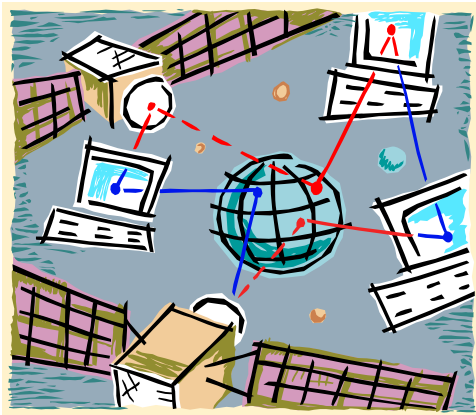




General Pandemic Surveillance Activities



State Perspective

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North Carolina State Laboratory of Public Health

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Preparing for Pandemic Influenza

- Why is NC concerned?
 - Public Health
 - Limit morbidity and mortality
 - Agricultural/Economic
 - Poultry Industry
 - Pork Industry
 - Travel and Tourism
 - International Airports
 - International Sea Ports
 - Trains
 - Interstate travel



North Carolina's Pandemic Influenza Plan

- Core Parts of NC Plan include:
 - Command, Control and Management Procedures
 - Surveillance
 - Vaccine Preparedness and Response
 - Antiviral Preparedness and Response
 - Medical Response
 - Preparedness in Health Care Facilities
 - Communications



North Carolina's Pandemic Influenza Plan

- Core Parts of NC Plan (cont'd):
 - Laboratory Diagnosis
 - Community Containment
 - International Travel
 - Mass Fatality
 - Legal Preparedness
 - Behavioral Health
 - Pandemic Influenza Information (FAQ)



Surveillance Activities in NC



- Surveillance Activities are based on WHO Pandemic Phases
 - Interpandemic Phases 1&2: GCDC will continue normal operations
 - Pandemic Alert Phases 3&4: Broad dissemination of case definition for active case finding of novel viruses in NC residents (all patients with ILI should be asked about recent travel, exposure to any suspect patients, intense exposure to poultry or domestic birds)

Surveillance Activities in NC



- Surveillance Activities are based on WHO Pandemic Phases (cont'd)
 - Pandemic Alert Phase 5: GCDC enhanced surveillance per NC Plan; Case finding of pandemic strain in NC residents per NC Plan
 - Pandemic Phase 6: GCDC enhanced surveillance per NC Plan; Case investigation limited to determining age specific attack rates, morbidity and mortality per NC Plan

Surveillance Activities in NC

- Postpandemic Period
 - GCDC will conduct epidemiological studies as outlined in the NC Plan
 - Return to normal case investigation process



Surveillance Tools

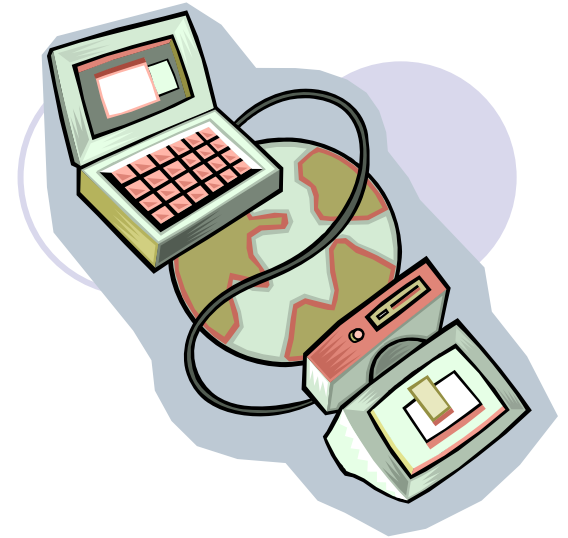
- Information Systems

- The NC Health Alert Network

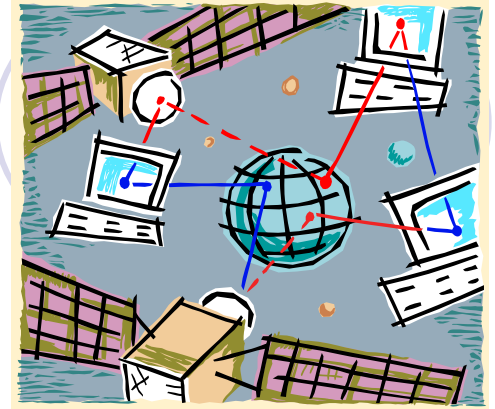
- Alerts key health officials and health care providers in NC to acts of bioterrorism or other emerging disease threats

- NC Electronic Disease Surveillance System

- Enables users to report cases electronically to GCDC (under development; expected completion date is early 2007)



Surveillance Tools (cont'd)



- Information Systems

- NC DETECT

- Monitors data streams from poison control center, hospital emergency departments, Piedmont wildlife center, and NCSU CVM laboratories

- North Carolina Hospital Emergency Surveillance System

- Monitors emergency department data for specific syndromes via central database

- North Carolina Immunization Registry

- Tracks childhood and adult immunizations

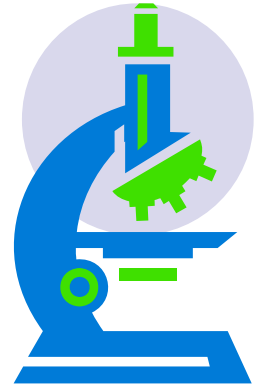
Surveillance Tools (cont'd)



- Human Resources/Expertise

- Public Health Epidemiologists located at 10 large medical centers in North Carolina monitor hospital data and identify unusual trends
- Public Health Regional Surveillance Teams consist of physicians, nurses, industrial hygienists, administrative assistants, and in some teams, veterinarians, to assist with local responses to public health emergencies

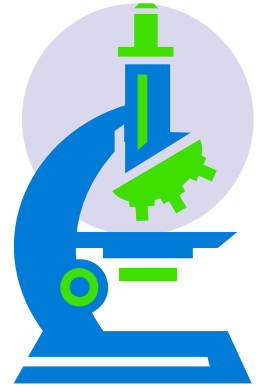
Surveillance Tools (cont'd)



- Laboratory

- NC State Laboratory of Public Health adopted an algorithm to rule out suspect cases of H5 using LRN assay first, then following a negative test with additional subtyping assays and viral culture as appropriate
- GCDC Branch serves as “gatekeeper” to restrict testing to patients who meet case definition in order to conserve limited resources; 24/7 consultation is available
- All reportable laboratory results are submitted to GCDC as required by Public Health Law

Surveillance Tools (cont'd)



- Laboratory

- NCSLPH has year round surveillance for influenza viruses
- During influenza season (October-March), sentinel physicians submit specimens to NCSLPH for testing; sub-typing is performed on all isolates
- Surveillance reports are compiled weekly or every two weeks and disseminated widely to public health and clinical laboratory communities

References and Contact Information

- NC Pandemic Influenza Plan can be found at
<http://www.epi.state.nc.us/epi/gcdc/pandemic.html>
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- Thank you!

