



Missouri Environmental Public Health Tracking (EPHT) Network
Metadata Record

Water Quality Data

Description	
Citation	
	<p>Titles: Number of people receiving water from community water systems; Distribution of number of community water systems (CWS) by mean arsenic concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) by mean arsenic concentrations (micrograms per liter), by year; Distribution of number of community water systems (CWS) by maximum arsenic concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) by maximum arsenic concentrations (micrograms per liter), by year; Distribution of number of community water systems (CWS) by mean arsenic concentrations (micrograms per liter), by quarter; Distribution of number of community water systems (CWS) by mean nitrate concentrations (milligrams per liter), by year; Distribution of number of people served by community water systems (CWS) served by community water systems (CWS) by mean nitrate concentrations (milligrams per liter), by year; Distribution of number of community water systems (CWS) by maximum nitrate concentrations (milligrams per liter), by year; Distribution of number of people served by community water systems (CWS) served by community water systems (CWS) by maximum nitrate concentrations (milligrams per liter), by year; Distribution of number of community water systems (CWS) by mean nitrate concentrations (milligrams per liter), by quarter; Distribution of number of people served by community water systems (CWS) by mean nitrate concentrations (milligrams per liter), by quarter; Distribution of number of community water systems (CWS) by mean trihalomethane (THM) concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) served by community water systems (CWS) by mean trihalomethane (THM) concentrations (micrograms per liter), by year; Distribution of number of community water systems (CWS) by maximum trihalomethane (THM) concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) by maximum trihalomethane (THM) concentrations (micrograms per liter), by year; Distribution of number of community water systems (CWS) by mean trihalomethane concentrations (micrograms per liter), by quarter; Distribution of number of people served by community water systems (CWS) served by community water systems (CWS) by mean trihalomethane (THM) concentrations (micrograms per liter), by quarter; Distribution of number of community water systems (CWS) by mean haloacetic acids (HAA5) concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) served by community water systems (CWS) by mean haloacetic acids (HAA5) concentrations (micrograms per</p>

liter), by year; Distribution of number of community water systems (CWS) by maximum haloacetic acids (HAA5) concentrations (micrograms per liter), by year; Distribution of number of community water systems (CWS) by maximum haloacetic acids (HAA5) concentrations (micrograms per liter), by year; Distribution of number of people served by community water systems (CWS) by mean haloacetic acids concentrations (micrograms per liter), by quarter; Distribution of number of people served by community water systems (CWS) by mean haloacetic acids (HAA5) concentrations (micrograms per liter), by quarter

Originators: Missouri EPHT Program

Publication date: 06/01/2011

Description

Abstract: These datasets include water monitoring results from multiple Missouri Department of Natural Resources datasets and contain the information needed to calculate EPHT measures of contaminants in Missouri public water supplies for arsenic, disinfection byproducts, lead and nitrates. Data is derived from the Safe Drinking Water Information System (SDWIS) database. The datasets contain one record for each community public water system (CWS) per year with average concentrations of each of arsenic, disinfection byproducts and nitrates and whether or not a maximum contaminant level (MCL) violation occurred. For lead, each record contains the 90th percentile value of lead sample results and whether the 90th percentile value exceeded the regulatory action level. Each record also contains descriptive information about the CWS.

Purpose: These datasets are required by the Centers for Disease Control and Prevention for submission to the EPHT Network.

Supplemental information: These datasets were provided by the Missouri Department of Natural Resources for use in the creation of indicators and datasets for the Missouri EPHT Portal. More information on water quality in Missouri is available at:

<http://www.dnr.mo.gov/water.htm>.

Point of Contact

Person: Missouri EPHT Program Manager

Organization: Missouri Department of Health and Senior Services
Division of Community and Public Health
Section for Environmental Public Health
Bureau of Environmental Epidemiology

Phone: 573-751-6102

Fax: 573-751-6041

Telecommunications Device or Teletypewriter (TDD/TTY) phone: 800-669-8819

Email: EPHTN@health.mo.gov

Address type: Mailing

Address: PO Box 570

City: Jefferson City

State or Province: MO

Postal code: 65102-0570

County: Cole County

Address type: Physical

Address: 930 Wildwood Drive

City: Jefferson City

State or Province: MO

Postal code: 65109

County: Cole County

Data Type

Native dataset environment: These files were created using SAS 9.2 TS Level 1MO, Microsoft Access 2007, Microsoft Excel 2007, and Altova XMLSpy 2008 Professional Edition ver. 2008 rel. 2 sp. 2., on the Windows XP_PRO ver. 5.1.2600 platform.

Time Period of Data

Beginning date: 01/01/1999

Ending date: 12/31/2007

Currentness reference: Time Period End Date

Status

Data status: Complete

Update frequency: None

Key Words

Theme:

Keywords: water, water quality, drinking water, SDWIS, Clean Water Act, community water system, CWS, public water system, PWS, maximum contaminant level, MCL, violation, national standard, results, contaminant, concentration, readings, arsenic, nitrates, disinfection byproducts, lead, analyte, 029, Missouri, MO

Keyword thesaurus: None

Place: Location

Keywords: 029, Missouri, MO

Keyword thesaurus: FIPS 5-2 (State)

Data Access Constraints

Access constraints: Public access

Use constraints:

How should this dataset be used?

Use of this data is restricted for statistical reporting and analysis only.

How should this dataset not be used?

Do not attempt to learn the identity of any person included in the data. Do not disclose or make use of the identity of any person or establishment discovered inadvertently and report the discovery to:

Missouri EPHT Program Manager
Bureau of Environmental Epidemiology
P.O. Box 570
Jefferson City, MO 65102-0570
Phone: 573-751-6102
Email: EPHTN@health.mo.gov

Can it be linked to other datasets?

Do not combine this data with other data for the purpose of matching records to identify individuals. Do not disclose or make use of the identity of any person or establishment discovered inadvertently and report the discovery to:

Missouri EPHT Program Manager
Bureau of Environmental Epidemiology
P.O. Box 570
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Phone: 573-751-6102
Email: EPHTN@health.mo.gov

Can these data be used for commercial purposes?

No.

Can these data be used to form a basis for additional health studies or some remediation actions?

N/A

What are the constraints for data interpretation?

Do not imply or state, either in written or oral form, that interpretations based on the data are those of the original data sources, the Missouri State Government, the Missouri Department of Health and Senior Services, or the Centers for Disease Control and Prevention unless the data user and data sources are formally collaborating and have received written permission to do so. Acknowledge, in all reports or presentations based on these data, the original source of the data, the Missouri Department of Health and Senior Services, the Centers for Disease Control and Prevention, and the Missouri Department of Natural Resources.

Data Security Information

Security classification system: Public

Security classification: Unrestricted

Security handling: No security measures have been specified for this dataset.

Spatial Reference Information

Spatial Domain

Bounding Coordinates
In Unprojected coordinates (geographic)

Boundary	Coordinate
West	-95.774699999999996 (latitude)
East	-89.098842000000005 (latitude)
North	40.613639999999997 (longitude)
South	35.995479000000003 (longitude)

Data Structure and Attribute Information

Overview

Entity and attribute overview: The Department of Natural Resources regulates all public water systems and monitors for 91 contaminants that can cause long-term health problems. In compliance with the Clean Water Act requirements, water systems must use Environmental Protection Agency (EPA)-approved analytical methods when analyzing samples to meet federal monitoring requirements or to demonstrate compliance with drinking water regulations.

Approved methods are listed in the Code of Federal Regulations after publication in a final rule or as part of an expedited approval. Approved methods are developed by EPA, other government agencies, universities, consensus methods organizations, water laboratories, and instrument manufacturers. More information regarding water quality analytical methods is available on the Internet at <http://water.epa.gov/scitech/drinkingwater/labcert/analyticalmethods.cfm>.

Many public water systems perform testing beyond that required by the state. A public water system, by definition, provides water for human consumption to at least 15 service connections or serves an average of 25 people for at least 60 days each year. Water testing for smaller systems serving fewer people is done by county sanitarians and the Missouri Department of Health and Senior Services, rather than the Department of Natural Resources. There are three basic types of public water systems.

- The first is a community system, where people live and consume the water on a daily basis. A community system could serve the residents of a large city, rural water district or a small mobile home park or subdivision.
- The second is a non-transient, non-community system, such as a school or factory, where people drink the water on a daily basis, but do not reside there.
- The third is a transient, non-community system, such as a restaurant, resort or campground that would not be a regular source of drinking water for most of its pass-through customers.

The percent of population served by community water systems in compliance with all health-based standards stands at 95 percent, meeting the U. S. Environmental Protection Agency's target of compliance.

Entity and attribute detailed citation: Specific citation information is available from the Missouri Department of Natural Resources, Division of Environmental Quality, Water Protection Program. Contact the Water Protection Program at P.O. Box 176, Jefferson City, MO 65102; or by telephone at 800-361-4827 or 573-751-1300; or E-mail: cleanwater@dnr.mo.gov. More information on the Water Protection Program is available on the Internet at <http://www.dnr.mo.gov/env/wpp/index.html>.

Data Quality and Accuracy Information

General

Logical consistency report: In October 1994, Technical Notes on Drinking Water Methods (EPA/600/R-94/173) was published as a joint effort of the Office of Water and the Office of Research and Development. This publication was prepared to add modifications, clarifications, options or improvements to methods that had previously been approved and published. EPA elected to describe these changes in this document and thereby allow the public to use these changes more immediately. This document is available through EPA's digital publications National Environmental Publications Internet Site (NEPIS) database at <http://www.epa.gov/nscep/>.

The US EPA document titled *EPA guidance for CY2007* was sent to all states to describe how data should be submitted to EPA. The document alludes to the problem EPA has when trying to compare across all states and territories. Each state conducts its NPDES permit and enforcement activities a little differently even though all states are theoretically following the same instructions from the code of federal regulations. EPA included instructions within the document to request states to stick to the defined terms. In addition, EPA and the states are using different databases. EPA uses Permit Compliance System and some states are using Integrated Compliance Information System. The Missouri Department of Natural Resources uses its Water Quality Information System, which is uploaded into EPA's Permit Compliance System database. These different reporting systems make comparing states across states and states across EPA even harder. Missouri is developing a new integrated database that will capture all permitting and compliance data. The consolidated database will upload data directly into EPA's national database. This guidance is available on the Internet at http://www.dnr.mo.gov/env/wpp/epa_guidance_cy2007.pdf.pdf.

Completeness report: Data completeness is based on the availability of samples for water systems during each calendar year. Data are only provided for water systems with that pass the completeness criterion.

For additional information concerning the technical documentation, contact the Missouri

Department of Natural Resources, Division of Environmental Quality, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102; or by telephone at 800-361-4827 or 573-751-1300; or E-mail: cleanwater@dnr.mo.gov. More information on the Water Protection Program is available on the Internet at <http://www.dnr.mo.gov/env/wpp/index.html>.

Data Source and Process Information

Process Steps

Process step information

Process Step 1

Process description: Information was extracted from the SDWIS database by Missouri Department of Natural Resources, Water Protection Program and delivered to Missouri Department of Health and Senior Services, EPHT Program for calculation of measures and indicators.

Process date: ongoing, beginning 06/12/2008

Process Step 2

Process description: The datasets were developed in accord with EPHT table shells to produce the requested statistics. Datasets processed into required measures and indicators using the following software packages: SAS 9.2, Microsoft Access 2007, Microsoft Excel 2007, and Altova XMLSpy 2008 Professional Edition.

Process date: annually, ongoing, beginning 06/12/2008

Process Step 3

Process description: Metadata record created for the dataset using the EPHT Metadata Creation Tool., version 1.1.

Process date: 06/01/2011

Process Step 4

Process description: Missouri Metadata record created for the datasets using the Missouri EPHT Metadata Record format then converted to .pdf. The creation of a Missouri Metadata record is completed to assist users by offering the record in a format compatible with electronic reading devices and smart phones.

Process date: 06/01/2011

Data Distribution Information

General

Resource description: PDF file

Distribution liability: These data were provided by the Missouri Department of Health and Senior Services; the findings and conclusions based on these data are the sole responsibility of the author(s) of the study.

Although every effort has been made to ensure the accuracy of the material contained

in this dataset and the Missouri EPHT Network Portal, complete accuracy cannot be guaranteed. The Missouri Department of Health and Senior Services is not responsible for any errors or misprints contained herein and cannot accept any responsibility whatsoever for loss or damage occasioned or claimed to have been occasioned, in part or in full, as a consequence of any person acting, or refraining from acting, as a result of a matter contained within the Missouri EPHT Network Portal.

Distribution Point of Contact

Person: Missouri EPHT Program Manager

Organization: Missouri Department of Health and Senior Services

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County: Cole County

Address type: Physical

Address: 930 Wildwood Drive

City: Jefferson City

State or Province: MO

Postal code: 65109

County: Cole County

Custom Order Process

Custom order process: Custom selected data from this data source/set is available from the Missouri Department of Natural Resources at:

- Missouri Department of Natural Resources
Division of Environmental Quality
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
- By telephone at 800-361-4827 or 573-751-1300
- cleanwater@dnr.mo.gov
- <http://www.dnr.mo.gov/env/wpp/index.html>

More information on obtaining a custom created Missouri specific health record dataset is available at <http://www.health.mo.gov/data/policies.php>

Metadata Reference
Metadata Date
Last updated: 06/01/2011
Metadata Point of Contact
Person: Missouri EPHT Program Manager Organization: Missouri Department of Health and Senior Services Division of Community and Public Health Section for Environmental Public Health Bureau of Environmental Epidemiology Phone: 573-751-6102 Fax: 573-751-6041 Telecommunications Device or Teletypewriter (TDD/TTY) phone: 800-669-8819 Email: EPHTN@health.mo.gov
Address type: Mailing Address: PO Box 570 City: Jefferson City State or Province: MO Postal code: 65102-0570 County: Cole County
Address type: Physical Address: 930 Wildwood Drive City: Jefferson City State or Province: MO Postal code: 65109 County: Cole County
Metadata Access Constraints
Access constraints: None Use constraints: None
Metadata Standards
Standard name: FGDC Content Standard for Geospatial Metadata