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
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