Iowa Environmental Public Health Tracking Network

Nationally Consistent Data Measures for Community Water Systems

Concentration of Arsenic, 2008

Presented below are data that represent the nationally consistent data measures for presence of arsenic in community water systems in Iowa for the Year 2008:

Community water systems (CWS) are regulated under the Safe Drinking Water Act, and are defined as public water supplies that provide water for human consumption that has at least 15 service connections or serves at least 25 people at least 60 days during the year. The Iowa Department of Natural Resources maintains a statewide Safe Drinking Water Information System (SDWIS), and CWS submit the results of required water quality monitoring to this system.

Arsenic is a toxic chemical element that is naturally found in the Earth's crust in soil, rocks, and minerals. The levels of arsenic found in drinking water systems and private water supplies across the United States vary widely. Arsenic occurs naturally in the environment and as a by-product of some agricultural and industrial activities. It can enter drinking water through the ground or as run-off into surface water sources. Some people who drink water containing arsenic in excess of the U.S. Environmental Protection Agency's (EPA) standard of 10 micrograms per Liter (10 µg/L) over many years could experience skin damage or problems with their circulatory system and may have an increased risk of developing cancer. CWS were required to comply with this standard by January 23, 2006.

CWS also provide estimates of population served through the SDWIS. These numbers are used in the measures presented below, but should be treated as rough estimates and not accurate counts of the population served.

This report contains the following NCDMs

- Distribution of number of community water systems and number of people served by mean arsenic concentrations (micrograms per liter) by year.
- Distribution of number of community water systems and number of people served by maximum arsenic concentrations (micrograms per liter) by year.

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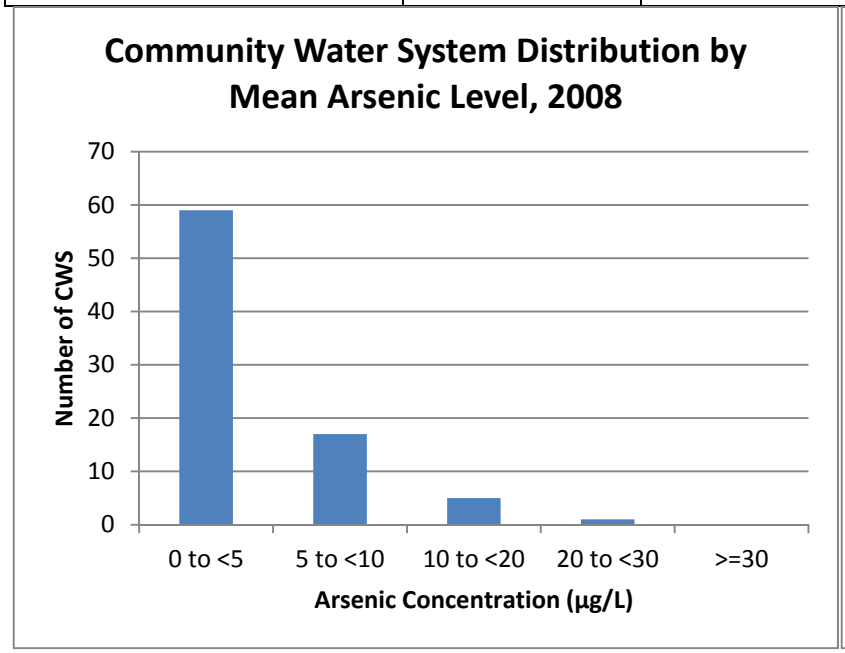
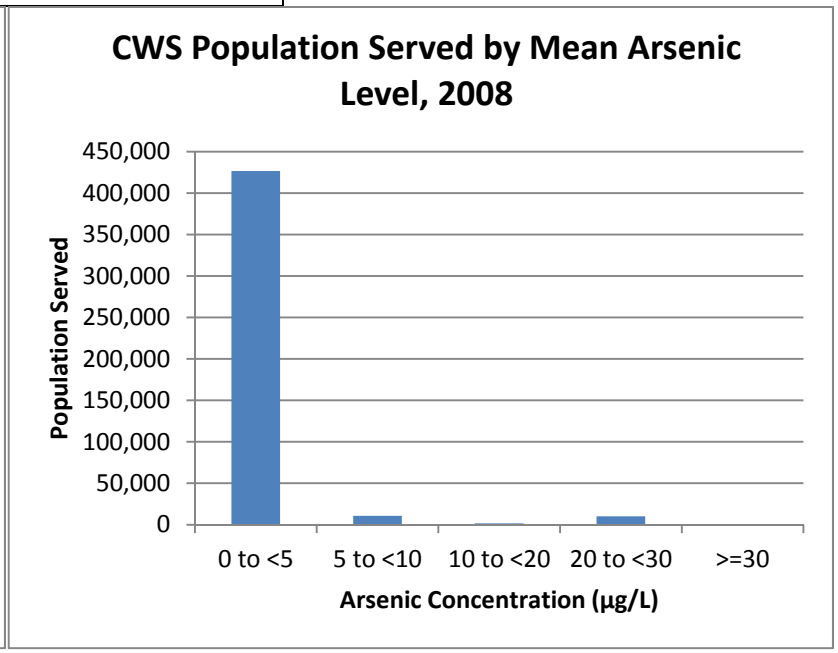
1. Distribution of number of community water systems and number of people served by mean arsenic concentrations (micrograms per liter) by year.

Community Water Systems and Population served by mean Arsenic concentration, 2008		
Arsenic Concentration (µg/L)	Number of CWS	Population Served
0 to <5	59	426,526
5 to <10	17	10,751
10 to <20	5	1,691
20 to <30	1	10,103
>=30	0	0





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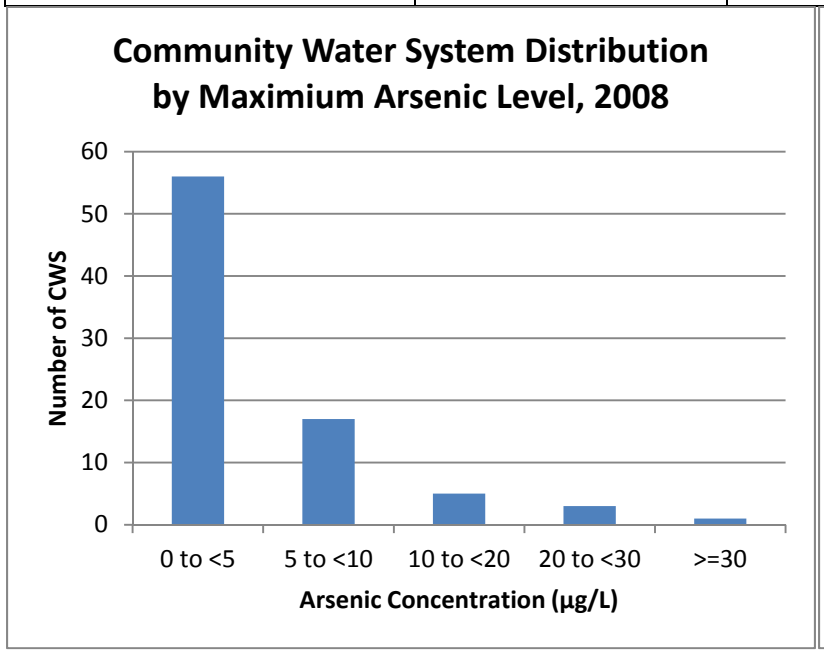
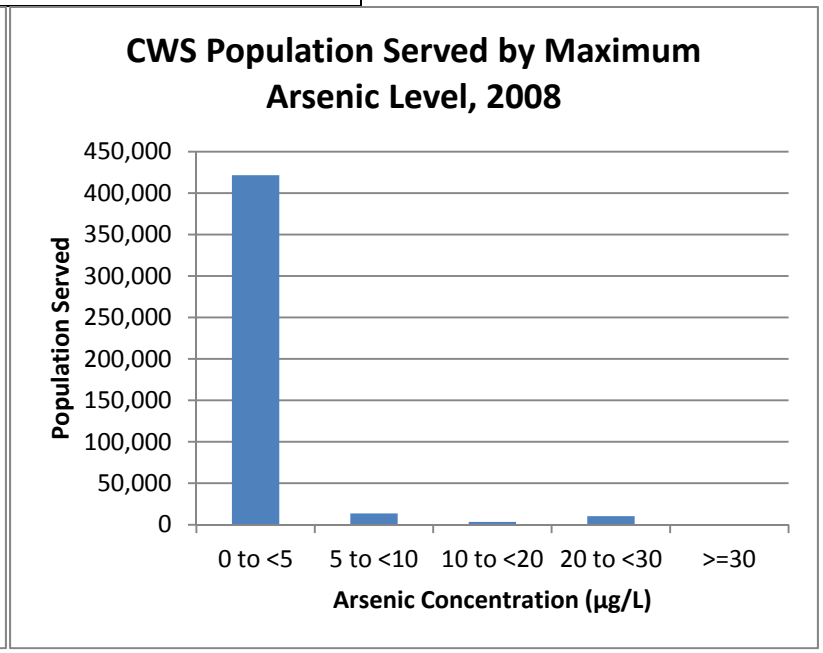
2. Distribution of number of community water systems and number of people served by maximum arsenic concentrations (micrograms per liter) by year.

Community Water Systems and Population served by maximum Arsenic concentration, 2008		
Arsenic Concentration (µg/L)	Number of CWS	Population Served
0 to <5	56	421,655
5 to <10	17	13,623
10 to <20	5	3,443
20 to <30	3	10,283
>=30	1	67





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