Environmental Public Health Tracking

The National Portal
What is Environmental Public Health Tracking?
Vision

Healthy Informed Communities

Mission

To Provide information from a nationwide network of integrated health and environmental data that drives actions to improve the health of communities
Environmental Public Health Tracking

1. Hazard
2. Exposure
3. Health Effect

Ongoing Evaluation

Tracking Network

Collection → Integration → Analysis → Dissemination

Assessment → Research → Prevention

Stakeholders

*Stakeholders include:
- Federal Agencies
- Business and Industry
- State and Local Agencies
- Policy Makers
- Academia
- Media
- Health Care System
- Public
- Non-Governmental Organizations

Improved Public Health

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
SAFER • HEALTHIER • PEOPLE
Portal Components

• Data
  – Standards
  – Measures
  – Metadata

• Contextual
  – Background
  – Resource Links
  – Indicator Profiles

• Visualization
  – Charts, Maps, and Graphs
  – Scale and Confidentiality
  – Reports

• Analysis (FUTURE)
  – Statistical tools
  – Linkages
Data on the Network

Content Areas:

- Air Quality (Ozone, PM2.5)
- Drinking Water Quality (Nitrate, Arsenic)
- Cancer (Breast, Lymphoma)
- Birth Defects (Cleft Lip, Trisomy 21)
- Vital Statistics (Infant mortality, Premature births)
- Childhood Lead poisoning (Blood lead by birth cohort)
- Hospitalizations for:
  - Asthma
  - Heart Attacks
  - Carbon monoxide poisoning
Data on the Network

Nationally Consistent Data Measures (NCDM)
• Allow direct comparison of data across geography and time

Metadata – Information about the data
• Describes the content, quality, and context of a dataset
• Identifies the source of the data
• Explains the limitations of the data and how the data can be used and shouldn’t be used
Content Area Pages

• General information and Background
• Description of data on the Tracking Network
• For Environmental Topic Areas
  – Topic and Health
  – Topic Monitoring in Iowa
  – Topic Contaminants
• For Health Topic Areas
  – Topic and the Environment
  – Exposure and Risk
  – Prevention
• Resources and Links
Indicator Profiles

• Present information for each Indicator
  – Derived from the metadata
  – Defines the measures available for each indicator
  – Data Source
  – Rationale for using on the network
  – Strengths and Limitations of the data
Visualization on the Network

• Generate visual displays of data, including maps, charts, tables, and graphs.
• Provide minimally aggregated data
• Allow users to stratify data on age, gender, year, geographic location if appropriate
• Ensure all data confidentiality requirements
• Disseminate standardized reports and query results
NOTES ABOUT THE DATA

- Asthma hospitalizations represent people with severe asthma who end up being hospitalized because of their asthma. Although there is no cure, asthma can be controlled with regular prevent asthma action plan, medication, and by avoiding known asthma triggers.
  For more information...

- Asthma symptoms and asthma attacks have been found to be associated with both indoor and outdoor environmental factors.
Asthma Hospitalizations in Youths and Adults (15 Years and Older) by Neighborhood (UHF 42)

Instructions
Select a measure from the left-hand panel by clicking on the corresponding plus sign. Then select a year by clicking on the "view" box.
County age adjusted asthma inpatient discharge rates in 2005: Both genders

**Age adjusted rate map:** The map below shows the ranking of county asthma discharge rates in a single year. The map to the right shows whether the county was significantly higher than the rest of the state. The graph above shows the actual rates and level of certainty displayed in the map.

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**Related Information:**

**Data source:** The data used on this page come from the NH Uniform Hospital Discharge Data Set (UHDDS)

**Nationally consistent data:** View similar hospitalization data for other states on the Centers for Disease Control
Asthma: [http://ephtracking.cdc.gov/showAsthma.action](http://ephtracking.cdc.gov/showAsthma.action)
Acute myocardial infarctions (Heart attacks): [http://ephtracking.cdc.gov/showHeartAttack.action](http://ephtracking.cdc.gov/showHeartAttack.action)

**Fact sheets on tracking asthma and heart attacks using hospital discharge data in NH:**
Combining inpatient and emergency department asthma discharges to create a better tracking indicator: [http://www.cdc.gov](http://www.cdc.gov)
Creating a better environmental health indicator for acute myocardial infarctions (Heart attacks): coming soon.

**Definitions:**

**Age adjusted rate (direct standardization):** A weighted average of a region’s age-specific incidence rates within multiple regions can be compared as long as they use the same standard population and same age groupings. All age adjusted rates in this report use the direct standardization method.

95% **Confidence interval (95% CI):** 95% Lower confidence interval (LCI) and upper confidence interval (UCI), which provide a range of values that is quite likely to encompass the true estimate. For example, a high estimate is a small
Data Notes
The ICD-9 code used to define asthma is 493. The rates were age-adjusted to the U.S. 2000 standard population. Rates for Daggett and Rich counties were very small and not appropriate for publication. This map was made using an interval break method that most accurately represents the data. The break method used is called “natural breaks” where classes are based on natural groupings inherent in the data.
FUTURE Analytical Tools

• Statistical Analysis
  – Evaluate differences over time, across geographic borders, and between different population groups (age, gender, race)

• Data Linkages
  – Connecting hazard, exposure, and health outcome data to explore relationships (i.e. asthma and air quality)
IDPH Data Warehouse

Current

– Births, Deaths, In-patient Discharge, BRFSS
– LPHA have access via a Sharepoint site
– County Profiles for CHNA-HIP

Future

– House Tracking data and additional IDPH data
– Tracking compliant portals (Public and Secure)
Learn More Now

• Environmental Public Health Tracking 101 Online Course at NEHA
  – http://nehacert.org

• Explore the National Portal
  – http://ephtracking.cdc.gov/showHome.action

• Check out other State Portals
  – http://ephtracking.cdc.gov/showStateTracking.action
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