

Public Health Background

The US public health delivery system includes disease control and prevention, maternal and child health, environmental health, epidemiology, and emergency preparedness and response. One of the most pressing needs in public health is the ability to access, aggregate, analyze, translate, and disseminate public health information. Access to this information is especially useful to support public health research, build promotional programs, and gather data and information for community-based assessments.

Today, stakeholders must search multiple and disparate sources to find needed information, and often do not have the expertise or resources to aggregate and analyze the data so it can be used in a meaningful way. This creates a substantial roadblock to researchers, educators, health professionals, and service providers in endeavors to improve public health (Richardson, 2001; Greiner, 2002).

Environmental Public Health Tracking

Environmental Public Health Tracking (EPHT) studies the influence of the environment on human health. It provides valuable information regarding the linkage of the geographic distribution of environmental pollution and hazards and the incidence of diseases in humans in the respective areas and communities (Brender, 2006).

The Consortium for Public Health Informatics (CPHi) provides the first Nebraska-focused environmental public health resource of available databases. With the index of environmental databases, researchers, state workers, and all other members of the public can easily access various sources of information about environmental public health in one centralized location. Previously, interested parties had to consult a variety of web sites to find the desired data.

www.NebraskaPublicHealth.info



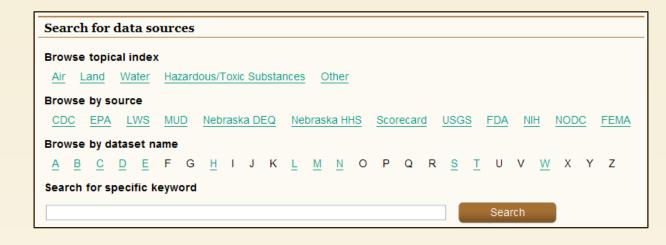
Environmental Public Health Tracking: Looking towards the Future in Nebraska

B. Lechner, G. Hoff, C. Wetzel, R. Yoder, PE, A. Fruhling, PhD UNO College of Information Science & Technology | Pollution Prevention Regional Information Center

EPH Dataset Capabilities

Easy to use Search and Browse Facilities

The easy to learn user interface allows browsing the database through a topical index, by source and by dataset name. In addition, users can search for a specific keyword for the desired dataset.



Aggregated Information about EPH Datasets

The results of the search and browse activities are presented in an easily skimmable and concise format. Thus, researchers can quickly decide if the datasets are relevant.

Results	
Drinking Water Contaminant Fact Sheet	
The dataset contains contaminants, toxic substances, radionuclides, disinfectants, particulate matter, and volatile organic compounds possibly present in water	
URL: www.epa.gov/safewater/contaminants/index.html Source: Environmental Protection Agency	
National Water Quality Standards Database (WQSDB)	
The database contains information about designated uses, waterbody names, state numeric water quality criteria, and EPA recommended numeric water quality criteria	
URL: www.epa.gov/wqsdatabase/ Source: Environmental Protection Agency	

Links to EPA EPHT Services

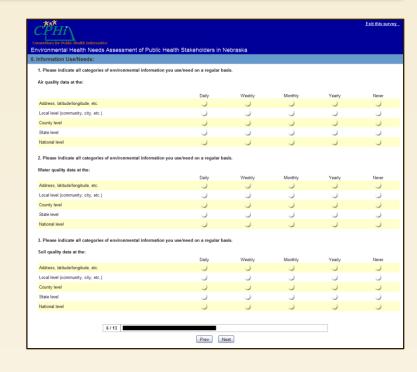
Input fields provide direct access to EPHT-related services provided by the Environmental Protection Agency. These services are provided on a ZIP Code level and thus are highly location-specific. The resources include comprehensive environmental information, watershed information, EPA-regulated facilities, and UV indices.

Relevant Links	
Enter your Zip Code or location in the fields below to search for local environmental information provided by EPA:	
MyEnvironment:	
	Search
Watershed Information:	Search
Envirofacts:	
	Search
UV Index:	
	Search

Needs Assessment Survey

CPHi is in the process of conducting an Information and Analysis Needs Assessment. An online survey has been created to gather data from the Nebraska public health user community.

This assessment will be used to assist in improving the currently offered services and expanding them in future phases.



Future Plans

In a future phase, CPHi plans to provide an easy to use query tool to directly access and query the data, as opposed to providing only a means to search for relevant datasets. This unified interface will facilitate the researchers' work as they will not have to keep learning and using different interfaces for data querying. The planned facilities will also allow for faster access to the desired data since users will be able to directly select a data set rather than searching for it across the Internet.

References

Brender, J. et al (2006). Linking environmental hazards and birth defects data. International Journal of Occupational Environmental Health. 12(2) pp 126-133.

Greiner, A. (2002). Educating health professionals to use informatics: Current reality, barriers and related actions. www.iom.edu/File.aspx?ID=10483. Retrieved March 17, 2008.

Richardson, W. (2001). Crossing the quality chasm: A new health system for the 21st century. http://www.iom.edu/Reports/2001/Crossing-the-Quality-Chasm-A-New-Health-System-for-the-21st-Century.aspx. Retrieved September 24, 2010.

