

**STATE ENVIRONMENTAL HEALTH INDICATORS COLLABORATIVE (SEHC)
CLIMATE CHANGE INDICATORS**

Indicator: CC2: Cold related health outcomes

Measure(s): CC2.2: Annual number and rate of cold related hospitalizations

MEASURE DESCRIPTION

CC2.2: Annual number and rate of cold related hospitalizations	
Last updated:	September 28, 2008
Measurement units:	Number and rate per 100,000 population
Geographic scale:	Statewide
Time scale:	Annual (available years vary by state)
Significance/background:	
Rationale:	
Data resources:	Agency for Healthcare Research and Quality (AHRQ) HCUPnet: http://hcupnet.ahrq.gov/ 991 Effects of reduced temperature 991.0 Frostbite of face 991.1 Frostbite of hand 991.2 Frostbite of foot 991.3 Frostbite of other and unspecified sites 991.4 Immersion foot Trench foot 991.5 Chilblains Erythema pernio Perniosis 991.6 Hypothermia Hypothermia (accidental) Excludes: hypothermia following anesthesia (995.89) hypothermia not associated with low environmental temperature (780.99) 991.8 Other specified effects of reduced temperature 991.9 Unspecified effect of reduced temperature Effects of freezing or excessive cold NOS
Limitations:	Annual counts for many states are too small for producing stable rate calculations. Other options for presenting rates are to combine years or states (for example, by region). Statistics are based on hospitals that meet the definition of "community hospital" -- nonfederal, short-term, general and other specialty hospitals, including public hospitals and academic medical centers. Excluded are federal, rehabilitation, and psychiatric hospitals, as well as

	alcoholism/chemical dependency treatment facilities.
Related indicators (from other projects):	
Recommendations:	

HOW-TO GUIDE: CC2.2 Annual number and rate of cold related hospitalizations

1. Go to the AHRQ web site: <http://hcupnet.ahrq.gov/>
2. On this first screen, select **State Statistics on All Stays** under the section **Statistics on Hospital Stays**.
3. On the next screen, select **Researcher, medical professional** to describe yourself.
4. On the next screen, for the type of query choose the option **Trends**.
5. The next screen shows the years available for each state. Click the arrow next to your state.
6. On the next screen, click on the second option **Specific diagnoses by ICD-9-CM**.
7. On the next screen, select **Principal diagnosis** or **All listed diagnoses**.
8. On the next screen, you will see a box for entering specific codes. In this box, type **991.6** (the code for hypothermia) and leave the option checked for statistics for **Each code separately**.
9. For the outcome options on the next screen, choose **Number of discharges**.
10. For patient and hospital characteristics on the next screen, select **All patients in all hospitals**.
11. The next screen is the results screen. This screen shows the total number of heat hospitalizations (where heat is the principal diagnosis) for the year you selected for your state.
12. To calculate the annual rates per 100,000 population, obtain the total population for your state for the year of interest from census data. Divide the number of heat related hospitalizations by the total population and then multiply by 100,000.