Update on Public Health Surveillance and Our Collaboration with Purdue University

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Highlights

- Traditional public health surveillance data sources
- New methods in surveillance
- Collaborative efforts
Traditional Data Sources

- Births
- Deaths
- Reportable diseases
  - Food
  - Vector
  - Communicable
  - STDs
Survey Data

- BRFSS
- YRFSS
Environmental

- Lead
- Other contaminants
- Spills
- Water
“Timely” Data Sources

- Emergency Department “Chief Complaint”
- Physician phone calls
- Hospital phone calls
- Poison Control Center
Registries

- Cancer
- New born screening (including hearing)
- Birth defects
- Immunizations
Knowledge Management System

- Integrated data set
  - Person centric

- Analysis
  - Statistical
  - Visual

- Systems to look at policy decisions that cross program areas
Public Health Emergency Surveillance System (PHESS)
PHESS Data Sources

- Hospital Emergency Departments
- Over the Counter Drug Sales
- Indiana Poison Center Outliers
- School Absenteeism
Emergency Department Data

- 50 hospitals currently submitting emergency department data to ISDH
- Additional 12 hospitals projected to come online by August 2006 (62 total)
- Ultimately, all 114 Indiana hospitals with emergency departments will be online
Coding ED Chief Complaint

Data

- Respiratory
  - Gastrointestinal
  - Fever
  - Neuro logical
  - Febrile disease

- Rash
- Botulism-like
- Hemorrhagic illness
- Shock / Coma
- Other syndromes
Alert Time Series
(12/21/05, Neurological Syndrome, Reg-10)

Greater number of cases than expected on 12-21-05
ESSENCE – GIS Maps
Alert Time Series
(12-28-05, Gastrointestinal Syndrome, Reg-5)

Greater number of cases than expected
ESSENCE – GIS Maps
Potential Collaboration Projects

- Visualizations
- Additional information
  - Databases added
    - Which ones?
- Rural Area Surveillance
- Veterinary Surveillance
  - Companion animals
  - Livestock
Public Health Initiatives

- Effective, efficient, and timely data collection
- Data-driven policy making
  - Partners
  - Community
  - Economic
- Evidence-based and results-oriented programming
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