

Early Indicator Surveillance Model

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Pandemic Early Indicator Background

General Cartwright met with CDC Leadership (2006)

- Insufficient indications to lead a pandemic
- Can Nebraska develop a model?

Pandemic Early Indicator Concept

- Create a web-based model
 - Easy access to users
 - Automatic alerts of possible concerns
 - Near real-time (daily) flow of data
- Obtain non-traditional data
 - Assist governor and public health authority with earliest indication of a pandemic
- Data Categories
 - Absenteeism – employers and schools
 - Influenza like illness lab test results
 - Medications – Relenza and Tamiflu

Model Operation

Current data sources

- Employer Absenteeism (6)
- School District Absenteeism (4)
- Nebraska Public Health Laboratory ILI test results
- Nebraska Medicaid pharmacy fills
- Nebraska Blue Cross Blue Shield pharmacy fills
- Analysis
 - Data flows in *daily* by zip code or county
 - County turns from green to yellow if 2 categories turn from green to yellow
 - Automatic notice provided to public health authority

Model Results

- Indications expected to lead traditional data by several days. As in 1918 avian flu, days are critical.
- Governor and public health authorities will have data to decide course of action when a problem arises
- Easy access for sources providing data and authorities using data
- Improves situational awareness by providing feedback to authorities of effectiveness of intervention programs



IndraNet Global



Industry Absenteeism

School Absenteeism

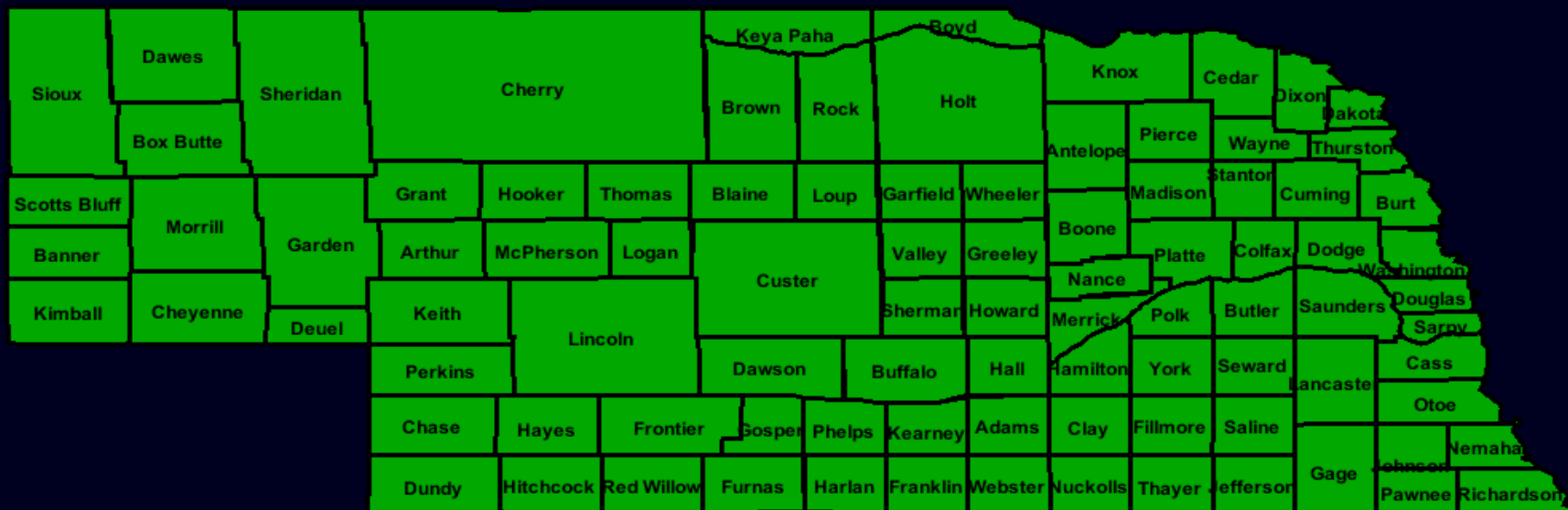
Health Labs

Wildlife

Pharma

Report

Response



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Next Steps

- Increase data sources across the state
- Confirm appropriateness of trigger points with NE health experts
- Monitor upcoming flu season to determine if model leads traditional data sources