

Issue 2

January 2004



Environmental Public Health Tracking Program  
Utah Department of Health

UTAH DEPARTMENT OF HEALTH

# EPHTP Newsletter

Keeping EPHTP stakeholders informed.

## EPHTP National EPHTP News



CDC has formed four workgroups to engage in issues common to all EPHT grantees and to ensure network development coincides with the vision and goals of the national EPHT initiative. The workgroup members consist of representatives from the CDC and each of the participating states, cities, and schools of public health. Following are updates from the Utah representatives to each of the workgroups:

### Legislation and Partner Agreements Workgroup (Utah representative Wayne Ball)

The purpose of the Legislative workgroup is to provide grantees with tools to promote legislation in the various states dealing with Environmental Public Health Tracking. The workgroup has developed a "Bill Writers Tool Kit", a tool that helps grantees work with their legislators on developing legislation to promote tracking. For example, in California there is a bill that requires the California State Department of Health, California EPA, and the University of California to sign a Memorandum of Understanding to assess the feasibility of integrating existing environmental hazard exposure and health effects data. The law authorized the California Environmental Health Tracking Program to collect all the information from state agencies. In Montana, an act requiring the Department of Public Health and Human Services to provide a feasibility report to the

legislature on the development of a chronic disease registry was also passed. This type of legislation facilitates data integration; however, the workgroup continues to work on issues of data ownership, security, and confidentiality.

For a copy of the Bill Writer's Tool Kit, contact EPHTP staff.

### Program Marketing Workgroup (Utah representative Kori Gunn)

The purpose of the Program Marketing Workgroup is to help CDC clarify, communicate, and promote the purpose, goals, objectives, and timelines of the national EPHT program. The Program Marketing Workgroup split into four subgroups: Stakeholder Identification, Existing Materials search/review, Message Mapping, and Communication Planning. The Stakeholder Identification group has defined and characterized the audiences, tailored specific information to those audiences, and defined the roles of the audience. The Existing Materials search/review subgroup developed a "chatter report," which summarizes recent tracking news, along with what is being done and said about the EPHTP. The Message Mapping subgroup is developing a searchable database with specific messages that will help respond to questions and develop fact sheets, pamphlets, etc. The three subgroups will funnel their

### Inside this issue:

Updates	1-2
Policy Workgroup	2
Technical Workgroup	2
NEIEN	3
Biomonitoring	3-4
National EPH Conference	4
Training Opportunities	4
Contact Information	5



### Meetings and Important Dates:

- 3rd Technical Workgroup Meeting  
February 25, 2004 10:00-12:00  
UDOH, Room 101
- 3rd Policy Workgroup Meeting  
March 4, 2004 10:00-12:00  
UDOH, Room 201
- EPHTP Partners Meeting March 24-26,  
2004 Philadelphia, Pennsylvania
- 5th Planning Consortium Meeting  
April 14, 2004 10:00-12:00  
UDOH, Room 114

work into the Communication Planning subgroup, which in turn will create a work plan for the activities, people, and tasks needed for the development of the EPHTP communication plan.

### **Data Linkages Workgroup (Utah representative Gambrelli Layco)**

The purpose of this workgroup is to compile lessons learned from examples of data linkages that have been done, and write a report of recommendations to be used by CDC and other EPHT grantees. To evaluate those examples, a template was made of questions or issues to consider: Data, Technology, Data Access, and Outcomes. The Data Linkage workgroup was subdivided into five workgroups of five different priority health conditions: Asthma, Birth Defects, Cancer, Lead Poisoning, and Pesticide Poisoning.

The workgroup also makes recommendations to CDC involving developing standards, additional research, and developing partnerships. The workgroup will complete their working report by the upcoming EPHT meeting in March.

### **Standards and Network Development Workgroup (Utah representatives Mei Xue and Mark Wensel)**

The purpose of the Standards and Network Development (SND) workgroup is to identify, develop, implement, and promote standards and other mechanisms to support data sharing and network development. There are four subgroups in the SND Workgroup: Network Architecture, Data Sharing/

Access, Metadata and Data Quality, and Geography/Locational Referencing. The Network Architecture Subgroup is concentrating on (1) developing general information system conceptual models and work flows, (2) reviewing and exploring interoperability issues associated with the exchange of information between the Public Health Information Network (PHIN) and the National Environmental Information Exchange Network (NEIEN), (3) clarifying preliminary network assumptions, and (4) reviewing general information system and participatory role security standards. The Data Sharing/Access Subgroup is focusing on (1) identifying inventories, portals, registries, and data collections, etc. that will be components of the EPHTN, (2) developing a template of data sharing/trading agreement for EPHTN based on the existing agreements, and (3) identifying barriers and access issues for using data based on different user types. The Metadata and Data Quality Subgroup is working on (1) identifying existing data quality standards and making recommendations for standards to improve data quality for EPHTN data providers, and (2) developing a metadata template using a controlled vocabulary for EPHT Network datasets. The Geography/Locational Reference Subgroup is focusing on (1) identifying issues with different levels of geo-referencing resolution, (2) identifying standards for locational referencing of health/environmental data and translation tools for access to geographical data, and (3) identifying various geo-coding techniques and translation tools for access to geographical data.

## **Updates: Policy Workgroup**

The second meeting for the Utah Policy Workgroup (UPW) was held on December 10, 2003. The UPW went through the analyzing framework and mapping exercise. The group identified connections between health, environmental conditions, and quality of life, by using the framework. The environmental health issues of concern identified by the UPW were: air pollution, emergency response, heavy metals, waste management, and water quality. The health issues of concern identified by the UPW were: asthma, birth defects, cancer, diabetes, and neurological diseases. By following the

framework, the statements can then be evaluated quantitatively using Environmental Public Health Indicators (EPHI). EPHI provide information about a population's health status with respect to environmental factors.



*Next meeting  
March 4, 2004  
10:00-12:00  
UDOH, Room 201*

The next UPW meeting will continue with Environmental Public Health Indicators related to EPHTP.

For more information contact Kori Gunn. EPHTP Community Health Specialist, at (801) 538-6191 or email: [kgunn@utah.gov](mailto:kgunn@utah.gov).

## **Technical Workgroup**

The second meeting of Utah Technical Workgroup (UTW) was held on December 17, 2003. The workgroup discussed the technical standards and tools that will impact the EPHT Network such as:

- Data Exchange Message: Health Level Seven (HL 7), Extensible Markup Language (XML), Geography Markup Language (GML) and Public Health Information Network Message System (PHINMS).
- Data Architecture: Public Health Conceptual Data Model (PHCDM).

*Next meeting  
February 25, 2004  
10:00-12:00  
UDOH, Room 101*

- Data Analysis and reporting: Geography Information System (GIS) and Federal Geographic Data Committee (FGDC) Standards.



The next UTW meeting will focus on the data systems that are related with EPHT Network.

For more information contact Mei Xue. EPHTP IT Analyst, at (801) 538-6191 or email: [mxue@utah.gov](mailto:mxue@utah.gov).

# National Environmental Information Exchange Network (NEIEN)

The NEIEN is an EPA initiative that facilitates the efficient exchange of environmental information among interested parties at all levels of government and the public. Because it shares some common goals with the EPHTP and because Utah Department of Environmental Quality (UDEQ) is an integral component of the Utah EPHTP, we asked Mark Wensel, IT Analyst from Utah Department of Environmental Quality to give a presentation on NEIEN at the planning consortium January 14, 2004.

The purpose of the NEIEN is to:

- (a) improve the process of reporting states' environmental information to the EPA; and
- (b) to provide more timely, reliable, standardized, and consistent data for Legislators as they are planning budgets and creating policies.

The NEIEN is a web and standards-based secure data exchange between partners, built on the principles of integrated information, secure real-time access, and the electronic collection and storage of accurate information. As illustrated, the Exchange Network consists of data exchanges between 'nodes' or portals maintained individually by participating partners (initially envisioned as State environmental departments and EPA). Once established, these data exchanges will replace and complement the traditional approach to information exchange that currently relies upon States feeding data directly to multiple EPA national data systems. In addition to these historical flows, new flows of additional data (e.g., facility identification) will be established. The Exchange Network is built upon the



philosophy that data should reside as close to its source as possible to maintain the highest degree of data quality. The Internet-based Exchange Network uses Data Exchange Templates (DETs) and schemas, data standards, and data Trading Partner Agreements (TPAs) to ensure that data integrity is maintained by clearly defining data needs, and establishing standards for their transmission.

In establishing the network, partners identified the following NEIEN components: Network Administration, Technical Infrastructure, Data Exchange Templates, Trading Partner Agreement, Member Infrastructure, and Data Standards. NEIEN partners agreed upon the following four principles:

- (a) stewardship of specific data was established by mutual agreement between partners
- (b) stewards are responsible for the quality and availability of their data
- (c) network members are responsible for ensuring the integrity and currency of copies
- (d) network members agree to use the network technology standards.

NEIEN, now 3 years into development, employs a uniform registration and authentication process, a uniform data exchange process, a records management archive, and defined security and management protocols. The Central Data Exchange (CDX) is responsible for receiving the SML, validating it against data standards established, and translating it so they can distribute to other systems. The Trading Partner Agreements identify data exchange frequency and exact data types/fields exchanges.

For more information on the NEIEN, visit their website at: [www.exchangenetwork.net](http://www.exchangenetwork.net) or contact Mark Wensel of UDEQ at [mwensel@utah.gov](mailto:mwensel@utah.gov).

## Biomonitoring

The EPHTP will include health outcome data, environmental hazard data, and when available, biomonitoring data. For this reason, Karen Keller, Project Manager for the Utah Biomonitoring Project at the Utah Department of Health, was asked to give a presentation at the EPHTP Planning Consortium Meeting on January 14, 2004.

Biomonitoring is the direct measurement of environmental chemicals, their primary metabolites, or their reaction products (such as DNA-adducts) in people—usually in blood or urine specimens. Currently, human exposure information is limited. Reliable and accurate exposure data are required for studies that examine the relation between exposure and adverse health effects. Decision makers need information about which environmental chemicals actually get into people and at what levels to make decisions about public health issues that will benefit the American public. Historically, many of the health risks and related policies, have been based primarily on sampling of environmental media such as soil, water, and air; exposure of humans is either assumed or estimated. However,

with biomonitoring, we would obtain information on concentrations of chemicals or metabolites in individuals in an exposed population. In that respect, biomonitoring is considered a more accurate measure of human exposure than environmental sampling.

Recently, the CDC provided funding for biomonitoring to the Rocky Mountain Biomonitoring Consortium, which includes Arizona, Colorado, Montana, New Mexico, Utah, and Wyoming. The purpose of the grant is to build capacity and capability in state Laboratories with the requirement of an epidemiology component that ties biomonitoring to health outcomes. The consortium was formed to collaborate on a long-term biomonitoring initiative to be able to assess the human exposure to environmental hazards, and to also reduce the human exposure to these hazards. This consortium will also collaborate, as a group, to compete for CDC funds.

Rocky Mountain Biomonitoring Consortium



The first step of the biomonitoring consortium was to assess priority areas of environmental risk within the states. Then to identify areas in which biomonitoring could be an effective tool to aid in the characterization of human exposure and in the effectiveness and progress of remediative measures. The consortium also intends to develop a plan for the implementation of a regional biomonitoring project to address the prioritized list.

The goal of the Biomonitoring Program is to help prevent environmental disease by (1) determine which environmental chemicals actually get into people, (2) measure how much exposure each person has, assess exposure for health studies of exposed populations, (3) determine which population groups, such as minorities, people with low incomes, children, or the elderly, are at high risk for exposure and adverse health effects,

(4) assess the effectiveness of public health interventions to reduce exposures, (5) monitor trends in exposure levels over time.

The goal of the EPHTP is to build a standards-based, coordinated, and integrated environmental public health tracking network that will allow linkage and reporting of health effects data with human exposure data and environmental hazard data. A component of this is tracking environmental hazards, which involves gathering data about human exposure to environmental factors. Biomonitoring will be a useful resource for the EPHTP in this area.

For more information on biomonitoring visit their website at: [www.cdc.gov/nceh/dls/biomonitoring.htm](http://www.cdc.gov/nceh/dls/biomonitoring.htm) or contact Karen Keller at [karenkeller@utah.gov](mailto:karenkeller@utah.gov).

## National Environmental Public Health Conference

The Sixth National Environmental Public Health Conference, entitled, "Preparing for the Environmental Public Health Challenges of the 21st Century" was held December 3-5, 2003 in Atlanta, GA. The plenary sessions focused on challenges faced by environmental public health, building successful environmental public health programs, and building the science of environmental public health. The goals of the conference were to (1) prepare the public health workforce for the environmental public health challenges of the 21st century, (2) promote the need for an all-hazards approach to preparedness and response that encompasses terrorism, natural disasters, and

other environmental challenges, and (3) promote the development of emerging environmental public health leaders.

The National Environmental Public Health Tracking Program Strategic Planning Session discussed the following issues: (1) the long term and 5-year vision for the EPHT program goals (What is the network? What does the network do? Whom is it serving?...) (2) Rational Unified Process/Joint Application Development session presented by Science Applications International Corporation (SAIC) that focused on identification of "User" Roles and Features for the EPHT Network.

## Training

### Geographic Information Systems (GIS) Training

EPHTP staff have attended and highly recommend the GIS training courses held by the state of Utah's Automated Geographic Reference Center (AGRC). Courses are taught by AGRC staff at the State Capitol building in a format combining lectures and hands-on exercises. Following is a brief description of two introductory GIS courses:

#### Introduction to ArcGIS I

This two-day course introduces participants to ArcGIS™ and provides the foundation for becoming a successful ArcView®, ArcEditor™, or ArcInfo™ user.

#### Introduction to ArcGIS II

This three-day course follows Introduction to ArcGIS I (for ArcView 8, ArcEditor 8, and ArcInfo 8) and continues to present important concepts and functionality for successfully working with ArcGIS.

*For more information on registration, training schedules, and course fees, contact the State of Utah's Automated Geographic Reference Center at: <http://agrc.utah.gov/index.html>.*

Online and instructor-led GIS courses are also offered by ESRI at <http://www.esri.com/>.

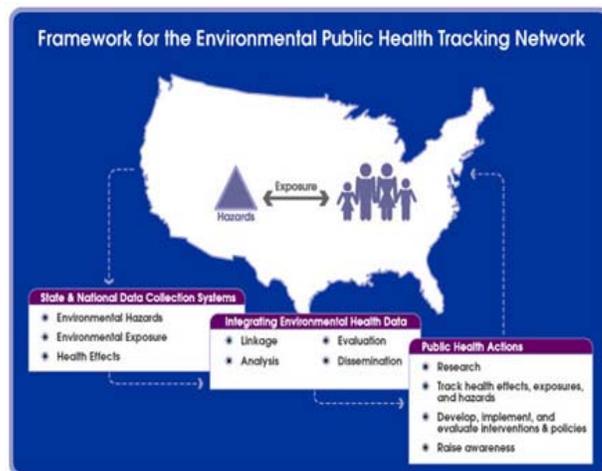
### GIS Brown Bag

Matt Peters, Utah State GIS Specialist, will present a GIS-focused brown bag on Friday, March 5, noon-1:00 P.M., in room 125 at the Utah Department of Health (Cannon Building), 288 North 1460 West, SLC.

The presentation titled, "An Introduction to the State Geographic Information Database Data Use and Access", will include accessing and using Utah's available geographic information for spatial analysis and modeling.

*In the next EPHTP Newsletter:*

- 1. Updates from the 4th meeting of the Technical and Policy Workgroups.*
- 2. Updates from the Planning Consortium Meeting.*
- 3. Preparing for the March 2004 meeting.*
- 4. Training Opportunities*



**Utah Department of Health  
Office of Epidemiology  
Environmental Epidemiology Program  
P.O. Box 142104  
Salt Lake City, Utah 84114-2104  
801-538-6191  
Fax: 801-538-6564**

<http://www.health.state.ut.us/els/epidemiology/envepi/activities/ephttp.htm>

**Contacts:**

Wayne Ball, Principal Investigator

wball@utah.gov

Gambrelli Layco, EPHTP Project Manager

glayco@utah.gov

Mei Xue, Information Technology Programmer

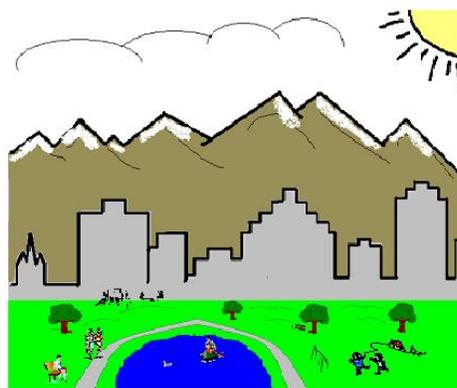
mxue@utah.gov

Kori Gunn, Community Health Specialist

kgunn@utah.gov

Sharon Ball, Office Specialist

smball@utah.gov



**Environmental Public Health Tracking Program  
Utah Department of Health**