

Pandemic Influenza Preparedness: Complementary Roles within DHHS

CDC



- Surveillance and detection
- Train local response teams
- Maintain vaccine/antiviral stockpiles
- Disease control/prevention

NIH



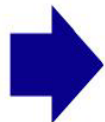
- Conduct basic research
- Develop medical interventions (vaccines, antivirals)
- Conduct clinical evaluation of vaccines and antivirals

FDA

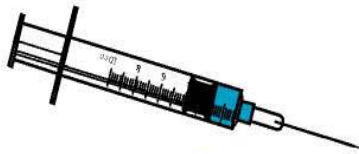


- Regulatory approval – vaccines, therapeutics, diagnostics

OPHEP



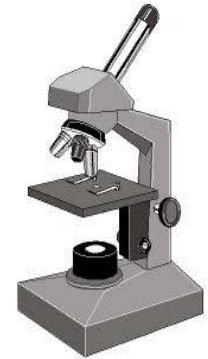
- Office of Public Health Emergency Preparedness coordinates HHS-wide emergency preparedness activities



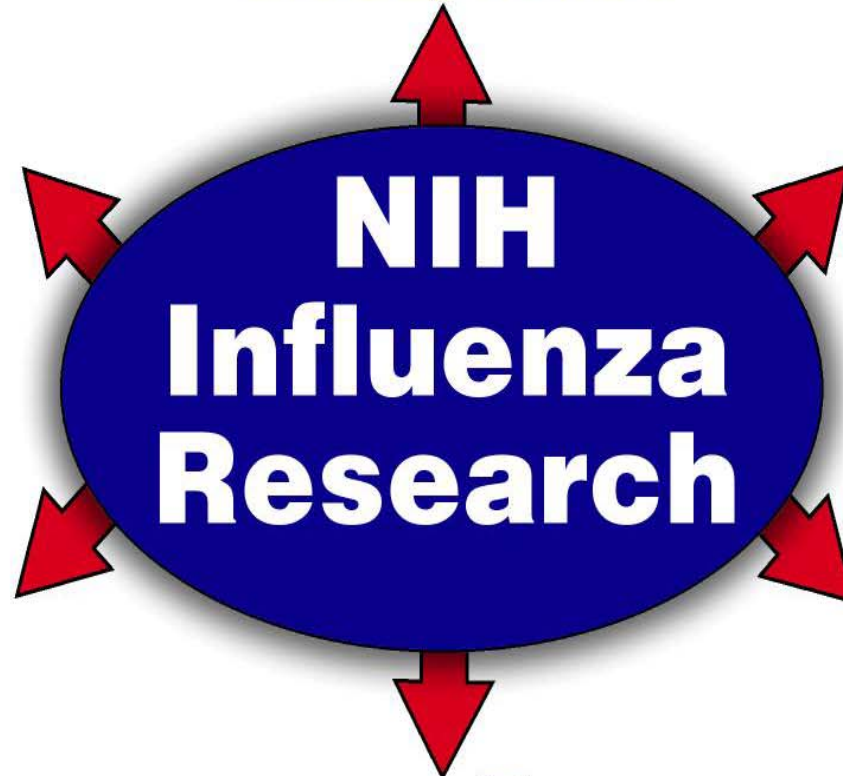
Vaccines



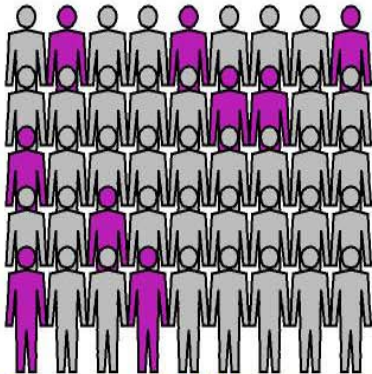
Therapeutics



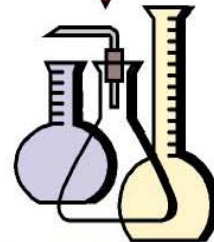
Diagnostics



**NIH
Influenza
Research**



**Surveillance
and
Epidemiology**

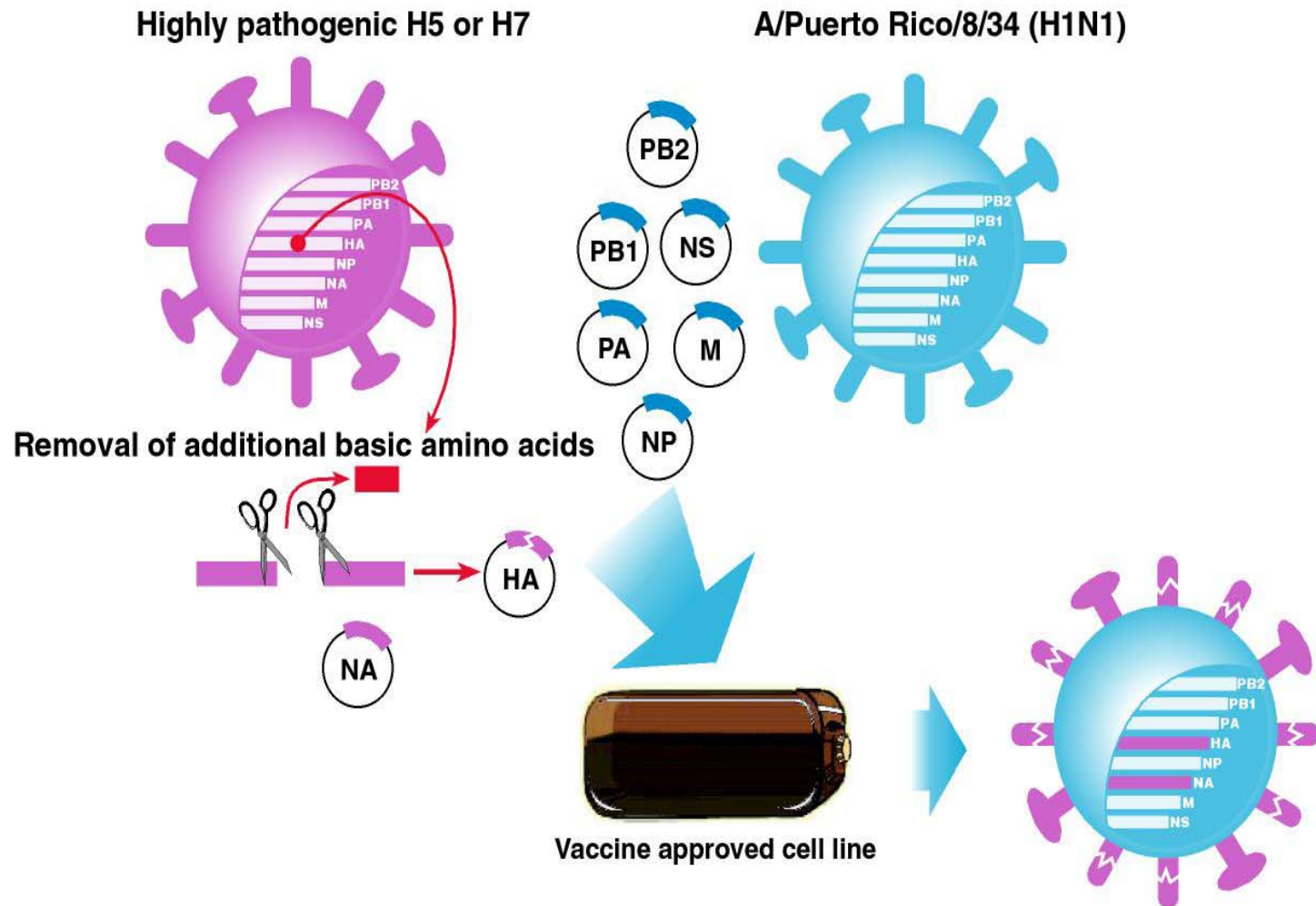


Basic Research



**Expansion of
Research
Capacity**

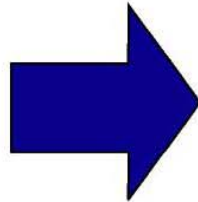
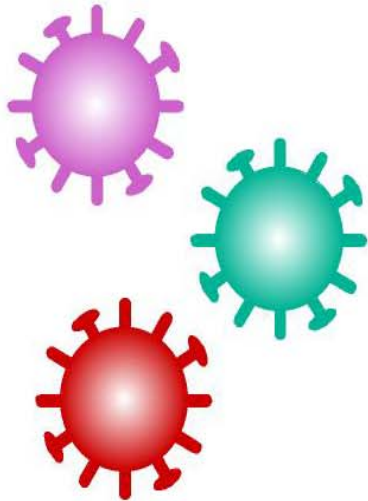
Influenza Seed Virus for Inactivated Virus Vaccine Production Using a Reverse Genetics System



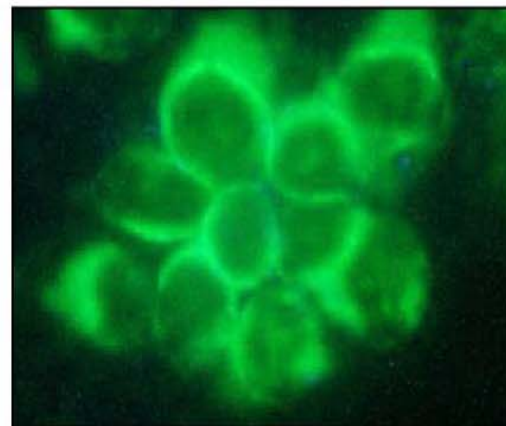
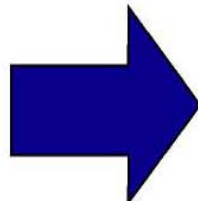
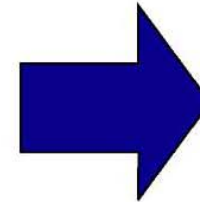
Influenza Vaccine Production: Cell Culture as an Alternative to Chicken Eggs

Provide target viruses to vaccine manufacturers

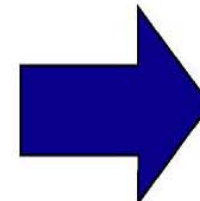
Identify target influenza strains



Egg-based



Cell culture-based



Reuters

March 24, 2005

U.S. Starts Human Tests of Bird Flu Vaccine

Phase 1 trial on 450 adults will determine safety of shots

U.S. health officials said on Wednesday they have started human tests of a vaccine against avian flu, which experts believe could kill tens of millions of people if it becomes easily passed from person to person.



Clinical Trials for Pandemic Influenza

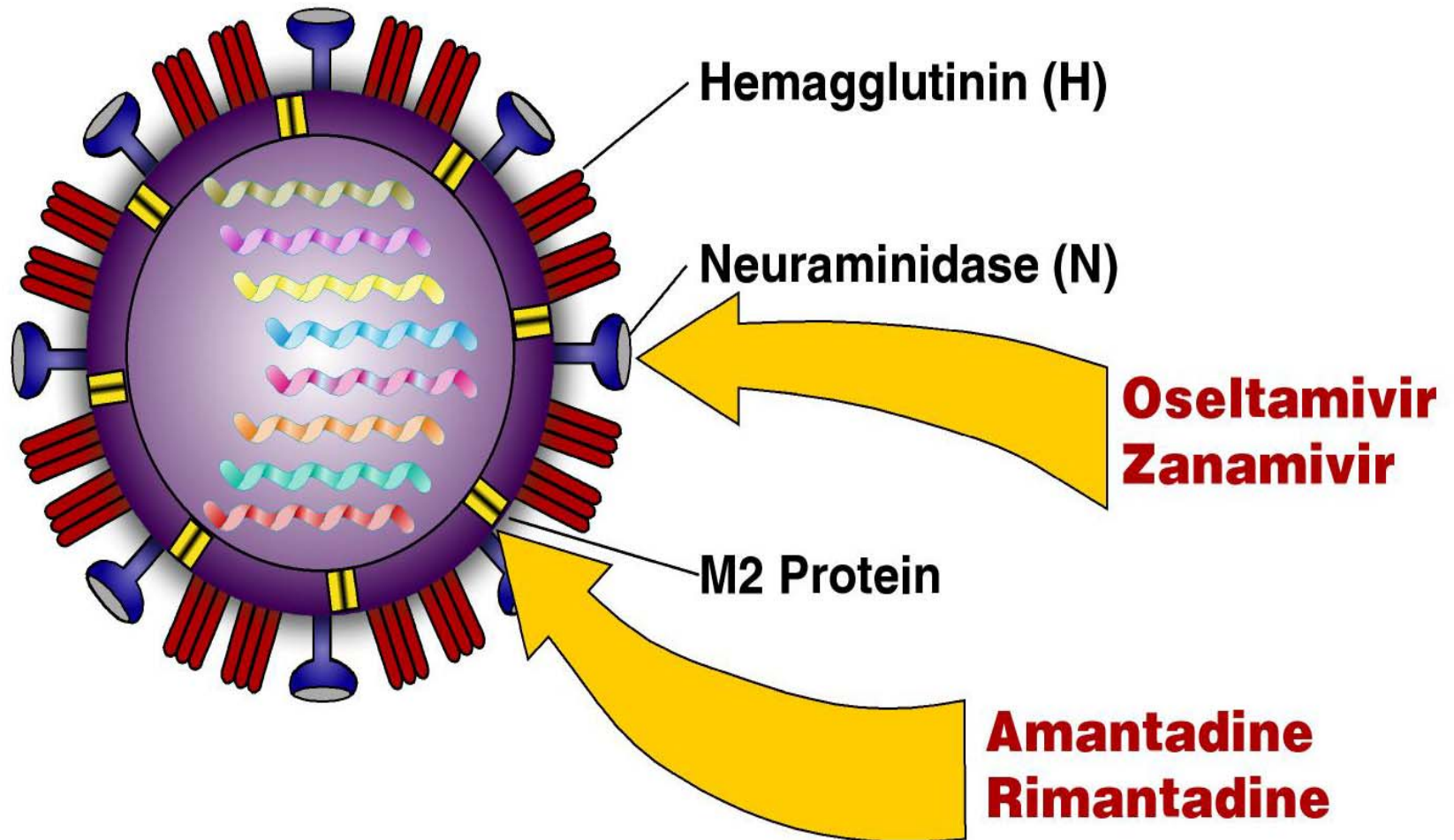
H5N1

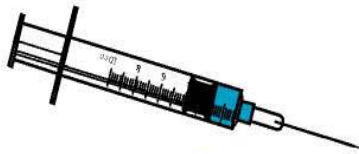
- **Inactivated vaccine trial began April 4, 2005**
 - Stage 1: fully enrolled (118 healthy adults)
 - Stage 2: fully enrolled (333 healthy adults)
 - Upon review of safety and preliminary immunogenicity data, plan to conduct trials in healthy elderly and children in late summer 2005
- **Attenuated vaccine trial planned for late 2005**

H9N2

- **Inactivated vaccine trial began March 31, 2005**
 - Fully enrolled (96 healthy adults)
- **Attenuated vaccine trial planned for summer 2005**

Antiviral Therapies for Influenza

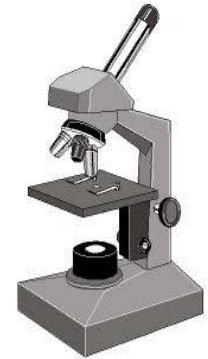




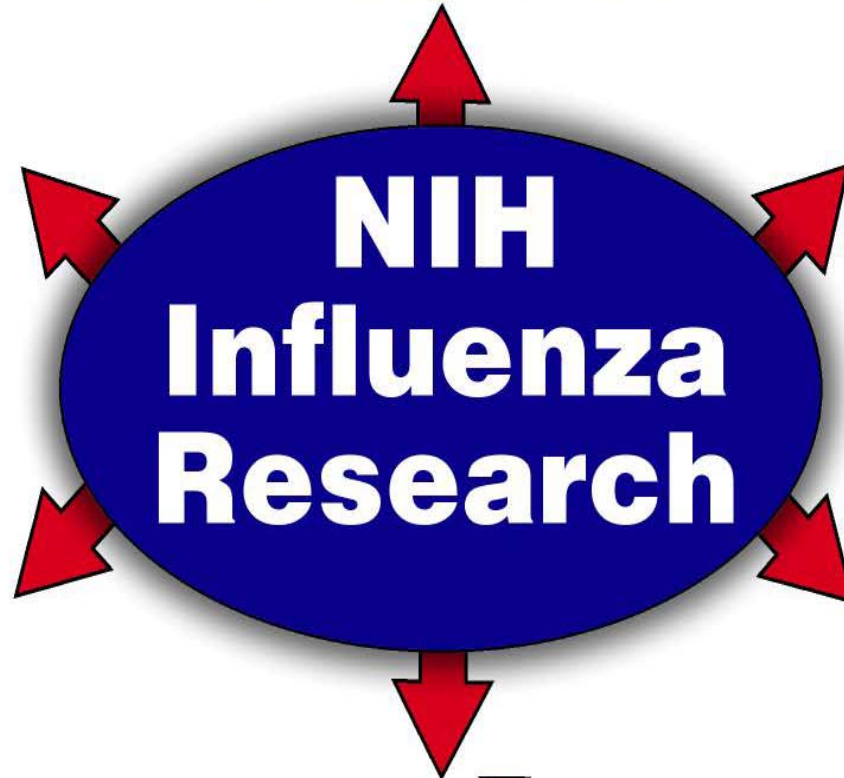
Vaccines



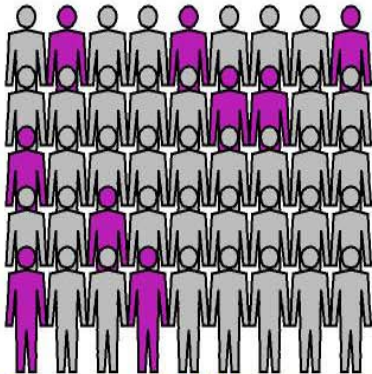
Therapeutics



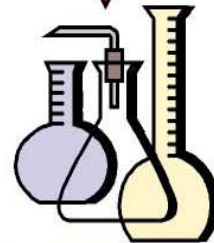
Diagnostics



**NIH
Influenza
Research**



**Surveillance
and
Epidemiology**



Basic Research



**Expansion of
Research
Capacity**