

EPI Pulse™

EPI Pulse™ was originally developed to assist in combating the spread of West Nile Virus but has been upgraded so that it can identify and track other emerging biological, chemical and viral threats as well.

EPI Pulse™ offers local and state government an invaluable, GIS-based management decision -support system, that can be utilized by public health agencies and medical professionals. The system allows users to quickly customize the data entry process, easily enter and analyze data as well as rapidly develop questionnaires and forms to meet their specific needs.

The EPI Pulse™ System Offers:

- Savings in Time and Money:** Provides commercial, off-the-shelf data warehousing at a reasonable cost with the ability to obtain data results in minutes or even seconds.
- Easy Access:** Connects users by web browser, telnet (Internet), modem, local area network, or stand-alone PC.
- Powerful Analysis Capabilities:** Allows for in-depth analysis of data.
- Easy to Use Format:** Customizable menu system makes selections easy. Available on-line help and advice. No programming experience needed.
- Flexible Data Presentation:** Produces a wide variety of tables. Settings may be chosen or combined as needed. Output easily exported to tab-delimited or Microsoft® Excel, or as a series of HTML files.
- Efficient and User-friendly:** Creates a whole series of tables with one keystroke. Bar graphs can be quickly scanned for trends.

Case Example Due to recent outbreaks of West Nile and SARS and because of current elevated terror risk levels, there is clearly a substantial need for a unified data management system to aid critical decision-makers. The EPI Pulse™ decision support system serves as a central location for the collection and coordination of information for any epidemiological incident or outbreak. Reported data is quickly and easily entered into the system. The ability to develop questionnaires and forms specific to each incident is provided. The system is able to utilize the latest, demographic data available and instantly provide this data to geographically distributed decision-makers. The systems incident command and control capabilities can provide police departments, fire departments, emergency managers, response teams, hospitals, medical professionals, and federal, state and local government and health agencies a central location for both collection and coordination of information pertaining to any bio-incident, a valuable asset both prior to and during an incident. Epidemiological statistics, tables, graphs, and maps can be easily produced by using simple commands, such as READ, FREQ, LIST, TABLES, GRAPH, and MAP. The ability to process, share and analyze collected data within an easy-to-use interface, facilitates user knowledge and understanding, ultimately allowing for improved decision-making capabilities.

Key Benefits and Features:

- * Provides the functionality of a full-blown GIS package that is based on industry standard GIS (ESRI®-Map Objects)
- * Exchanges data with permits and zoning software to create emergency mail outs to specified areas (subdivisions, etc.)
- * Provides a scheduling ability for various ancillary purposes (grass cutting, trash and debris pickup)
- * Creates an easy-to-use, Web-based management environment for fast, self-service access to data
- * Uses the standard electronic maps of the county, local, and state government to form a base
- * Extensibility to allow organizations to integrate additional modules
- * Accommodates geographically distributed decision-makers
- * Password protection, encryption, and compression of data
- * Logistic regression and Kaplan-Meier survival analysis
- * Double data entry comparison through Data Compare
- * Message and correspondence tracking
- * Analysis and import of other file types
- * An ArcView®-compatible GIS system
- * Patient Information tracking