

Real-Time Biosurveillance

Introduction

BioSense is the national, human health surveillance system designed to improve the nation's capabilities for disease detection, monitoring, and real-time health situational awareness. This work is enhanced by providing public health real-time access to existing data from healthcare organizations, state syndromic surveillance systems, national laboratories, and others for just in time public health decision-making.

BioSense data are analyzed through advanced statistical methods, and made accessible through the BioSense application. The application provides data, charts, graphs, and maps through a secure webpage which can be accessed by CDC, authorized state and local public health partners and participating healthcare facilities.

Access to this data facilitates the identification, tracking, and management of emergent and routine health events, including potential bioterrorism events and rapidly spreading naturally occurring diseases.

In 2007/2008 the BioSense program will focus on the following:

- Catastrophic public health emergencies;
- Enhancing biosurveillance capabilities in major metropolitan areas and continuing to link all states;
- Simultaneous data feeds from acute care hospitals to state and local public health departments, as well as CDC;
- Evaluating cost-effectiveness of different configurations for connecting healthcare information sources like Regional Health Information Organizations (RHIO's) and Health Information Organizations (HIE's);
- Field-testing the Minimum Data Set (MDS) recommended by the American Health Information Community (AHIC); and
- Exercising BioSense during the 2007/2008 seasonal influenza epidemic.

BioSense Vision

BioSense provides real-time health data to local and state public health organizations, CDC, and participating hospitals in order to:

- Provide health situational awareness at the local, state, and national levels;

- Help confirm or refute the existence of an event;
- Monitor the size, location, and rate of an outbreak.

Better Coordination with Public Health

BioSense enhances coordination between all levels of public health and healthcare by providing access to the same data at the same time. Ultimately, this simultaneous data access can produce a faster and more coordinated response for the community by reducing phone calls and paperwork previously needed to conduct public health investigations.

Data Sources

BioSense is a network of networks rather than a stand-alone program. BioSense recruitment is closely aligned with several other Federal preparedness initiatives including the Cities Readiness Initiative (CRI) and BioWatch. A special focus is also placed on recruiting data sources in major metropolitan areas for maximum population coverage. Voluntary data sources include:

- Veterans Administration and Department of Defense healthcare facilities
- Private hospitals and hospital systems
- State-run healthcare systems
- State and/or regional surveillance systems
- National laboratories

BioSense will enable cross-jurisdictional views of real-time health data for public health decision-making. Future plans include incorporating relevant over-the-counter drug sales, poison control data, and working with RHIOs as they become available.

CDC's BioIntelligence Center (BIC)

The BIC provides additional service and support to public health with knowledgeable public health analysts, epidemiologists, and statisticians who assist and train partners in the analysis and use of BioSense data on a daily basis.

For More Information

Visit www.cdc.gov/biosense
or e-mail BiosenseHelp@cdc.gov

BioSense

Simultaneous Data Access for Local, State, and Federal Public Health Decision Makers

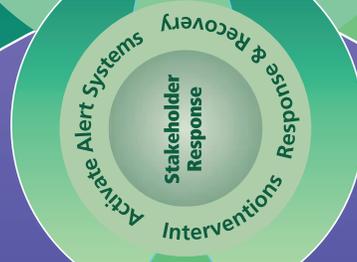
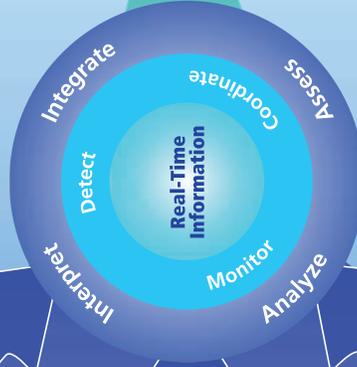
Response

Data, Information, Knowledge

Bi terrorism Attacks • Catastrophic Emergencies • Disease Outbreaks



- DOD/VA
- Healthcare Delivery Organizations
- Existing Public Health Surveillance Systems
- Laboratory Organizations
- Poison Control Centers
- RHIO's/HIE's



- Stakeholders**
- State and Local Health Departments
 - Hospitals
 - Federal Agencies
 - Business and Industry
 - Policy Makers
 - First Responders
 - Media
 - Public

Public Health Response • Health Situational Awareness • Early Event Detection

- RHIO - Regional Health Information Organizations
- HIE - Health Information Exchanges