

**Vaccines**



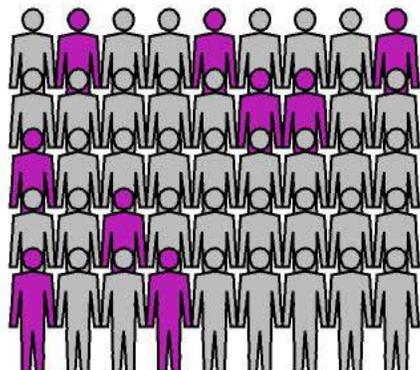
**Therapeutics**



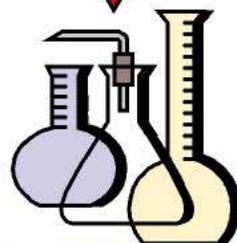
**Diagnostics**



**NIH  
Influenza  
Research**



**Surveillance  
and  
Epidemiology**



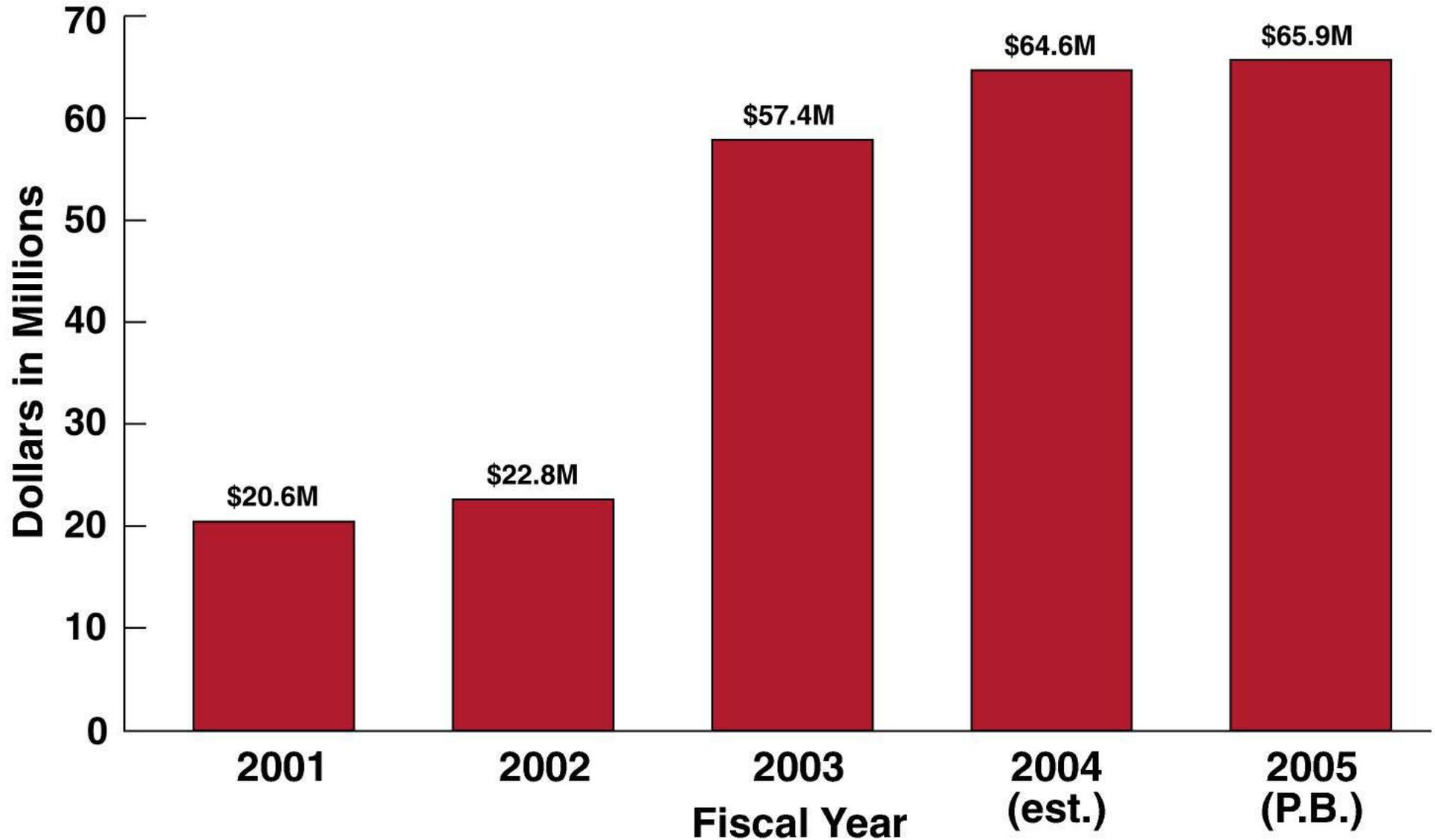
**Basic Research**



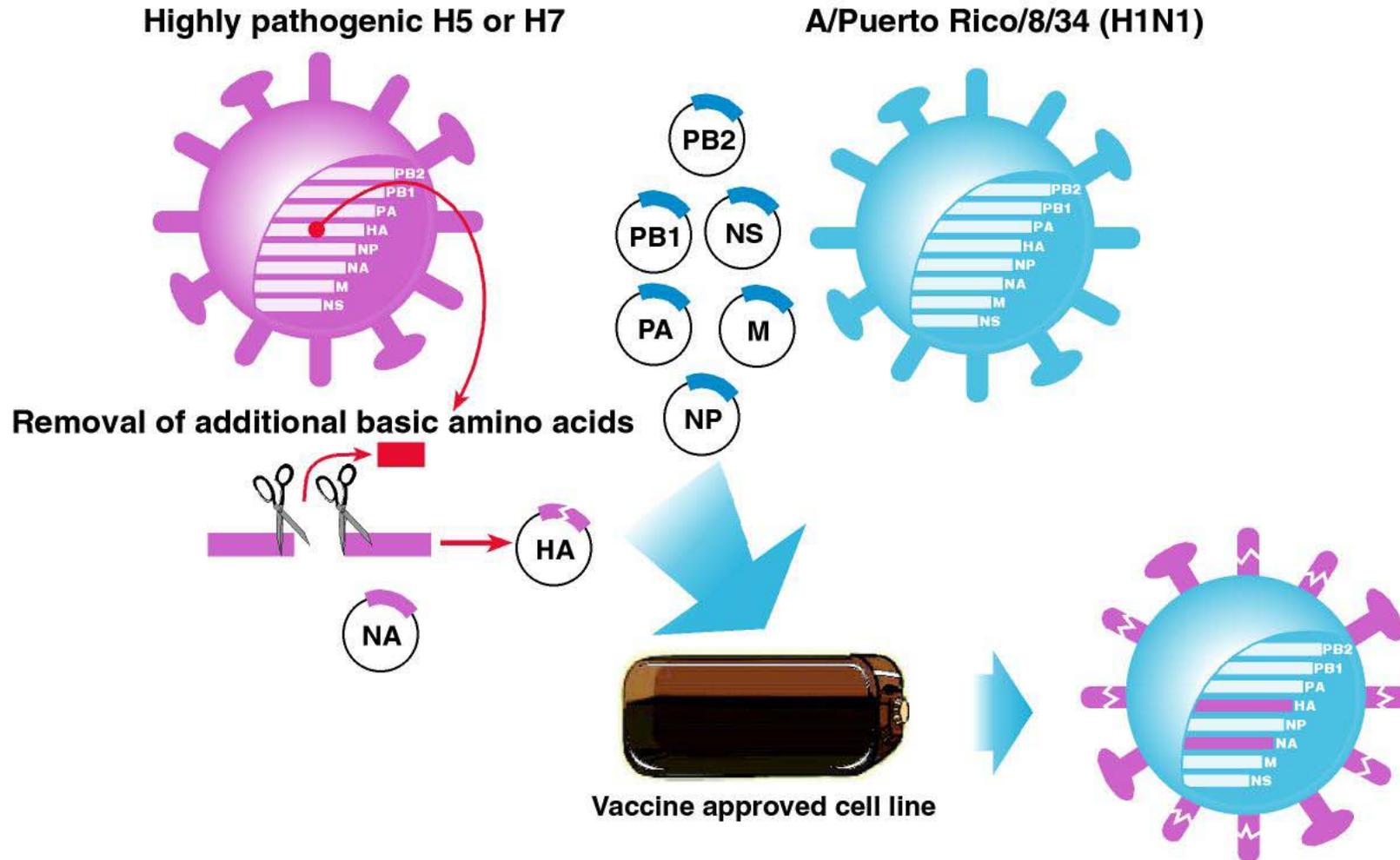
**Expansion of  
Research  
Capacity**

# NIH Influenza Research Funding

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# Influenza Vaccine Seed Virus Production Using a Reverse Genetics System



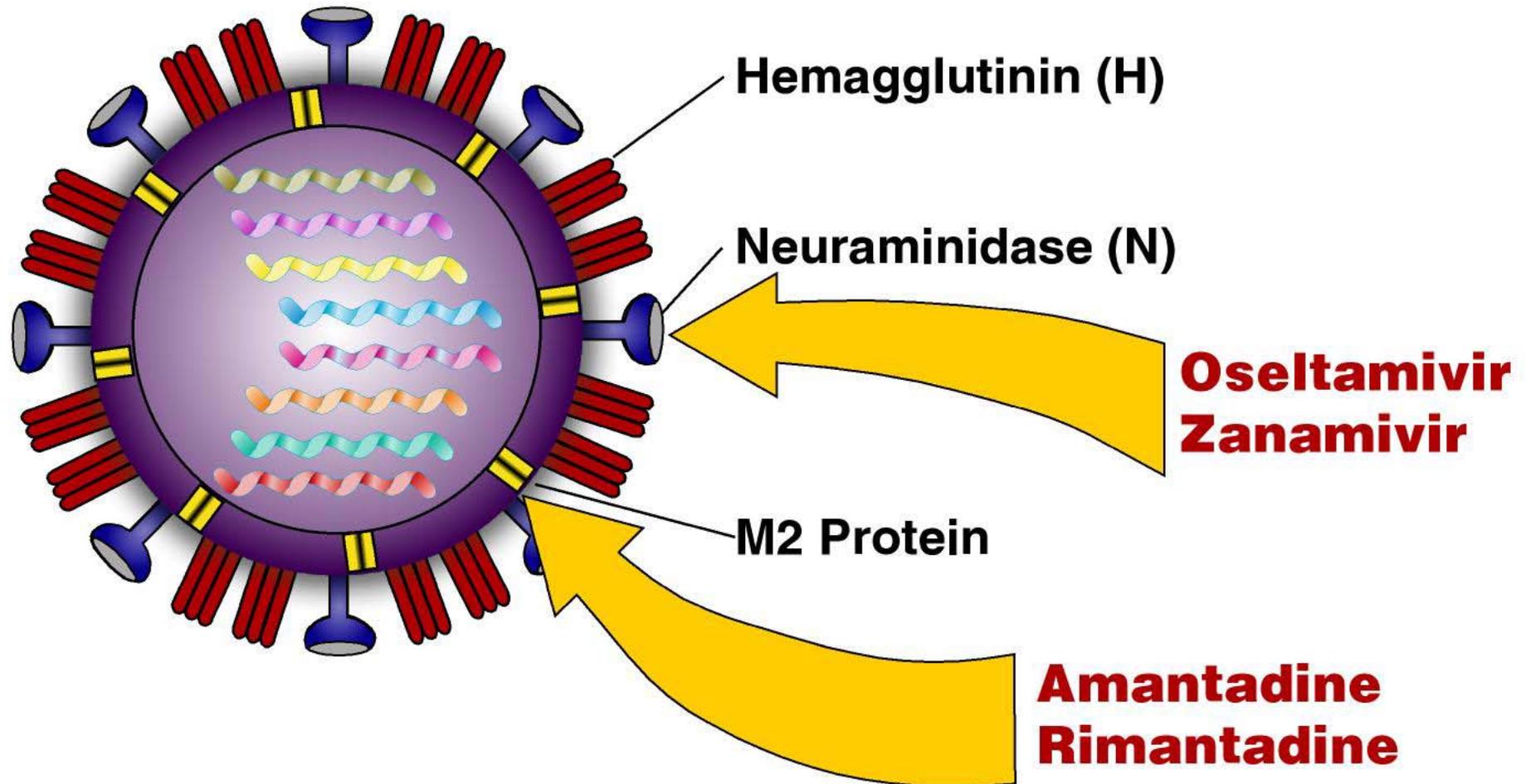
# **Alternatives to Egg-Based Influenza Vaccine Production**

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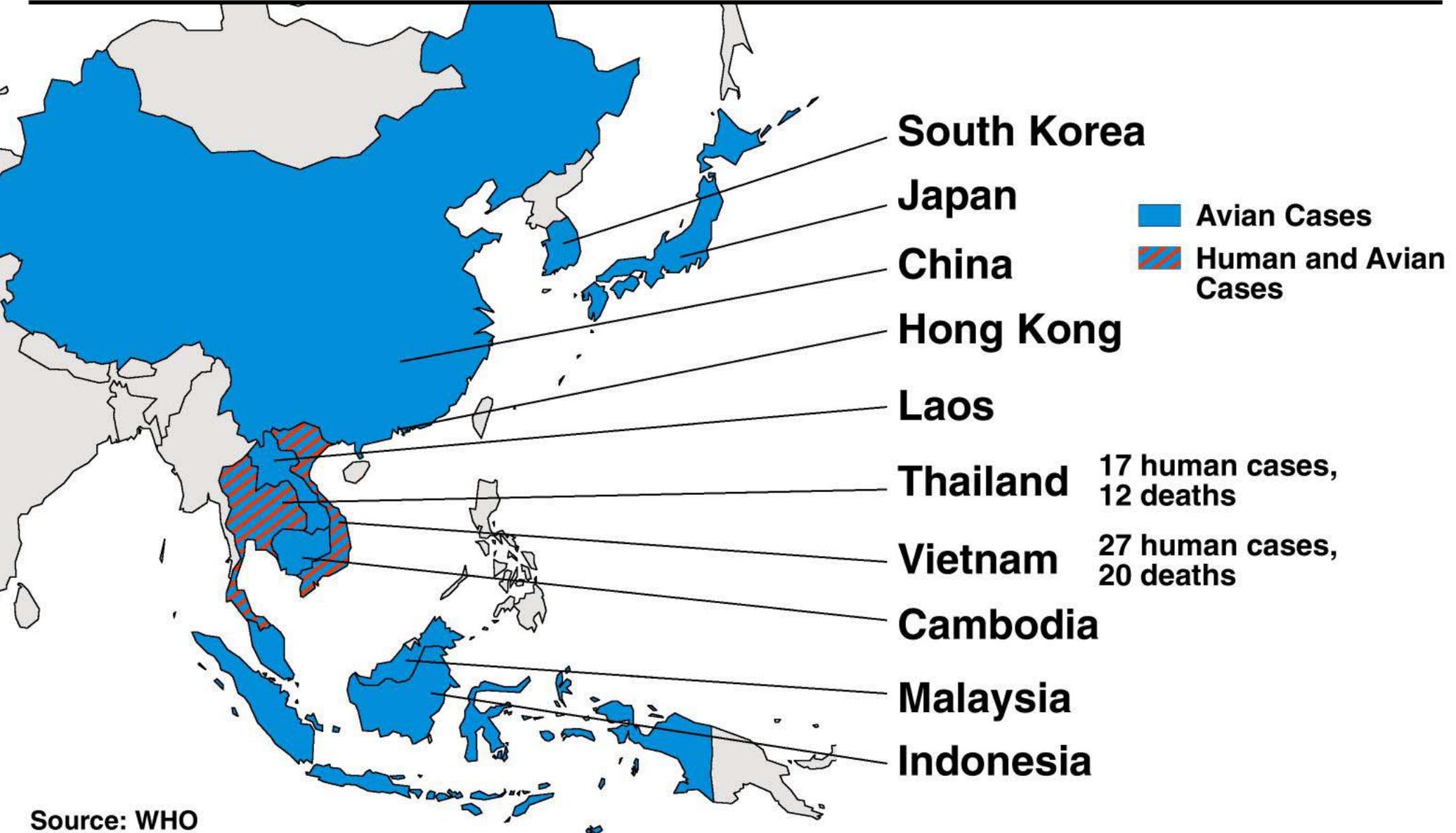
- **Cell culture-based vaccine production**
- **Recombinant DNA methods**

# Antiviral Therapies for Influenza

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# H5N1 Influenza in Asia, 2004



Source: WHO

# **NIH Activities in Preparation for Pandemic Influenza**

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- **Isolation of seed virus by reverse genetics**
- **Development of vaccine pilot lots for clinical trials**
- **Execution of vaccine clinical trials**
- **Screening and development of new therapeutics**