



Consortium for Public Health Informatics

## 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](http://www.NebraskaPublicHealth.info)



## Environmental Public Health Tracking: Looking towards the Future in Nebraska

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## 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.

### 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.

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

