PHIN – Purpose

- Improve the capacity of public health to use and exchange information electronically by
  - Promoting the use of standards
  - Providing technical specifications
  - Defining basic public health priority functions
  - Identifying workforce competencies
  - Facilitating collaborative development of policies for data sharing
  - Strengthening routine use and exchange to be robust and flexible enough to accommodate an emergency
Public Health Information Network
Functional Areas

PH Monitoring
PH Intervention
PH Prevention
PH Communication and Alerting

Common Services and Components
Public Health Monitoring

Functions:

• Initial Event Detection – (biological, chemical, radiological)
• Situational Awareness
• Notifiable Condition Reporting
• Environmental Health Monitoring
• Chronic Disease Surveillance
• Injury Surveillance
• Mortality and Vital Statistics

Systems: e.g., BioSense, NEDSS, LRN, EPHT, HSEES, EHS–Net
Public Health Intervention

Functions:
• Public Health Investigations
• Environmental Assessments
• Outbreak Management
• Resource Utilization (bed capacity, personnel, services)
• Inventory Allocation and Distribution
• Response Management and Follow-up

Systems: e.g., OMS, CRA, TopHat
Public Health Communications

Functions:
- Health Alerts
- Decision Support
- Secure Communications & Collaboration
- Public Communications – websites and marketing materials
- Health Risk Communications
- Promotion of Health Practices
- Health Training and Education

Systems: e.g., Epi-X, HAN, CDC Website
Prevention

Functions:
• Vaccination campaigns
• Wellness programs
• Health awareness programs
• Smoking/drug cessation
• Violence prevention
• Maternal health programs

Systems: e.g., CRA, VacMan
PHIN Systems and Standards

- Functional requirements for information systems that support public health
- Guidelines for workforce competencies
- Guidelines on policy and operations for information systems that support public health
- A set of applications for public health
- Vocabulary standards
- Technical specifications for message exchange and data transport
- Technical specifications for directory exchange
- Technical specifications for alerting
- Security services: Authentication, Authorization, Credentialing, Encryption, etc.
What can be Shared?

- Functional requirements for information systems that support public health
- Guidelines for workforce competencies
- Guidelines on policy and operations for information systems that support public health
- A set of applications for public health
- Vocabulary standards
- Technical specifications for message exchange and data transport
- Technical specifications for directory exchange
- Technical specifications for alerting
- Security services: Authentication, Authorization, Credentialing, Encryption, etc.
Consumers
Hospital or Healthcare System
Electronic Health Records
Clinical Labs
Pharmaceutical Stockpile
Other Surveillance Sources
State and Local Health Departments
Public Health Labs
CDC, FDA, USDA, EPA, and other Federal Agencies

NHIN
Common Services and Components
Consumers

Directory Messaging Vocabulary Security

Data & Information
Patient Data
Health Record Locator
Data Brokering

CDC, FDA, USDA, EPA, and other Federal Agencies

SAFER • HEALTHIER • PEOPLE
PHIN/NHIN Interaction Scenarios

- West Nile Virus
  - Information Sources
    - Animal disease data (PHIN)
    - Vector control (PHIN)
    - Human clinical data (NHIN)
    - Case reports (PHIN)
  - Information dissemination
    - Prevention guidelines (PHIN/NHIN)
    - Alerts/notifications (PHIN/NHIN)

- Air Quality and Asthma
  - Information Sources
    - EPA and local EPD air quality data (PHIN/EPA CDX)
    - Asthma related clinical diagnosis and observations (NHIN)
  - Outputs
    - Evidence for regulatory control measure success (PHIN/EPA CDX)
    - Community health research (PHIN)
    - Air quality notifications to clinical care (NHIN)
Recommendations

• Synchronization of PHIN components and services with NHIN functional categories
• Extend Biosurveillance use case to include data flows from PHIN to NHIN
• Extend Biosurveillance use case to include requirements for routine surveillance needs
• Work with additional Public Health Partners on requirements