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### Western Nebraska Health Information Exchange: Public Health Reporting – Where Does All the Data Go?

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Further Information

To view the Public Health Reporting- Schematics and Matrix document, visit <http://www.ppc.nebraska.edu/materials/phreporting.pdf>

For more information on this project, please contact:

- University of Nebraska Public Policy Center at [ppc@nebraska.edu](mailto:ppc@nebraska.edu) or (402) 472-5678
- Western Nebraska Health Information Exchange's official website, Community Health Connection at <http://www.comhealth.org>

Acknowledgements

- Rural Nebraska Healthcare Network:

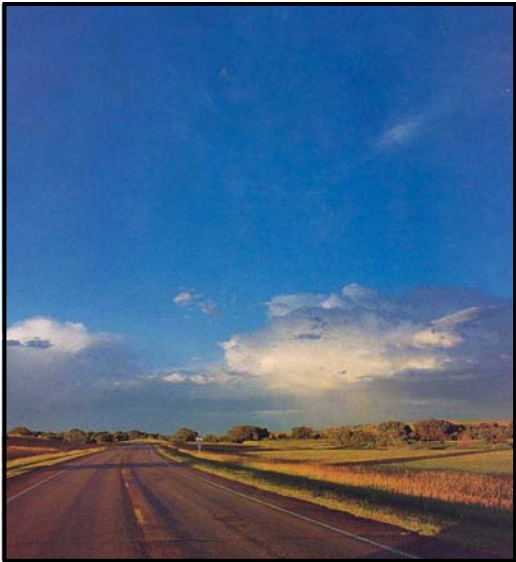
  - Box Butte General Hospital
  - Chadron Community Hospital
  - Garden County Health Services
  - Gordon Memorial Hospital
  - Kimball Health Services
  - Memorial Health Center
  - Morrill County Community Hospital
  - Perkins County Health Services
  - Regional West Medical Center
- Panhandle Public Health District
  - Panhandle Mental Health Center
  - Region I Behavioral Health
  - Panhandle Community Services Health Center
  - Western Community Health Resources
  - Nebraska Department of Health and Human Services

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Photograph Courtesy of John Woollam

Acronym Key for Schematics	
CDC	Centers for Disease Control and Prevention
Co-CASA	Comprehensive Clinic Assessment Software Application
e-NARSIS/ NARSIS	(electronic) Nebraska Ambulance and Rescue Service Information System
HARS	HIV & AIDS Reporting System
NEDSS	National Electronic Disease Surveillance System
NEMSIS	National Emergency Medical Services Information System
NNSP	Nebraska Newborn Screening Program
NTRACS	National Trauma Registry of the American College of Surgeons
PHIN-MS	Public Health Information Network- Messaging System
RWMC	Regional West Medical Center

Western Nebraska Health Information Exchange:  
Public Health Reporting –  
Where Does All the Data Go?



*“A tremendous amount of data is collected in the spirit of public health that public health professionals have difficulty retrieving.”*

*-Kim Engel*  
*Director, Panhandle Public Health District*

# Public Health Reporting – Where Does All the Data Go?

Keerun Kamble, BS; Nancy Shank, MBA; Kim Woods, RN, MSN, CPHIT; Mark DeKraai, JD, PhD; Elizabeth Willborn, RN, MSN

## Introduction

The Public Health Reporting - Schematics and Matrix outlines the current requirements of **public health surveillance and reporting** from rural healthcare providers to local, state, and national entities. The report was created to enhance the understanding of public health reporting for members of the Western Nebraska Health Information Exchange Network.

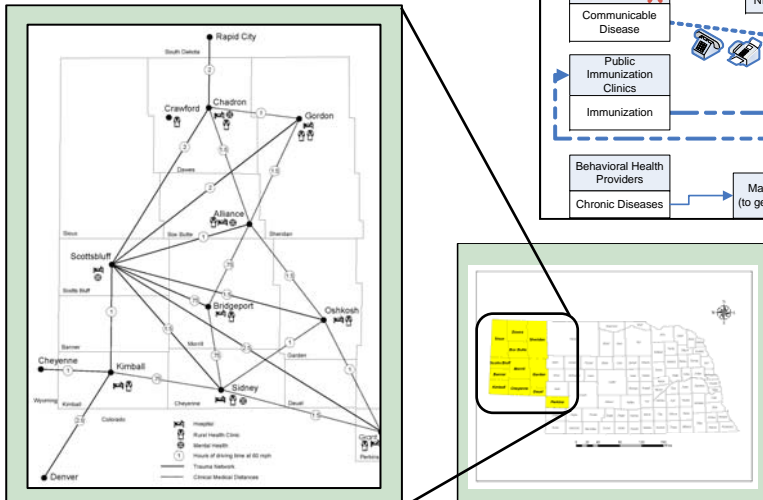
## Research Question

Where do public health data go and how easy are they to retrieve once they are filed?

## Panhandle Description

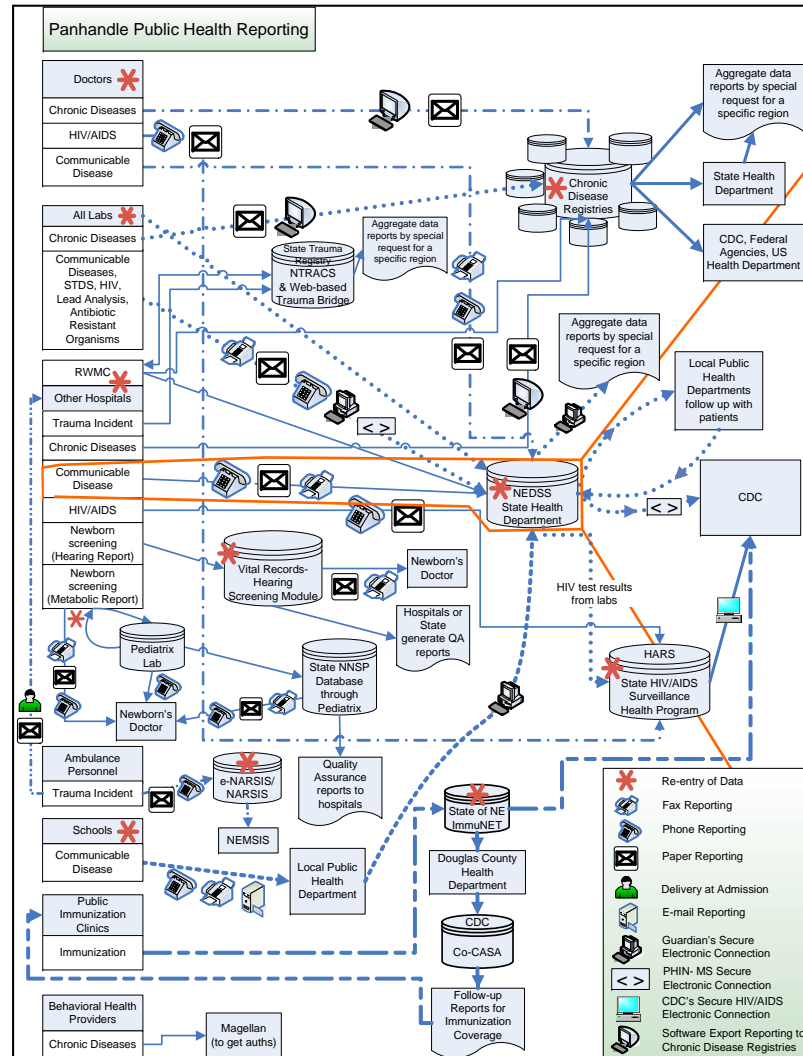
**Table 1**  
Demographic Comparisons of the Panhandle Region to Nebraska

	Panhandle Region of Nebraska	Entire State of Nebraska
Area	14,000 sq miles	77,358 sq miles
Population	93,610	1,711,263
Age over 65 yrs	17.3%	13.3%
Minority Population	14.6%	13.3%



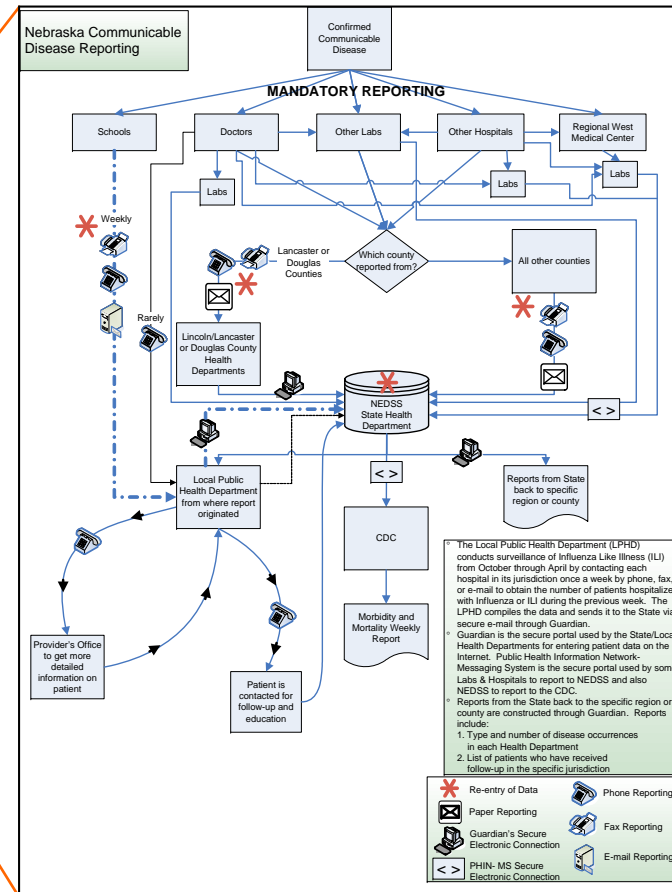
**Figure 1.** The Panhandle Regional Map highlights the healthcare facilities and travel distances.

## Summary Schematic



**Figure 2.** The Summary Schematic begins with each reporting entity and shows the health conditions and tests they report. From there, the schematic shows how the health information is reported, to whom it is reported, and how the data are reported back to the community.

## Specific Example Schematic



**Figure 3.** The Communicable Disease Reporting Schematic first illustrates the initial confirmed disease and who is reporting. The next steps include to whom the health information is reported, how it is reported, and how the data are reported back to the community.

## Design and Methodology

This **descriptive study** has already generated great interest to healthcare providers and organizations throughout Nebraska. The methods for collecting information in the report included meeting with and working collaboratively with State of Nebraska Health & Human Services personnel, health professionals throughout the Panhandle in Western Nebraska, and viewing disease surveillance application programs such as Nebraska Electronic Disease Surveillance System.

## Results

The final report titled, **Public Health Reporting-Schematics and Matrix**, documents the flow of public health reporting information in Western Nebraska. Unfortunately it appears that much **data end up in “silos” and can be difficult to retrieve**. The report includes a matrix which illustrates the flow of public health reporting from local to state and national entities. In addition, a series of schematics was created to outline the steps of different reporting processes. There is a summary schematic of all public health reporting in the Nebraska Panhandle and a set of other schematics to illustrate public health reporting in each of the following areas:

- **Communicable Disease**
- **HIV/AIDS**
- **Nebraska Newborn Screening Program**
- **Newborn Hearing Screening**
- **Chronic Disease**
- **Nebraska Cancer Registry**
- **Nebraska Trauma Registry**
- **Immunization**

## Implications

The Public Health Reporting- Schematics and Matrix:

- Highlights the **complex processes, duplicate steps, and challenges** with public health reporting and information sharing in Western Nebraska.
- Enables public health administrators, educators, and policy makers to **make reporting systems more efficient**.
- Illustrates an **effective way to document a public health reporting trail** that can be replicated by other communities throughout the nation.