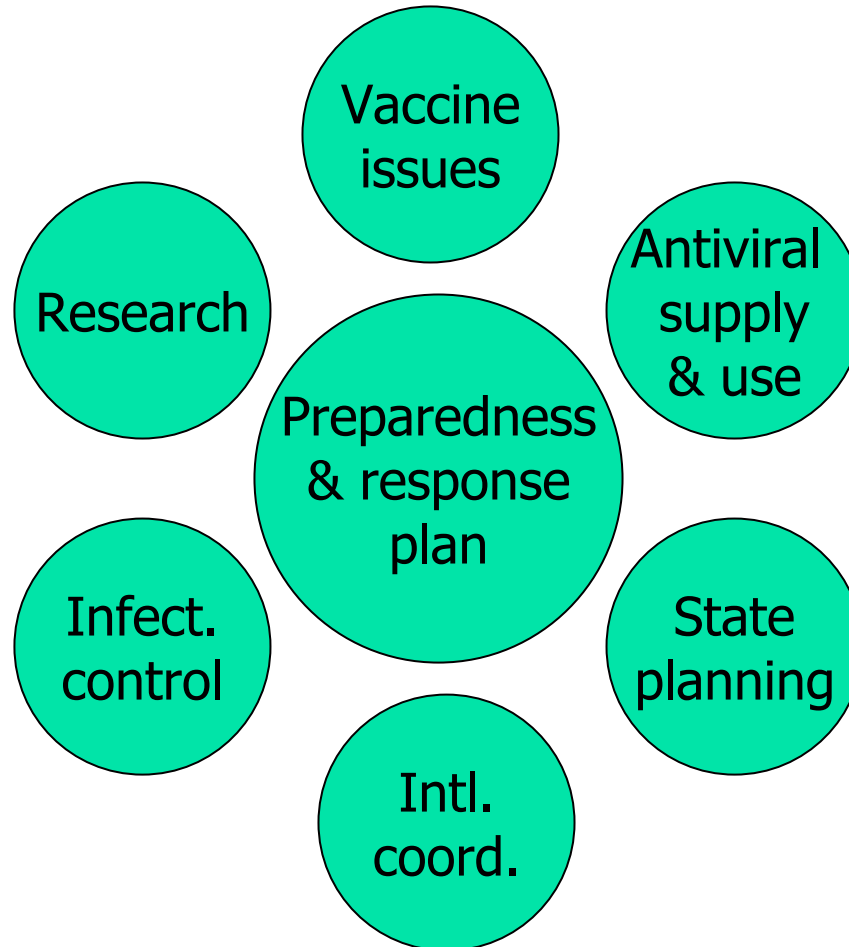


Increased Focus on Pandemic Influenza Preparedness

- Global spread of SARS
- Avian H5N1 influenza in humans in Asia
 - 34 documented cases in Vietnam and Thailand
 - 23 deaths (68% case-fatality rate)
- Severe/early 2003-04 influenza season



Pandemic Influenza Preparedness



National Pandemic Influenza Preparedness & Response Plan

- Core plan, 2 guides (for State health departments and health care organizations), and 10 annexes
- Next steps
 - Obtain HHS clearance
 - Release for public comment
 - Federal Register and on-line
 - Solicit general comments and specific input on several key issues
 - Develop roll-out strategy





Key Issues

- Public and private sector vaccine purchase and distribution
- Priority groups for early vaccine and antiviral chemoprophylaxis and therapy
- Approach to indemnification, liability protection, and compensation



Vaccine and Vaccination Preparedness Goals

- Assure year-round production and surge capacity
- Shorten timelines to availability
- Ensure effective distribution & administration to achieve pandemic response goals





Improving Vaccine Preparedness

- \$50 million FY 2004 funding to...
 - Assure year-round egg supply
 - Promote U.S. licensure and manufacture of influenza vaccine produced in cell culture
- NIAID currently is negotiating with manufacturers for production of pilot lots of H5N1 vaccine



Antiviral Drug Preparedness

- Oseltamivir acquired for the Strategic National Stockpile
- Modeling of antiviral drug use strategies, health impacts, and cost effectiveness
 - Substantial impact on deaths: Rx >> chemoprophylaxis
 - Likely strategies all cost saving to society
- Discussions of increased annual role for antiviral drugs are planned



Interventions to Decrease Influenza Spread

■ Objectives

- Contain clusters of human disease caused by strains not well transmitted between people
- Slow spread of strains that are more effectively transmitted buying time for specific preventive measures (e.g., vaccine)
- Control strategies in avian influenza outbreaks
 - Cull infected flocks
 - Prevent reassortment with human strains by protecting exposed persons with vaccine and antiviral chemoprophylaxis



Community Control Measures to Limit Pandemic Influenza Spread

Intervention	Decrease contact	Decrease acquisition
Isolation	X	X
Quarantine	X	
Travel restrictions	X	
Restricted mixing	X	
Community hygiene		X





State & Local Preparedness

- State and local health departments
 - Majority of States have or are developing plans
 - Tabletop exercises are being developed
 - Funding support through CDC BT cooperative agreement and HRSA hospital preparedness program
 - CDC support for surveillance and public health laboratories
- Health care system
 - Need for planning and education





Research Priorities

- Improve understanding of influenza molecular biology and emergence of new strains
- Improve understanding of ecology and spread of influenza in animals
- Improve antigen detection tests for patients and develop tests to rapidly detect new subtypes
- Develop new antiviral drugs
- Improve timeliness, yield, and immunogenicity of influenza vaccines



Impacts of Pandemic Preparedness on Annual Influenza Response

- Improved vaccine production & greater availability
- Improved antiviral drug availability & increased use
- Improved U.S. & global surveillance
- Increased focus of health departments on influenza and its prevention
- Improved understanding of how influenza changes and spreads; and new technologies for detection and response

