

BACKGROUND INFORMATION



New York State Data Exchange Project

Background:

As part of the Centers for Disease Control and Prevention's (CDC's) Environmental Public Health Tracking (EPHT) Program, the New York State Department of Health (NYSDOH) was funded to work with the New York State Department of Environmental Conservation (NYSDEC) on a project to develop and carry out a plan to design, develop, test, and implement a Data Exchange System based on the CDC Public Health Information Network Messaging System (PHINMS) and the Environmental Protection Agency's (EPA's) National Environmental Information Exchange Network (NEIEN). The CDC PHINMS is software developed by CDC to securely transmit public health information over the Internet. The PHINMS is based upon open industry standards (e.g., ebXML, SML Signature, and SOAP) and includes a client entity module (the sending site) and a server entity module (the receiving site). The NEIEN is composed of multiple network nodes. A network node is a simple environmental information Web service that initiates or responds to requests for information, processes authorized queries, and sends/receives the requested information in the standard XML format.

Objective:

The goal of this project and the resultant data exchange between NYSDEC and NYSDOH is to enable the agencies to share data about environmental hazards, exposures, and health effects over space and time. Real-time data flow will enable joint decision support, professional collaboration, and rapid dissemination of information to both public health and environmental agencies. The first application of the Data Exchange System will be the transmission of ambient air monitoring data from NYSDEC to NYSDOH. The system will eventually support the transmission of public drinking water system quality data from NYSDOH to NYSDEC, along with other data exchanges as opportunities and needs arise. This project will provide other state and federal public health and environmental agencies with detailed information on the technical and administrative requirements for implementing automated data exchanges between environmental and public health agencies. This data exchange system will be an essential component of the infrastructure for the CDC EPHT Program. This project is scheduled for completion by April 2005.

Activities:

- Develop technical specifications and system architecture for the data exchange between NYSDOH and NYSDEC on the basis of the interoperability between the PHINMS v2.0 and the Exchange Network.
- Define a specification for the automated data flow between NYSDEC and NYSDOH.
- Build the necessary components required to support the automated flow of ambient air monitoring data from NYSDEC to NYSDOH.
- Conduct advanced function and performance testing.
- Provide recommendations to other state and federal environmental and public health agencies regarding the technical specifications, system architecture, and technical implementation of automated data exchanges between environmental and health agencies.

Participating Organizations:

New York State Department of Health
New York State Department of Conservation
EPA Region 2
EPA's Office of Environmental Information
CDC's National Center for Public Health Informatics
CDC's National Center for Environmental Health



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