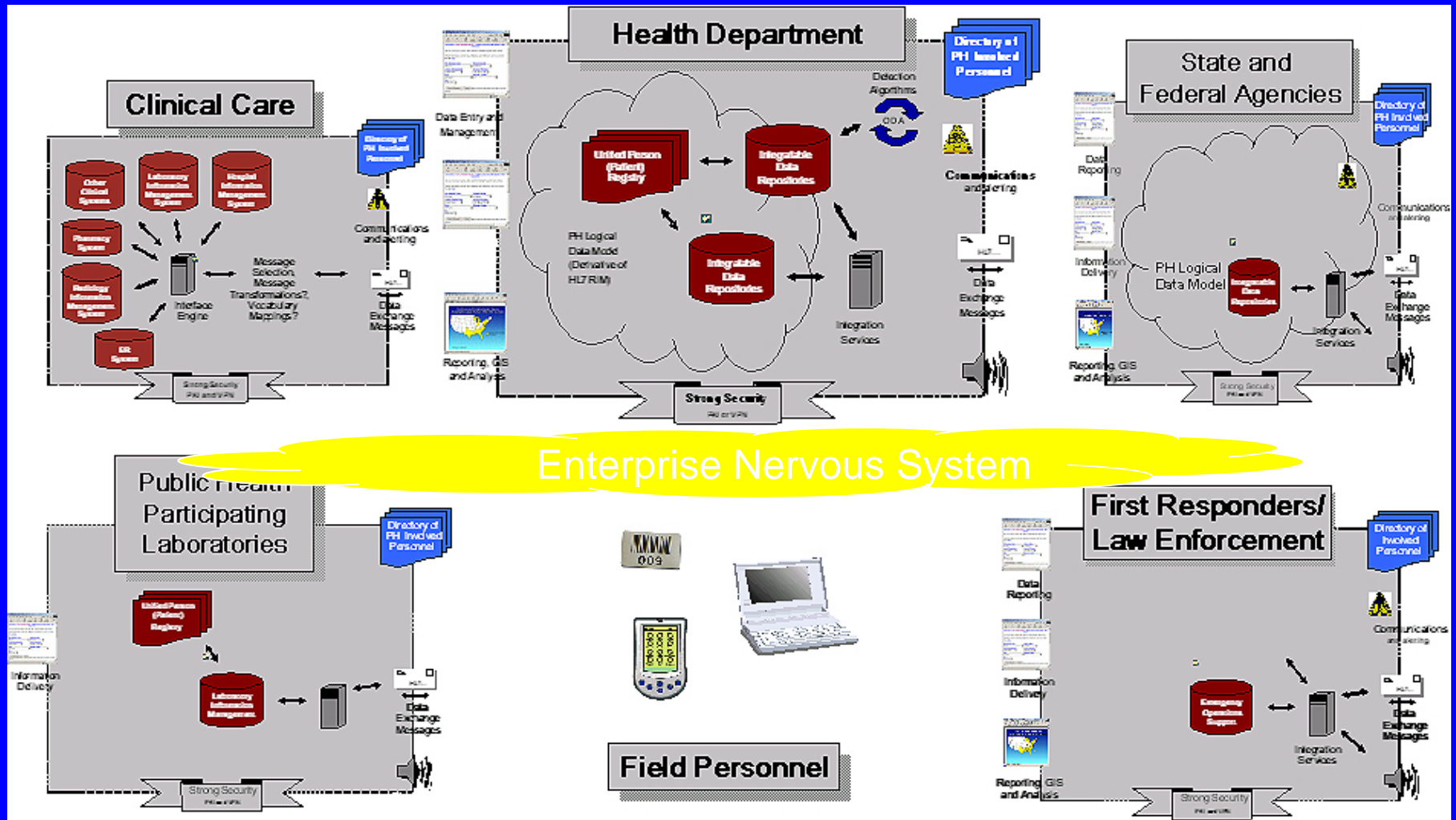


**Public Health Information Network:  
Why early detection needs a standards  
based approach to connecting public  
health and clinical medicine**

New York City Workshop on Early  
Detection Systems  
October 20-22, 2003



# Public Health Information



# **Current Opportunities to breakdown stovepipes!**

- **Progress in technology, informatics concepts**
- **National standards for health electronic data interchange with HIPAA '96**
- **Electronic Health Record functional standards under discussion—IOM, HL7**
- **Funding for Public Health Information Network (PHIN) and state Preparedness Capacity**

# PHIN Functions and Specifications

## Relevant to Early Detection

- Automated Exchange of Data Between Public Health Partners
- Use of Electronic Clinical Data for Event Detection
- Analysis and Visualization
- Directories of Public Health and Clinical Personnel
- Public Health Information Dissemination and Alerting
- IT Security and Critical Infrastructure Protection

# PHIN standards relevant to early detection: How does Gartner think we get there?

PH partners universally agree to the vision and overall direction of the PHIN

The PHIN standards and specifications are appropriate for use in PH

Success of the PHIN relies on both CDC and its PH partners—all must commit to this initiative in order for it to succeed

As the PHIN evolves, there are several gaps to be filled in the overall architecture

# Gartner's incremental steps towards PHIN compatibility...

- application development teams should focus first on the **data, data model and the use of CMVs** (i.e., create data that can be easily aggregated at the national level using XML schema).
- next focus on the **messaging formats, transport & security standards** to easily and securely share this data with its PH partners and CDC.
- then, **directory services** that will allow authorized and controlled access
- Tools that can be provided by CDC (e.g., compliant software modules, tools for messaging, etc. built on PHIN standards) should be made available to the states and their partners, for use as interested

# Implementation, continued

- ❑ PHIN should allow for multiple solutions for those components that are more technically challenging or immature in the market (e.g., HL7 v3.0, ebXML). **However, the goal of a “live” network must be maintained.**
- ❑ Attach the PHIN standards to the cooperative agreements as was done with the Preparedness awards
- ❑ Security is required at all levels of state PH infrastructure; independent verification & validation (IV&V) services assist the states with security compliance

# Current Status of Public Health Information Network

Public Health and Social Services Emergency Fund-2002

- \$1 billion for state and local public health preparedness capacity
- CDC and HRSA **require in grant guidance** use of standards for IT investments—[www.cdc.gov/cic](http://www.cdc.gov/cic)

September 2003 : second round Preparedness funding;  
HRSA grants \$498 million ; CDC \$870 million

All 50 states funded for continuous internet connectivity to counties (fy1999) and surveillance planning ( fy 2000)

# Public Health Information Network

## Tools available from CDC

**Software for industry standards based inter-institutional messaging transport (PHIN MS)**

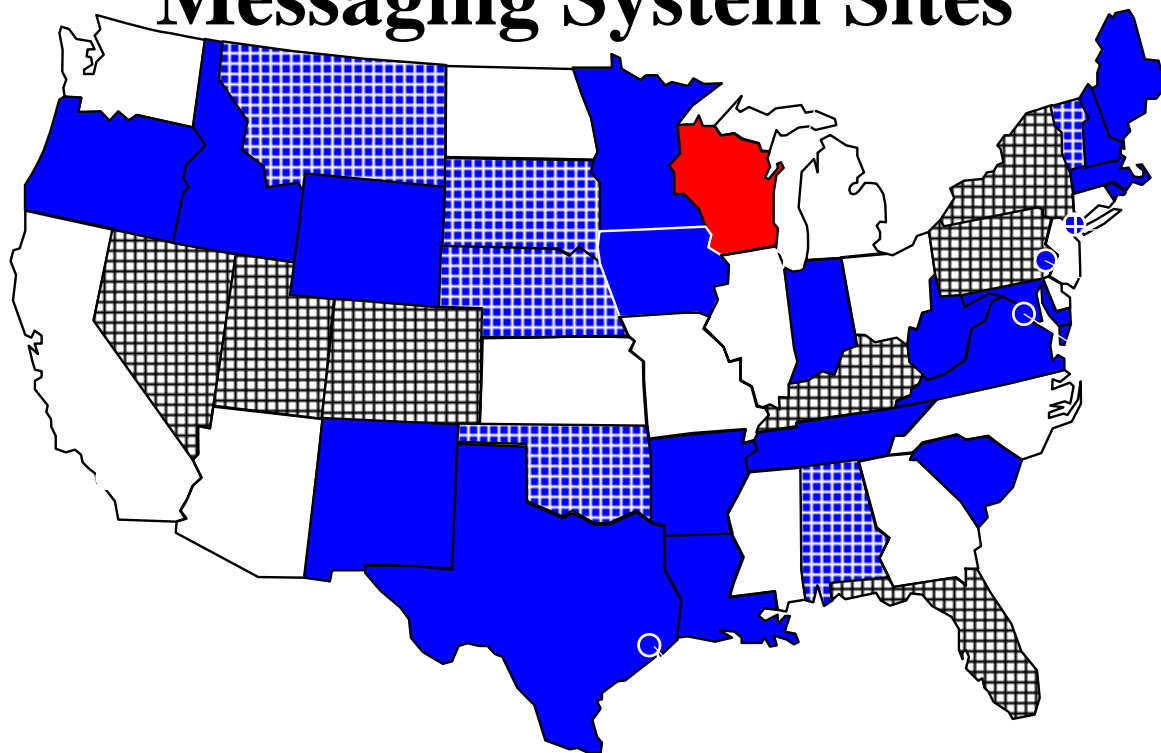
– ebXML “handshake,” PKI encryption and security





**Technical assistance & direct assistance available for public health partners (eg security IVV)**

**Vocabulary services, including web accessible Standard Reference Tables**

**Implementation Guides that specify data standards, message format**

# National PHIN Surveillance & Messaging System Sites



-  **NEDSS-Compatible Development - 28**
-  **NEDSS Base System Site - 29**
-  **NEDSS Base System Collaborative Development - 1**
-  **PHIN Messaging System - 15**

# Background information

# What does NEDSS have to do with HIPAA Privacy Rule?

- Privacy Rule allows current practice of sharing data with public health
  - Rule permits health care providers to share individually identifiable information with legally authorized public health entities for public health activities
  - Public health activities include surveillance (NEDSS), investigation, intervention

# What does NEDSS have to do with HIPAA?

- **HIPAA mandates national health care data standards and policies in four areas:**
  - Transaction content; unique identifiers for providers, health plans; security; privacy
- **NEDSS architecture standards are HIPAA compliant:**
  - supports “dual use” for security, messaging elements
- **Approach to NEDSS data standards is HIPAA compliant:**
  - Adopting HIPAA standards where relevant eg electronic laboratory reporting in NEDSS uses HIPAA claims attachment
  - Advocating inclusion of data elements relevant to public health with SDO's