

# PHIN and the Business of Local Public Health

May 2004

Lincoln-Lancaster County Health Department

# **Importance of PHIN from a Local Perspective**

**Critical: Local Health Departments'**

- **Must meet current and future state and federal requirements for data reporting and exchange**

# **Importance of PHIN from a Local Perspective**

- **Long life expectancy for local applications**
- **Need to make sound business case for long-term usability**

# Importance of PHIN from a Local Perspective

## PHIN Emphasis on Standards

- Data
- Data exchange
- Fostering use of standards across federal agencies

# **Importance of PHIN from a Local Perspective**

## **PHIN as a Model**

- **Model for how to decision making**
- **Model for design**
- **Starting point for standards**
- **Model for Approach to Integration**

# Importance of PHIN from a Local Perspective

- All local public health data needs **are not** met by PHIN
- The **goals** of public health are shared at federal, state and local but the **priorities** and program **realities** are not the same

**COMMUNICATION**

**IS THE KEY**

# **Importance of PHIN from a Local Perspective**

**Local Health Departments Are:**

- **Actively Investing in System Integration**
- **Facing Challenges related to Data Standards**

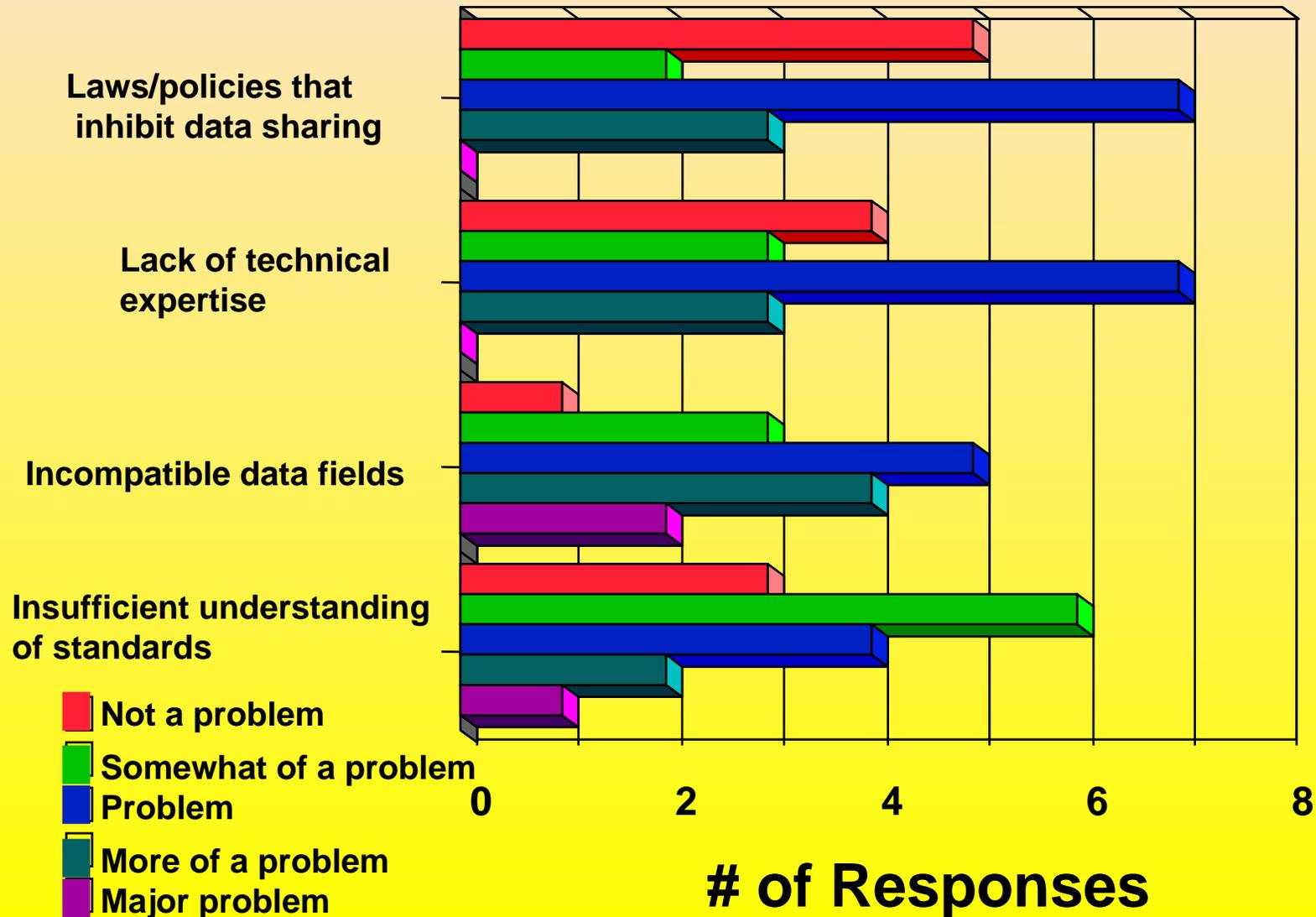
# Informatics Surveys of Local Health Departments

- NACCHO in partnership with Public Health Informatics Institute surveyed 23 local health departments regarding public health information systems
- Departments surveyed were medium to large LPHAs serving populations over 100,000

# Informatics Surveys of Local Health Departments

- 89% reported that system integration efforts are currently underway or highly likely in the next six to eighteen months
- 62.5% (10 out of 17) reported having major problems with integration efforts related to data standards

# Challenges to Integration of Information Systems Related to Data Standards



# Informatics Surveys of Local Health Departments

Percent of LPHAs currently undertaking or likely to undertake a systems integration effort in the next six to eighteen months? **N=18**

Area of integration	Current	Highly likely	Combined
Within LPHA	50%	25%	75%
With other local agencies	44%	25%	69%
With other agencies in state	19%	38%	56%
Total currently or highly likely to undertake system integration efforts			94%

# **Informatics Surveys of Local Health Departments**

## **Funding Sources**

- **Only three LPHA depend exclusively on state and federal funding**
- **Nearly 90% use a mix of local, state and federal funds**
- **For 30%, local jurisdictions fund high priority information system**
- **Only one agency (5%) depend primarily on bioterrorism funds**

# Informatics Surveys of Local Health Departments

Table n: Source of LPHA IT Systems (n=18)

	Percentage of LPHA Information Systems*				
Statistic	Custom-developed system	State-developed system	Federally-developed system	Commercial off-the-shelf system	Hybrid
Low	0	5	0	0	0
High	75	95	25	80	35
Median	25	25	5	12.5	2.5
<b>Mean</b>	<b>29</b>	<b>26</b>	<b>8</b>	<b>23</b>	<b>10</b>

# **Informatics Surveys of Local Health Departments**

- **41% (9) of the LPHA were currently working to implement PHIN standards and specifications**
- **45% (10) had some knowledge of PHIN but wanted to understand it better**
- **Only 3 of the survey participants said they were not familiar with PHIN**

# Implications for Business of Local Public Health

- Local Health Departments are investing in integration projects
- Funding comes from a wide range of sources

# Implications for Business of Local Public Health

- Integration needs at a local level reflect the priorities and realities of local public health practice
- These realities are not the same for state and federal partners

# Implications for Business of Local Public Health

- Local public health agencies vary widely in the **specific array** of public health functions and services
- The functions and services vary usually related to emphasis and workflow

# Implications for Business of Local Public Health

- Integration with state and federal entities is only one of the critical integration needs for LPHA

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# **Making PHIN part of the Business of LPHA**

- **Adopt data standards**
- **Incorporate messaging and data elements standards into new system specifications**

# **Making PHIN part of the Business of LPHA**

- **Business and workflow analyses include state and federal integration requirements**
- **Build capacity for electronic interface with PHIN systems at state / federal**

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# **Integrating PHIN into the Business of my local health department**

- **Strategic planning for IT**
- **Business case for system applications**
- **Workflow and Business Analysis**
- **Establish principles and protocols**

# Principles

- **Data Standards**
- **Standard methodologies**
- **Use standard, off-the-shelf technology**
- **Potential scalability**
- **Document for the future**
- **Easily accessible and usable by staff**

# **Integrating PHIN into the Business of my local health department**

- **Adopt standards**
- **Map application data elements to PHIN vocabulary**
- **Variances are identified**
- **Default to use of PHIN standard**
- **If not possible, variance is documented and values identified to convert to PHIN**

# **Integrating PHIN into the Business of my local health department**

- **Identify the specific points of integration in the business and workflow models**
- **Analyze the system requirements**
- **Determine if local functionality or state functionality best meets needs**
- **Develop the functional specifications for integration**

# **Integrating PHIN into the Business of my local health department**

## **We determined:**

- **NEDSS Base system functionality for disease investigation best match**
- **STD / HIV testing and counseling work flow requires use of local application**

# **Integrating PHIN into the Business of my local health department**

- **Laboratory orders originate in local application and results need to be recorded**
- **Immunization functionality and work flow requires use of local application**

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# Current IT Applications

## Service Encounter Data

- **Client Information System**
  - **CMHC**
  - Grapevine
  - General Assistance
- **Visual Centaurus Nurse Call line triage**
- **IRIS information & referral database**
- **Animal Control System**
- **Environmental Health Information Systems**
  - Application / Permitting / Time Activity
  - Special Waste database
  - Air Emission database
  - **RFP for new system**

# Current IT Applications

## Reference Data

### Population-based data

- Vital statistics
- Youth Risk Behavior Survey
- Adult Risk Behavior Survey
- CODES data regarding injuries
- E-coded medical records
- Hospital discharge data
- Low-birth weight data base
- Cancer registry data

### Geographic Data

- GIS maps
  - Population-based data
  - Water wells / on-site sewage systems
  - Air emissions
  - Soil
  - Health risks
  - Hazardous waste
  - Hazardous materials

### Data about data (metadata)

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# Current IT Applications

## Surveillance / Other Data

### Surveillance data

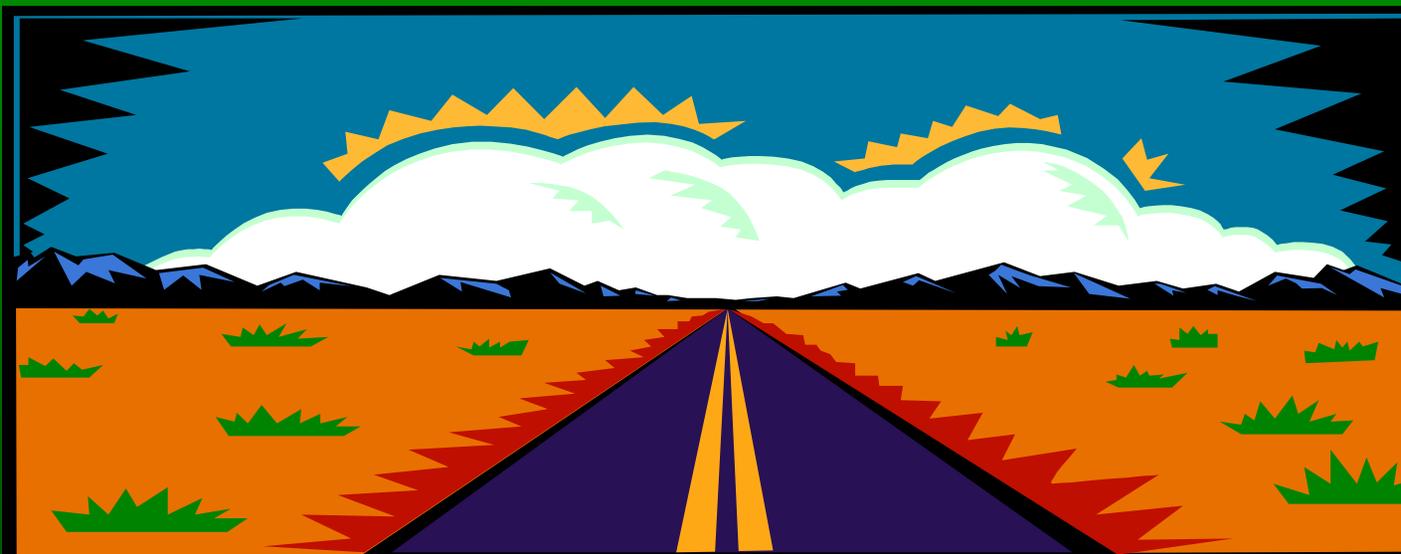
- Passive surveillance (bio sense)
- Communicable disease surveillance
- Air monitoring: (Carbon monoxide, Particulate, Ozone, Air Toxics)
- Laboratory surveillance data
- School absenteeism

### Data from Other Agency

- NEDSS (National Electronic Disease Surveillance System)
- EPA (Environmental Protection Agency)
- City / County GIS server
- Natural resources district GIS data

**The mission of public health  
cannot be accomplished  
without the partnership,  
collaboration and integration  
of functions, information and  
actions of Federal, State and  
Local Public Health**

**PHIN is a critical element  
for partnership,  
collaboration and integration**



**Local Public Health -- where the rubber  
meets the road**

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