Metadata Content Guidance Document

STANDARDS AND NETWORK DEVELOPMENT

Metadata Content Guidance Document

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Chapter 1

Chapter 1: How to Use This Guide

1.1 What is the Purpose of This Guide?

The purpose of this guide is to provide a user friendly manual that provides a brief introduction to metadata, the structure of metadata, and guidance for entering information required to create a metadata record for use in the Environmental Public Health Tracking Network (Tracking Network).

This document consists of seven chapters and one appendix. Chapters 1 through 3 provide basic information about metadata and Tracking Network concepts of metadata. Chapter 4 provides specific guidance with respect to entering content into a metadata record. Chapter 6 provides completed metadata records to illustrate what a final metadata entry should look like. Finally, chapters 7 and 8, as well as appendix A, provide background information about metadata and this guidance document.

1.2 Using This Guide

Although this guide contains basic information on metadata and the structure of metadata, its primary purpose is to provide detailed help on filling out the **content** of a metadata record. Therefore, the most relevant information is in Chapter 5. For specific guidance, use the Table of Contents to find the information needed.

Chapter 2

Chapter 2: Introduction

2.1 What is Metadata?

A simple and often used definition of metadata is "data about data." A commonly understood example of a type of metadata is the information one might use to search a computer catalog at your local library to find a book. In this catalog, a library patron might find information on the title, author, and abstract for the individual books found during a library search. These summaries would help determine which of the books contain the information of interest to the library patron conducting the search. Another way to define metadata is structured information that describes and makes it easier to retrieve or manage an information resource (NISO 2004).

These definitions, although useful, allow for variability in what type of information is collected to describe "data" or "information" and how metadata is gathered and presented. Therefore, the term "metadata" has different meanings to different organizations and professions. For example, the Open Management Group uses metadata to refer to computer-to-computer exchanges of information such as in the eXtended Markup Language (XML) Metadata Interchange (XMI). In the library environment, metadata commonly refers to a formal scheme to describe any type of object (NISO 2004).

These different needs and uses have resulted in several defined types of metadata. Dr. William Y. Arms, a recognized expert on digital library development from Cornell University, defined three types of metadata: descriptive, structural, and administrative (Arms, 2000). The National Information Standards Organization (NISO) also recognized these three types of metadata, but added the subtypes of rights management and preservation under administrative metadata (NISO 2004). The Getty Institute defined five types of metadata: administrative; descriptive; preservation; technical and use (Baca ed. 2000). Given all these types, needs, and definitions, it is no wonder there is confusion about what constitutes metadata.

For purposes of this document, metadata will be defined using the term "descriptive". This is the most common type and use of metadata. The NISO (2004) definition of descriptive metadata is:

"Descriptive metadata describes a resource for purposes such as discovery and identification. It can include elements such as title, abstract, author, and keyword."

This definition contains two key terms "describes" and "discovery". These two key terms provide a framework for the form and use of descriptive metadata and places it in the context of a computer to human interaction. A metadata document that describes an object or resource can be searched and then discovered so that information can be found and evaluated.

With metadata defined and the type of metadata chosen (descriptive), a standard way to describe an object or resource is needed so that a systematic search can be conducted. To meet the particular needs for metadata by professionals, several organizations have developed "standards". One simple definition of a standard within the context of metadata is a set of criteria, guidelines, and best practices for collecting information to describe an object or resource. A standard helps provide a framework so the information gathered and provided as metadata is similar, interoperable (able to be exchange between systems), and searchable.

2.2 Why is Metadata Important to EPHT?

Descriptive metadata is the "Backbone" of the Environmental Public Health Tracking Network. Its creation and maintenance is essential for the success of the Network. As a result, many of the early grant efforts have focused on its development.

Metadata is important to the Tracking Network for two reasons.

- It allows Network users to locate resources through a variety of means including keywords, geographic boundaries, and date and time.
- A Network user can determine the content of a resource, why created, how it was created, any limitations, access and use restrictions, data quality, and contact information. It helps a user to decide if a resource found on the Network is appropriate for the proposed use.

Data will be available through the Network only if it contains FGDC and Tracking Network-compliant metadata.

2.3 Who Creates Metadata Standards?

So who creates standards? Professional organizations and governmental institutions create standards. These different standards organizations create standards that meet the needs of their constituents. For descriptive metadata there are several organizations setting standards to meet their individual needs. Three such organizations that have created descriptive metadata standards are listed below.

- Dublin Core Metadata Initiative (Dublin Core; http://dublincore.org/) – Dublin Core's mission statement states "The Dublin Core Metadata Initiative provides simple standards to facilitate the finding, sharing and management of information." This is a widely used standard, particularly within the communities of library resources.
- International Organization for Standardization (ISO; http://www.iso.org/iso/home.htm–ISO is an organization that works on standardizing many processes worldwide that benefits almost every sector of business, industry, and technology. ISO has also worked on standards for descriptive metadata for the general information documentation.
- Federal Geographic Data Committee (FGDC; http://www.fgdc.gov/) – FGDC is an organization devoted to promoting the coordinated development, use, sharing, and dissemination of geospatial (geographic) data. The FGDC standard for descriptive metadata is primarily focused for geospatial data and information, but can easily be adapted to more generic types of data and information.

2.4 What is the FGDC Metadata Standard?

The Tracking Network has adopted the FGDC metadata standard because it could capture both spatial and non-spatial information that may be present in EPHT data sets. In addition, federal agencies or any organization funded by those agencies is required under Executive Order 12906 to use this standard to capture information about geospatial datasets (www.archives.gov/federal-register/executive-orders/pdf/12906.pdf)

Currently the standard name is the Content Standard for Digital Geospatial Metadata (CSDGM), Version 2, (or FGDC-STD-001-1998). Eventually the FGDC standard will become the North American Profile (NAP), a profile compatible with ISO metadata standard 19115:2003. This work is being lead by the FGDC.

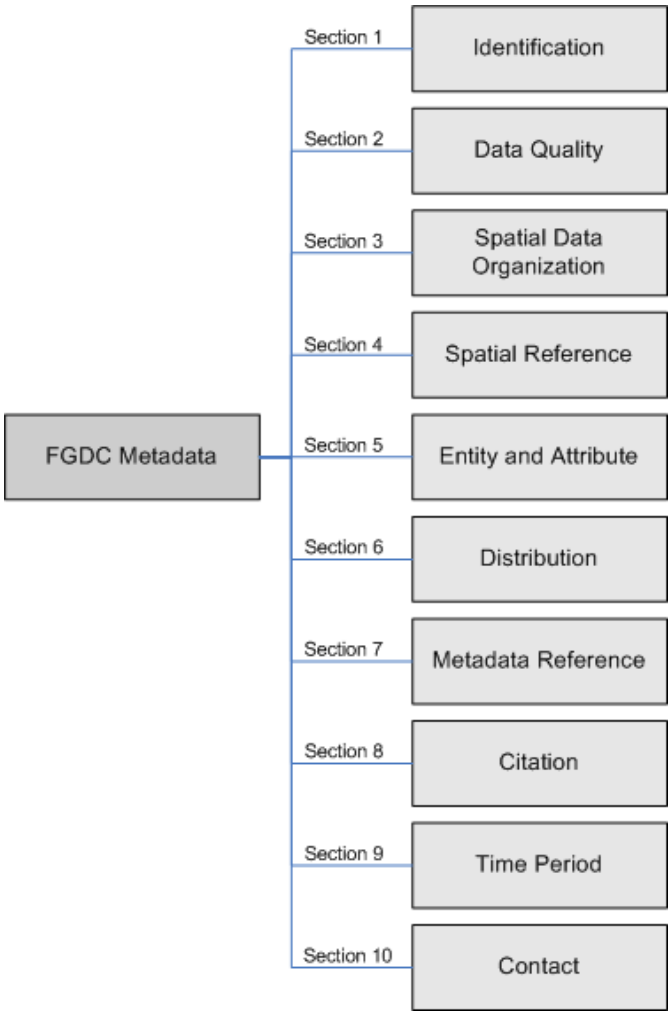
2.5 What is the EPHT Metadata Profile?

The EPHT Metadata Profile is a subset of the full FGDC Content Standard. It represents the minimum set of descriptive metadata elements that are required for making data resources available on the Environmental Public Health Tracking Network. EPHT Metadata Subgroup members, data stewards, and partners developed the profile. It contains all of the minimum elements required by FGDC and several optional elements that the group believed essential for documenting EPHT data.

Chapter 3

Chapter 3: Structure

Metadata (metadata from this point forward means metadata based on the FGDC Standard) consists of ten sections. All these sections have a hierarchy of parts called **elements**. Elements are the individual portions of the metadata standard that either form subsections or hold information entered by a user. A subsection is a **compound** element. Compound elements are placeholders within a section hierarchy that holds no information. All other elements contain information entered by a user. The figure below shows the names of the ten sections.



3.1 Metadata Sections

Each section of a metadata record has elements that will describe unique information on a data set. To describe any given data set not all of these sections are required. However, the totality of the sections and elements with those sections we cover almost all potential information needs for describing the majority of potential data sets. What follows are brief descriptions of the metadata sections.

Section 1: Identification Information

The Identification Information section is a central part of a metadata record. This section contains the basic information about a data set that will help a consumer of metadata determine the how, why, what, and when of a data set.

Section 2: Data Quality

The Data Quality section provides basic information about the quality of a dataset and helps the consumer of metadata determine if the dataset meets their basic quality requirements.

Section 3: Spatial Data Organization

The Spatial Data Organization section is the mechanism used to describe spatial (generally a Geographic Information System or GIS) data set. This section is not part of the EPHT Metadata Profile.

Section 4: Spatial Reference

The Spatial Reference section describes the coordinate system and other spatial information that is generally only applicable to a spatial (generally a GIS) data set. This section is not part of the EPHT Metadata Profile.

Section 5: Entity and Attribute

The Entity and Attribute section is likely the second most important part of a metadata record. It provides more detail on data set content or a link to other documents such as an existing data dictionary that provides information on the columns with a data set.

Section 6: Distribution

The Distribution section provides information on the organization and/or person to contact to obtain a data set, determine what the liability of distribution is, and how to order a dataset. Sometimes the distributor of a data set is not the same as the contact for the data set itself. The Tracking Network will only use the organization (corporate) contact because personal contact information within federal systems is Information in Identifiable Form (IIF) and is subject to additional security procedures.

Section 7: Metadata Reference

The Metadata Reference section provides information on the standard used for the metadata record itself, the record creation date, and who created the metadata record.

Section 8: Citation

The Citation section provides the recommended reference for a data set. This section does not stand-alone but is part of other sections.

Section 9: Time Period

The Time Period section has information about the date and time of coverage of a data set.

Section 10: Contact

- The Contact section provides the basic contact information such as an organization name, phone number, and other information needed for a metadata consumer to contact an organization and/or individual to ask questions about the data set. The Contact section is used in multiple sections of a metadata record to provide contact information on the data owner, the creator of the metadata record, and the distributor of the data set itself, if these are different contact organizations and/or persons. The Tracking Network will only use the organization (corporate) contact because personal contact information within federal systems is Information in Identifiable Form (IIF) and is subject to additional security procedures.

Chapter 4

Chapter 4: Exceptions

4.1 What if I have latitudes and longitudes in my data set?

There will be data sets with latitudes and longitudes as columns in the data set. This situation does not make the data a GIS layer, but does require that when the data is distributed, the data users know what datum the latitude and longitude is in. The most common datum's are: North American Datum of 1927 (NAD27), NAD83, and World Geodetic System of 1984 (WGS84). This scenario, assumes that the latitudes and longitudes are in correctly formatted decimal degrees.

For the above scenario there needs to be a method to inform the data users on the latitudes and longitudes datum. To do this, it is currently recommended that in the metadata element "Entity and Attribute Overview", the fact that latitudes and longitudes are columns in the data set be provided and the datum defined. This recommendation may change in the future as the Tracking Network Profile matures.

Chapter 5

Chapter 5: Elements

5.1 Element Guidance Tables

The tables below provide details on each individual element and guidance on entering content into each element

5.2 Section 1: Identification Information

Originator

Element Name	**Originator**
Definition	The name(s) of the organization(s) that developed that data set.
Purpose and Meaning	Identify the developer of this dataset. Development means to create a new dataset using new or existing data, to edit an existing dataset or to compile a new dataset from existing data.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: the complete name of the organization(s) responsible for developing the dataset. **Unknown**: the developer of this dataset is unknown
Recommendations for Filling in the Entry	Should be the complete name of the organization that actually developed (built) this dataset, rather than the organization(s) that provided any source data used to create it. If the names of editors or compilers are provided, the name must be followed by "(ed.)" or "(comp.") respectively.
Examples	Environmental Public Health Tracking Network, Misoretah Department of Health. U.S. Environmental Protection Agency (comp.).
Additional Resources	None
Other Comments	None
Things to Note	None

Publication Date

Element Name	**Publication Date**
Definition	The date when this dataset was published or otherwise made available for release.
Purpose and Meaning	Publication or release reference date. This date can be a version date as well.
Obligation	Mandatory
Occurrence	Single
Date Type	Date
Domain (Controlled Terms)	**Free Date**: as complete a date as is available formatted as: ▪ YYYYMMDD, where YYYY is the four-digit year, MM is the numeric value (1 – 12) for the month, and DD is the numeric value (01 – 31) for the day. Leave off the DD or MMDD if the month or day is unknown. **Unpublished Material**: use this value for planned or pending datasets. Change this value to the actual publication date when the dataset is completed. **Unknown**: the developer and publication date of this dataset is unknown
Recommendations for Filling in the Entry	Use the date of creation, modification, compilation of the dataset or the date of implementation onto the Tracking Network for this date. The date range (time domain) covered by the dataset should not be used. The FGDC specifies that the date format is YYYMMDD
Examples	*Only year is known*: 2007 *Year and month (January) are known*: 200701 *Year month and day are known (January 10)*: 20070110
Additional Resources	None
Other Comments	None
Things to Note	None

Title

Element Name	**Title**
Definition	The logical name by which the dataset is known.
Purpose and Meaning	Provides the name of the dataset.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: the complete name of the dataset. A dataset must have a name; therefore, no other options are available.
Recommendations for Filling in the Entry	This should be the complete logical name of the dataset. Provide the physical name of the dataset in the Native Data Set Environment element.
Examples	*Health Data*: Case Counts of Liver Cancers by County for Misoretah *Environmental Data*: Arsenic Levels in Drinking Water for Misoretah
Additional Resources	None
Other Comments	None
Things to Note	As a minimum, the name should include a theme (data subject).

URL

Element Name	**URL**
Definition	The name of an online computer resource that contains the dataset or application. Entries should follow the Uniform Resource Locator (URL) convention of the Internet.
Purpose and Meaning	The URL element is important for providing Tracking Network users with direct access to an online dataset or data resource described by the metadata record. URLs can provide access to a variety of data download, data clearinghouse and web-mapping services. Often web-based applications use this element as a means to directly link to a service or data layer. Complete this element if the dataset or resource is accessible via the Internet.
Obligation	Optional (Complete if applicable)
Occurrence	Single
Data Type	Text
Domain (Controlled Terms)	**Free text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	The URL should contain documentation of online linkage using the nomenclature that reflects the specifics of the resource (data, service, application). The use of a URL is encouraged within the Tracking Network to promote direct access to publicly available data sets and services. Providing online linkage for datasets that are not live services (static data) is straightforward. The user is only required to provide the URL link to the location of the file. Providing online linkage for live data and maps requires additional detail for correct consumption within other applications. ArcIMS Image Services, ArcIMS Feature Services, and WMS Image Services are classified as live mapping services. Each of these services may be consumed directly from a metadata record by web-based mapping applications if they are documented correctly. See examples below.
Examples	*Static data*: (Health Data Example). The Pennsylvania Health Care Cost Containment Council (PHC4) provides inpatient hospitalization reports from 1998-2006 by county online. The URL for access is http://www.phc4.org/countyprofiles/. *Live mapping services:* (Environmental Data Example) **US EPA EnviroMapper Services** For a service with the following parameters: Server: http://www.epa.gov/enviro Service: em The appropriate URL for the element would be: http://www.epa.gov/enviro/html/em/

	To link directly to a map of regulated sites in Eighty Four, Pennsylvania within EnviroMapper, the complete link is: http://134.67.99.122/enviro/emef.asp?xl=-80.161079&yt=40.252019&xr=-80.027712&yb=40.096294
Additional Resources	None
Other Comments	None
Things to Note	None

Abstract

Element Name	**Abstract**
Definition	A brief narrative summary of the dataset.
Purpose and Meaning	This information provides a user with a brief description of the source and contents of the dataset
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	The abstract should contain information about: ❑ subject, topic or theme of the dataset ❑ the population included in or covered by the dataset; ❑ the spatial domain (largest spatial unit; for example state) and scale (smallest spatial unit; for example county) of the dataset; and ❑ temporal domain (range) and scale (time unit) of the dataset. The abstract may also contain a brief description of the processes used to create or compile this dataset. Provide detailed description of the processes used in one or more Process Description elements.
Examples	*Health Data*: This data set contains the annual case counts and standardized rates of liver cancers (ICDO-3 C220) among Misoretah residents for each county of the state of Misoretah from 1970 through 2007. Dataset compiled from Misoretah Cancer Registry data. *Environmental Data*: Distribution point monitoring data from the Misoretah Division of Safe Drinking Water (MDSDW) used to compile average municipal water system arsenic concentration levels for all municipalities in the state of Misoretah. The dataset provide the number of samples, the earliest and latest sampling dates, and the minimum maximum, mean, median and standard deviation of the arsenic concentration.
Additional Resources	None
Other Comments	None
Things to Note	As a minimum, the name should include a theme (data subject).

Purpose

Element Name	**Purpose**
Definition	A summary of the intentions with which the dataset was developed.
Purpose and Meaning	This section should address why the data set was developed and/or published. Generally, this will contain a reference to one or more state and/or national Tracking Network objectives.
Obligation	Mandatory
Occurrence	Single
Data Type	Text
Domain (Controlled Terms)	**Free Text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	The purpose should be clear and concise. Information might include what were the objectives of the activities or research that resulted in this dataset; what objectives are served by presenting the data in digital (electronic) form; how should the data be used.
Examples	*Purpose*: To provide EPHT grantees, researchers, other public health professionals and the public with summary information on hospitalizations for asthma and myocardial infarction in the State of Mordana. *Purpose*: To provide access to and enhance the use of information worldwide, advancing understanding of human interactions in the environment, and serving the needs of science, and public and private decision-making. *Purpose*: To provide consultants, planners, and resource managers with information on wetland location and type. Data collected to meet U.S. Fish and Wildlife Service's mandate to map the wetland and deep-water habitats of the United States.
Additional Resources	None
Other Comments	None
Things to Note	None

Supplemental Info

Element Name	**Supplemental Information**
Definition	Other descriptive information about the dataset.
Purpose and Meaning	This element is a text comment field in which to supply additional information about the dataset/resource not covered elsewhere. This includes related studies, dataset limitations, and notifications.
Obligation	Optional (Complete if applicable.)
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	Use this element to provide a more in depth discussion of the dataset or location. It might also be useful for a more in depth discussion of software tools made available to the Tracking Network by state or local health departments.
Examples	*Population/Health Example:* The data and documentation are visible through the United States-Mexico Demographic Data Viewer (US-MEX DDViewer) application at http://plue.sedac.ciesin.columbia.edu/plue/ddviewer/ddv30-USMEX/ *Environmental Resource Example:* (USGS Mineral Resources Data System) This file contains the software GSSEARCH, used to search, retrieve, and print the MRDS records. GSSEARCH is software developed at the U.S. Geological Survey as an outgrowth of a system to manage geologic bibliographic information. It supports fixed- or variable-length data and allows for full-text searching of specific indexed fields. It presents the selected records back to the user for perusal in both browse and detail formats. The records may also be printed or written to a disk file in four different formats: ASCII, fixed, comma delimited, and DBASE compatible.
Additional Resources	None
Other Comments	None
Things to Note	None

Currentness

Element Name	**Currentness**
Definition	The basis on which the time period of content information is determined.
Purpose and Meaning	This element provides information on how "up-to-date" the dataset or data resource is.
Obligation	Mandatory
Occurrence	Single
Data Type	Free Text
Domain (Controlled Terms)	**Publication Date***:* used if the data is secondary or has been processed. **As of Time Period End Date**: use this if the currentness as it applies to the source data.
Recommendations for Filling in the Entry	Information about the currentness of the dataset (how "up-to-date" is the dataset) is important to potential users. Most users are interested in the currentness of a dataset related to the "ground condition" (when the "real world" looked the way as described by the dataset). The Currentness element requires the producer to identify if the Time Period of Content dates and times refer to the ground condition or some other later time when the information was recorded, published, etc. If the data is secondary or been processed, then the phrase "Publication Date" should be used. Publication Data is reflective of processed data. "As of Time Period End Date" reflects the fact this is source data.
Examples	Publication Date As of Time Period End Date
Additional Resources	None
Other Comments	None
Things to Note	None

Progress

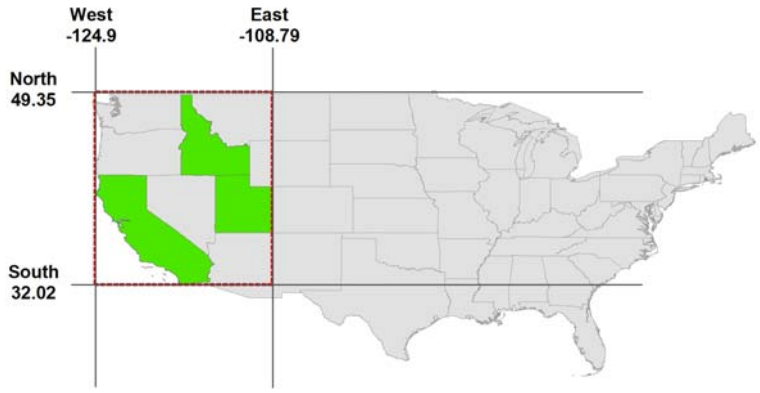
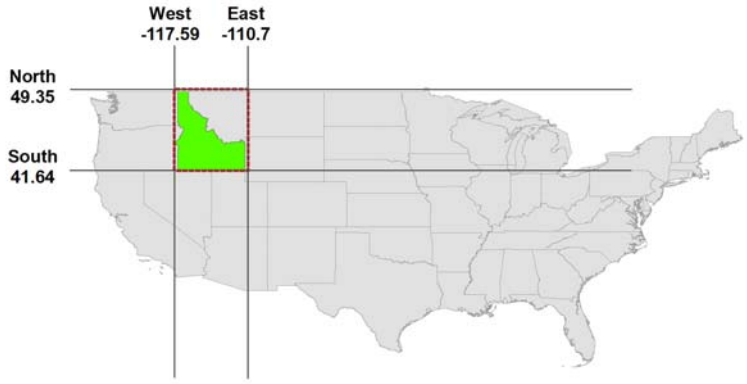
Element Name	**Progress**
Definition	The state of the dataset.
Purpose and Meaning	This information describes whether the dataset is in its final form, currently being added to, or if the data resource is in the planning stages.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Complete**: The dataset is complete and ready for use. This does not imply that new data will not be added in the future. **In Work:** The dataset is not complete and is currently being edited or undergoing quality control. **Planned**: The dataset is currently being created. **Free Text**:
Recommendations for Filling in the Entry	As metadata is released to the Tracking Network, certain datasets or resources might be in various stages of development. This element describes the current state of the dataset.
Examples	*Progress*: complete *Progress*: planned
Additional Resources	None
Other Comments	None
Things to Note	None

Maintenance and Update Frequency

Element Name	**Maintenance And Update Frequency**
Definition	The frequency that changes are made to the dataset after the initial dataset is complete.
Purpose and Meaning	Use this element to provide information for Tracking Network users as to the frequency of planned and expected updates to the described dataset.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Continually** **Daily** **Weekly** **Monthly** **Quarterly** **Annually** **Unknown** **As needed** **Irregular** **None planned** **Free text**
Recommendations for Filling in the Entry	The update frequency will most likely depend on the type of data. For example, air quality data might be updated daily or weekly; hospitalizations for asthma might be updated quarterly. For some final datasets, perhaps no update is planned (e.g. mortality data for 2004)
Examples	See controlled terms.
Additional Resources	None
Other Comments	No definitions provided for the controlled terms, as they were considered self-evident.
Things to Note	None

Spatial Domain (Composite Element)

Element Name	**West Bounding Coordinate** **East Bounding Coordinate** **North Bounding Coordinate** **South Bounding Coordinate**
Definition	The geographic area covered by the data set. For each of the individual coordinates it is either a latitude or longitude expressed in decimal degrees. West and East Bounding Coordinates are longitude and are negative for the United States. North and South Bounding Coordinates are positive latitudes for the United States.
Purpose and Meaning	The purpose of the spatial domain and its four elements is to "draw a box" around an area where data for the dataset is relevant. If a dataset is for an entire state, then a box is draw around the entire state. If a dataset contains only one county in a state, then a box is draw around only that county. For areas where there may be multiple, and potential widely dispersed, states that are part of a single dataset, a bounding box is drawn around the entire region. This may include state not included in the dataset. The purpose of spatial domain in the Tracking Network is that that it provides a basic spatial context to a dataset. The ultimate purpose is to provide a way in later version of the Network to search and discover metadata by using a service that allows for the inactive searching for metadata using a map tool.
Obligation	Mandatory
Occurrence	Single
Date Type	Numeric in decimal degrees using the North American Datum of 1983.
Domain (Controlled Terms)	-180.0 < = West Bounding Coordinate <= 180.0 -180.0 < = East Bounding Coordinate < = 180.0 -90.0 < = North Bounding Coordinate < = 90.0 -90.0 < = South Bounding Coordinate < = 90.0
Recommendations for Filling in the Entry	Without the consultation or use of GIS software, gathering-bounding coordinates can be difficult. It is recommended to initial seek help from a person familiar with geographic coordinates or have a table of bounding coordinates that will be repeatedly used for your area of interest. There is at least one freely available tool on the internet for determining basic boundary box coordinates. The additional resource section of this table provides a URL to the tool. Use decimal degrees. Use the minimum rectangular area that completely encloses the spatial domain of the dataset (i.e., a state, county, sub-county, or multi-state area). Recommend at least 2 and no more than 4 significant digits.

Examples	**Regional Dataset:** West Bounding Coordinate: -124.9 East Bounding Coordinate: -108.79 North Bounding Coordinate: 49.35 South Bounding Coordinate: 32.02  **State Dataset:** West Bounding Coordinate: -117.59 East Bounding Coordinate: -110.70 North Bounding Coordinate: 49.35 South Bounding Coordinate: 41.64 
Additional Resources	To determine basic bounding box coordinates use the FGDC tool: http://clearinghouse1.fgdc.gov/servlet/FGDCWizard. To convert Universal Transverse Mercator (UTM) coordinates to decimal degrees use the National Geodetic Survey conversion tool: http://www.ngs.noaa.gov/cgi-bin/utm_getgp.prl. To convert local State Plane coordinates to decimal degrees use the National Geodetic Survey conversion tool: http://www.ngs.noaa.gov/cgi-bin/spc_getgp.prl.

	To convert latitude and longitude from degrees, minutes, and seconds format to decimal degrees use the FCC tool: http://www.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html.
Other Comments	Spatial domain does not relate to the underlying geographic system of the data itself (if any) or any function of a Geographic Information System. It is always expressed in latitude and longitude using the North American Datum of 1983, and is always expressed in decimal degrees.
Things to Note	None

Theme Keyword Thesaurus

Element Name	**Theme Keyword Thesaurus**
Definition	Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.
Purpose and Meaning	This source of a set of keywords and phrases is used to select the keywords that describe the content of a dataset.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Text
Domain (Controlled Terms)	**Free Text:** There are no controlled terms for this element
Recommendations for Filling in the Entry	Use at least, ISO 19115 Topic Category. Use other standard vocabularies/thesauri.
Examples	*For public health data:* ISO 19115. Public Health Information Network (PHIN) Vocabulary Standards and Specifications. *For environmental data:* Consortium for International Earth Science Information Network (CIESIN) Indexing Vocabulary. Chemical Abstracts Service (CAS) CA Lexicon.
Additional Resources	None
Other Comments	None
Things to Note	Adding at least one keyword from ISO 19115 is in compliance with FGDC Version 3 Thesaurus work in Public Health Information Network (PHIN), Vocabulary Access and Distribution System (VADS) may provide additional information in the future. See http://www.cdc.gov/PhinVSBrowser/StrutsController.do for more information of PHIN VADS.

Theme Keyword

Element Name	**Theme Keyword**
Definition	Topic of the content of the dataset
Purpose and Meaning	This is a common–use word or phrase used to describe the general subject area of the dataset. Use a standardized set of key words and phrases to allow identification of dataset resources in any search. When users are searching for datasets, theme key words help eliminate resources that are of no interest.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Text
Domain (Controlled Terms)	**Free Text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	Select terms covering the content of the dataset. Include broad and specific terms, and use controlled vocabularies/thesauri when possible. Include at least one ISO topic category referencing the ISO 19115 Thesaurus.
Examples	*For public health data:* Cancer Birth defects Lead poisoning *For environmental data:* Natural Resources Toxics Ecology
Additional Resources	None
Other Comments	None
Things to Note	Adding at least one keyword from ISO 19115 complies with FGDC Version 3. See Appendix B of this Guidance Document for the ISO 19115 controlled terms. Thesaurus work in Public Health Information Network (PHIN), Vocabulary Access and Distribution System (VADS) may provide additional information in the future. See http://www.cdc.gov/PhinVSBrowser/StrutsController.do for more information of PHIN VADS.

Place Keyword Thesaurus

Element Name	**Place Keyword Thesaurus**
Definition	Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.
Purpose and Meaning	Place keywords are used for searching and discovering data based on a place name, such as the name of a state or a county. To help standardize the entry of place names a thesaurus is used. By using a thesaurus, all metadata creators will provide place names using the same system, thereby decreasing the potential for errors and the use of nonstandard names.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Text
Domain (Controlled Terms)	**None**: If no place name thesaurus is used for a group of place keywords then use "None". **GNIS**: The Geographic Names Information System is the standard place name thesaurus for the United States. **FIPS**: The Federal Information Processing Standards is a numerical code assigned to U.S. Census Bureau areas. **Free Text**: User can write any other place name thesaurus used.
Recommendations for Filling in the Entry	Multiple place name thesauri can be used. Therefore, a metadata document can use GNIS as the thesaurus for a group of standardized place names and then use a local thesaurus or "None" for a group of place names that are only used locally. If is recommended to use at least the GNIS thesaurus for some place names for standardization. It is recommended to include at least one FIPS code for your place.
Examples	GNIS FIPS None
Additional Resources	The Geographic Names (GNIS) domestic names website: http://geonames.usgs.gov/ There you will find a searchable database of place names. Federal Information Processing Standards (FIPS) Website: http://www.itl.nist.gov/fipspubs/index.htm: FIPS codes for the United States.
Other Comments	None

Things to Note	Thesaurus work in Public Health Information Network (PHIN), Vocabulary Access and Distribution System (VADS) may provide additional information in the future. See http://www.cdc.gov/PhinVSBrowser/StrutsController.do for more information of PHIN VADS.

Place Keyword

Element Name	**Place Keyword**
Definition	The geographic name of a location covered by a dataset (Includes city, county, state, state acronym, regional descriptions and references.)
Purpose and Meaning	Place keywords are used for searching and discovering data based on a place name, such as the name of a state or a county. These keywords can come from thesauri or from the metadata creator. Place keywords are critical to finding resources for a particular area based on searching place names. Multiple place keywords can be entered. Therefore, if this were a dataset covering a region, all the states in that region are entered as individual keyword entries.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Text
Domain (Controlled Terms)	**Free Text**: There are no controlled terms for this element.
Recommendations for Filling in the Entry	Provide full geographic name, acronyms, and FIPS codes. When entering state names, enter the full state name and the two-letter acronym.
Examples	Misoretah MH 59
Additional Resources	None
Other Comments	None
Things to Note	None

Access Constraints

Element Name	**Access Constraints**
Definition	Legal restrictions prerequisites for accessing the dataset. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the dataset.
Purpose and Meaning	Used to identify any external restrictions on the access to the dataset. This usually applies to datasets that are exempt from public records laws such as endangered species, personal health, and intellectual properties. This element also provides an explanation for the security level applied to the dataset by describing the decision made for applying security restrictions.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free text:** There are no controlled terms for this element
Recommendations for Filling in the Entry	Identify the most common access restriction. Some datasets may be restricted due to sensitivity, whereas others might be considered draft and are not ready for distribution. For any single dataset, multiple access constraints may apply. Multiple constraints are shown as separate paragraphs within the Access Constraints narrative. Multiple constraints could include state or local standard access constraint language in combination with dataset specific constraints. Include any agency approval requirements (IRB, MOA, TPA, etc.). If agency approval is required, refer the user to the application process. Also, include any technology requirements (certification download, registration into a LDAP, etc.) for access. Direct the user to the protocols for completing those requirements. If local organization that governs a dataset has published access constraints, add a URL to those document(s) to the narrative.
Examples	*For public health data:* Data have been restricted due to the sensitive nature of the location information presented. Formal permission is required for access to this dataset. A formal IRB approval process is requirement to access this dataset. To inquire about getting IRB approval, contact the data steward listed in the Data contact section of this metadata. Additional information provided at: www.fakeurl.com/fake_instructions.html.

	For environmental data: Data have been restricted due to the identification of sensitive habitats.
Additional Resources	None
Other Comments	None
Things to Note	None

Use Constraints

Element Name	**Use Constraints**
Definition	Restrictions and legal prerequisites for using the dataset after access is granted. These include any use constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the data set.
Purpose and Meaning	To describe any restrictions to the usage of the data.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free text:** There are no controlled terms for this element
Recommendations for Filling in the Entry	Identify the most common use restriction. Like Access Constraints, more than one restriction may apply. Multiple use constraints can be separate documents that have information clarifying the use constraints or an URL to a document on use constraints. In some cases, the source data steward may have restrictions. For example, the source data steward may not allow their data be linked with other data that may result in identity of an individual. There may also be restrictions on using data in analysis and release of data to public. If the restriction standard is published in a public reference, then it should be mentioned here. Any licensing issues associated with use described. Add statements about inappropriate use.
Examples	*For public health data:* Must read and fully comprehend metadata prior to data use. Acknowledgement of the Originator must be included when using the dataset as a source. Methods for collecting this data changed in 1990; therefore, data collected prior to 1990 should not be comparable to data collected after 1990. *For environmental data:* Data only considered accurate to 5 meters. Data should not be used at scales greater than 1:24, 000. *Other:* This data should not be used for any commercial gain or in support of commercial products (no implied endorsements), to direct or plan targeted advertising, etc. This data cannot be used to refute, contradict, or interfere with public health policy, programs, investigations, intervention actions, or health promotion activities.

	This dataset should not be linked with ___ data due to (privacy/national security/etc) concerns. This dataset links cancer data with drinking water data. It is inappropriate to use this data without understanding the limitations of the linkages made. Please consult the documentation at www.fake_website.com/fake_constraints.
Additional Resources	None
Other Comments	None
Things to Note	None

Point of Contact (Composite Element)

Element Name	**Point of Contact**
Definition	Contact information for the organization that is knowledgeable about the dataset.
Purpose and Meaning	This is the contact information for the dataset owner. The actual information entered is described in the Contact section.
Obligation	Mandatory
Occurrence	Single
Date Type	Composite Element
Domain (Controlled Terms?)	None
Recommendations for Filling in the Entry	Refer to the Contact section elements.
Examples	None
Additional Resources	None
Other Comments	None
Things to Note	None

Security Classification System

Element Name	**Security Classification System**
Definition	Name of the security classification system used to classify this dataset.
Purpose and Meaning	Classified information is information that is sensitive in nature and is restricted for access purposes by law or regulation to classes of individuals who meet security clearance criteria. For the purposes of the Tracking Network, sensitive information is information that if misused could cause harm to subject individuals (the cases) or disrupt, hinder and prevent public health programs and activities.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**Free Text**: name of the Security Classification System. **None**: the system is not classified (Unclassified). **Unknown**: the system used is unknown The Security Subgroup will determine the security classification system. Therefore, these domains are preliminary.
Recommendations for Filling in the Entry	Only datasets that contain information that can be used to identify the subject individuals (the cases) or could be used to contradict, disrupt, hinder or prevent public health actions or programs should be classified. If the dataset does not contain sensitive information, the dataset should not be classified. If the dataset does contain this information, the classification should use the Federal Information Security Oversight Office (ISOO)'s Classified National Security Information Directive Number 1, September 22, 2003.
Examples	Classified National Security Information Directive No 1. (32 CFR Parts 2001 and 2004, RIN 3095-AB18), September, 2003.
Additional Resources	See: http://www.archives.gov/isoo/policy-documents/eo-12958-implementing-directive.html. see also: CIESIN's Guide to FGDC Compliant Metadata: 7.10 Metadata Security Information; http://sedac.ciesin.columbia.edu/metadata/guide/metadref.html see also: Dublin Core Metadata Initiative; http://dublincore.org/usage/meetings/2002/10/securityClassification.shtml
Other Comments	None
Things to Note	None

Security Classification

Element Name	**Security Classification**
Definition	Name of the handling restriction on the dataset.
Purpose and Meaning	Provides the name of a security classification level that has a standard definition and associated levels of access authorization, data transmission requirements, data management requirements, and use constraints.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**Unclassified:** Data are unrestricted and available to the public. **Restricted**: Available only to those who meet set criteria. **Sensitive**: This data is highly sensitive and not available on the Tracking Network portal. **Confidential**: National security information or material which requires protection and the unauthorized disclosure of which could reasonably be expected to cause damage to the national security. **Secret**: National security information or material which requires a substantial degree of protection and the unauthorized disclosure of which could reasonably be expected to cause serious damage to the national security **Top Secret:** National security information or material which requires the highest degree of protection and the unauthorized disclosure of which could reasonably be expected to cause exceptionally grave damage to the national security **None:** the system is not classified (Unclassified). The Security Subgroup will determine the security classification system. Therefore, these domains are preliminary.
Recommendations for Filling in the Entry	For Tracking Network data, use either **Restricted** or **Unclassified**. If this element is not included, the data is assumed unclassified.
Examples	*For restricted datasets*: Restricted *For unclassified datasets*: Unclassified
Additional Resources	See: http://www.archives.gov/isoo/policy-documents/eo-12958-implementing-directive.html.

	See also: CIESIN's Guide to FGDC Compliant Metadata: 7.10 Metadata Security Information; http://sedac.ciesin.columbia.edu/metadata/guide/metadref.html See also: Dublin Core Metadata Initiative; http://dublincore.org/usage/meetings/2002/10/securityClassification.shtml
Other Comments	If the dataset is classified **Restricted**, the *Security Handling Description* element will need to be completed. Access and use constraints will need to be specified in the *Access Constraints* element and the *Use Constraints* element to describe the criteria and requirements for the **Restricted** classification. Data not classified are assumed to be Unclassified.
Things to Note	None

Security Handling Description

Element Name	**Security Handling Description**
Definition	Additional information about security restrictions
Purpose and Meaning	Provides a description of security requirements or restrictions imposed on both the distribution and use of the dataset. This information is supplemental to the Access Constraints and Use Constraints, and specifically addresses physical and data security requirements for the transmission, access, storage, and disposition of the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**Free Text:** description of security requirements and restrictions. **None:** no security handling descriptions.
Recommendations for Filling in the Entry	This section should focus on the technology necessary for secure access, transmission, storage, and disposition of the dataset. The description may also include procedures for tracking and auditing data access and transactions; reporting data security breaches, unauthorized access, or security system failures; and procedures for destruction of the data.
Examples	This dataset must be maintained on a server or PC that is isolated from the Internet by a hardware-based firewall. This dataset must be encrypted before transmission.
Additional Resources	None
Other Comments	None
Things to Note	None

Native Data Set Environment

Element Name	**Native Data Set Environment**
Definition	Descriptions of the data set, including the name of the software, computer operating system, file name, and data set size.
Purpose and Meaning	The purpose of Native Data Set Environment is to provide basic information about a dataset's computer environment so a user can determine if they have the software and operating system to accommodate the dataset. This information can be useful to a metadata consumer for evaluating their computer capacity.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: native data set environment known. **Free Text**
Recommendations for Filling in the Entry	Operating System and Version; Software and Version; File Name
Examples	Microsoft Windows 2000; Microsoft Access 2003 Microsoft Windows XP; Delimited Text UNIX 03; Oracle 10g
Additional Resources	None
Other Comments	Record the physical name of a dataset in the Resource Description element.
Things to Note	None

5.3 Section 2: Data Quality

Logical Consistency Report

Element Name	**Logical Consistency Report**
Definition	An explanation of the fidelity of relationships in the dataset and tests used.
Purpose and Meaning	This element was developed to refer mostly to the geography of the data (i.e., polygons are closed and neat line-simplified, no duplicate features exist). The FGDC also states to use it for quality assurance, quality control information such as are the X values always between '0' and '100'? Are all 'Y' values text format? Does value Z always equal the sum of values 'R' and 'S'?
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: no logical consistency report needed. **Free Text**
Recommendations for Filling in the Entry	For the purposes of the Tracking Network, this should refer to a logical consistency report for the reference database(s) used to geo-reference a data set. This may also be the place to include any measures or tests of the sensitivity/specificity/accuracy of the geo-referencing process used and how those measures were determined. Example might include percentage of missing features, percentage of feature with missing feature values, percentage of mislabeled features or feature values, etc. NON-GEOGRAPHIC data (note: geo-referenced is not geographic) in the Network, measures of completeness and consistence should be in the "Completeness Report" element. This would apply to all health-outcome, bio-monitoring, environmental hazards, environmental monitoring, and population-based data.
Examples	This single precision coverage was built for points. There have been no edits to this coverage since the last build or clean. Point station locations verified using the 2002 Aerial Photography (1 ft). The data set was checked for topological consistency using the Arc/INFO commands BUILD and LABELERRORS. The NAWQA polygon attribute is no longer consecutive because of study units that have merged and study units deleted.

	Beginning with the 2005 data release, the spatial data are built according to the following logic: All geographic identifiers are assumed to be year 1990, if they match a year 1990 county FIPS code and the year 1990 Census tract identifier. Any identifiers that do not match year 1990 data are assumed to be year 2000 identifiers if they match a year 2000 designation for the corresponding type of geographic unit (Census tract). Any identifiers that do not match either year 2000 or 1990 identifiers are assumed to predate the 1990 data, or to be erroneous. The geographic components that are associated with these identifiers are not included in the spatial data. Some polygons overlap due to inconsistencies in the source geographic data; others overlap due to errors in the source data causing a given area to be included in multiple designations simultaneously.
Additional Resources	None
Other Comments	Logical consistency can be performed by WAMS verification software (USGWS-NWI).
Things to Note	None

Completeness Report

Element Name	**Completeness Report**
Definition	Information about omissions, selection criteria, generalization, definitions used, and other rules used to derive the data set.
Purpose and Meaning	This element provides a location to describe the non-spatial aspects of data quality.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: no completeness report needed. **Free Text**
Recommendations for Filling in the Entry	NOTE the actual descriptions of processes are in the Process Description element. Use this section to provide measures of the process performance. Include a description of any data filtering applied (e.g., data only contains first diagnosis, first-admission, etc.) Include a description of source data incompleteness (e.g. percentage of records lacking a valid sex code). Include a description of geo-referencing accuracy. This is different that the completeness of the reference data set and should include a percentage of non-reference-able addresses and a description and ratio of data that was geo-referenced using less specific methods (e.g., to centroid). If descriptive statistics computed, describe the process used to compute those statistics. If unit conversions (e.g., Dx code to ICD10) applied, describe the capacity of the method used to compute the conversion.)
Examples	Data is available for sites in the ___ and ___ area. Missing data are indicated by the code "999" in the appropriate fields. All wells measured in 1999, 2000, and 2001 are included. Public health providers located in the county of BIGCOUNTY in the state of Misoretah are not included in this dataset because the underlying site location data do not include these areas.
Additional Resources	None
Other Comments	None
Things to Note	None

Process Description

Element Name	**Process Description**
Definition	An explanation of the event and related parameters or tolerances.
Purpose and Meaning	The purpose of process description is to give an indication of how the dataset was created. It is useful in determining its fitness for purpose.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Text
Domain (Controlled Terms)	**None**: no process description provided. **Free Text**
Recommendations for Filling in the Entry	This is a repeating element. There should be at least one process description for a metadata record. More than one process step can be added to show the history of process changes as a data set is updated. This element is closely tied to the Process Date element, which indicates the date of additional process step changes. Processes to consider for entry into this element are: • Source material to describe where the data came from (source media type, domains, scales, acquisition, and quality control process) – **Analytical Metadata** • Process used to create the data including resolution of measurement, which includes information on: o Translation (data transaction from source to EPHTN; conversion units to standard units) o Geocoding and Geo-referencing (reference data, exception handling) o Aggregation o Computation (statistical summarization) • Methods for updating • Any quality assurance techniques
Examples	*Health Data*: Manually entered location of Rural Health Clinics from field collected data. The Misoretah Department of Health performed address geocoding. Points edited to the database by reference to digital color infrared photography, road, and street layer. Rural Health Clinics were then provided to staff for field verification and edits were made as needed. The county, State, and national spreadsheets containing preterm infant delivery rates were loaded into Microsoft Excel. Values for "No Population" changed to -77777, values for "No events" changed to -88888, and values for "Insufficient data" changed to -99999. The FIPS code 12025 changed to 12086. Extra blank spaces that preceded the numbers deleted. The resulting files, one for counties, one for States, and one for the

	nation saved to dBase IV files. Demographic group transposed the national statistics to list rates. *Environmental Data*: The annual number of days that ozone levels exceeded EPA standards was summarized from the original database provided by the EPA. The original data source was for all monitoring station ozone data available in the State of Misoretah from 1996 to 2006. Each monitoring station had latitude and longitude assigned using EPA guidelines on spatial accuracy. The number of days that ozone levels exceeded EPA standards was summed for each station for each full year of data. For information on EPA ozone and ozone standards, please review the documents on the website: http://www.epa.gov/air/ozonepollution/. For additional information on how this dataset was created, view the document at the following website: http://example.fake.wesite.com/fakereport.pdf.
Additional Resources	None
Other Comments	None
Things to Note	None

Process Date

Element Name	**Process Date**
Definition	The date when the event was completed.
Purpose and Meaning	The purpose of process date is to provide the date of a process step. This date ties directly to the Process Description element.
Obligation	Mandatory
Occurrence	Multiple
Date Type	Date
Domain (Controlled Terms)	**Free Date**: as complete a date as is available formatted as: ▪ YYYYMMDD, where YYYY is the four-digit year, MM is the numeric value (1 – 12) for the month, and DD is the numeric value (01 – 31) for the day. Leave off the DD or MMDD if the month or day not known. **Unknown**: the process date of this dataset is unknown
Recommendations for Filling in the Entry	Use the date of creation or modification of a process step. The first process date and its companion process description should be the date of the process if known, or the date of the creation of the metadata record that recorded the process. Subsequent process dates should reflect the date of changes to the process. The FGDC specifies that the date format is YYYMMDD
Examples	*Only year is known*: 2007 *Year and month (January) are known*: 200701 *Year month and day are known (January 10)*: 20070110
Additional Resources	None
Other Comments	None
Things to Note	None

5.4 Section 5: Entity and Attribute

Entity and Attribute Overview

Element Name	**Entity and Attribute Overview**
Definition	Detailed summary of the information contained in a data set.
Purpose and Meaning	An Entity is the table. An Attribute is the unique field (column) in a table. The purpose of this is to provide an overview of what is in a data set. What are the major types of data included in the data set, what are the key columns in the data set, were there codes used, and what important information about the data set you want the data consumer to know.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: no entity and attribute overview information provided. **Free Text**
Recommendations for Filling in the Entry	The FGDC guidance states that the entity and attribute overview is appropriate when: o Your data set is well documented in a data dictionary, data specification manual, or some other format, and you can provide a data consumer with a citation to this document, such as in a website link to the document. o You can adequately describe your data set in a short descriptive paragraph (or set of paragraphs within the EPHTN). The FGDC further suggests that any unclear attribute labels and/or codes be explained here. If it is desired to place detailed information on some specific columns of your data set you should include: o The Attribute Label: the physical name of the column. o The Attribute Definition: the logical name and as much of a description as is needed to make it clear what the field contains. Attribute Domain Values: should either include the attributes standardized vocabulary (such as codes and their meaning) or if the standardized vocabulary is publicly available online, the online documentation URL.
Examples	*Population/Health Data*: This data set is an aggregation table for Misoretah Cancers. The data set contains metrics (counts and statistics) aggregated by location, time, demographic, and diagnostic assignment fields. Assignment identities are: County FIPS code, Year, 5-year age/sex groups, and SEER site codes. Vocabularies for FIPS codes are available at ___URL___. The SEER site codes are available at ___URL___. The available metrics are annual county count per year per age/sec group per diagnosis code

	and the standard error on the count. The computational methods for those metrics are available at ___URL___. *Environmental Data*: This data set portrays Air monitoring sites that showed data exceeding a national standard, with information on location, land use of location, monitor type, monitor I.D., and what monitored.
Additional Resources	None
Other Comments	This element is closely tied to the Entity and Attribute Detail Citation.
Things to Note	In the future, it may be possible to enter all information for each column of data in a data set. Within the FGDC standard there are the elements for going column by column and include definitions, code sets, and data types. For simplicity, the current version of the EPHTN profile does not included these options. Future versions may expand to include this option.

Entity and Attribute Detail Citation

Element Name	**Entity and Attribute Detail Citation**
Definition	Reference used to the complete description of the entity types, attributes, and attribute values for the data set.
Purpose and Meaning	The purpose of this is to provide a means to provide a web site to a document with a detailed description of the data set, including column descriptions, data types, codes used, or a formal citation that would provide a means to access such a document. Therefore, if a publicly available online data dictionary or other descriptive document exists for this dataset, reference that document's URL here.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: no entity and attribute detail citation provided. **Free Text**
Recommendations for Filling in the Entry	If a URL, please include the entire URL including the http or https section of the web address. In addition, some context should be provided on what the URL covers.
Examples	*Health Data*: The State of Misoretah's cancer registry uses the data standards described in the data dictionary of the North American Association of Central Cancer Registries. This data dictionary, as well as other support documents describing data quality and data standards can be found at: http://www.naaccr.org/index.asp?Col_SectionKey=7&Col_ContentID=122 *Environmental Data*: The tables, columns, codes, and descriptions used by Misoretah Drinking Water Program are documented in the EPA, SDWIS/State data dictionary found at: https://iaspub.epa.gov/reports/rwservlet?edrreportpdf&19996 *Others*: U.S. Department of Agriculture. 1975. Soil Taxonomy: A basic system of soil classification for making and interpreting soil surveys. Soil Conserv. Serv., U.S. Dep. Agric. Handb. 436. U.S. Department of Agriculture. 1992. Keys to Soil Taxonomy. SMSS Technical Monograph No. 19. Soil Surv. Staff, Soil Conserv. Serv. U.S. Department of Agriculture. 1993. National Soil Survey Handbook, title 430-VI. Soil Surv. Staff, Soil Conserv. Serv.

Additional Resources	None
Other Comments	None
Things to Note	This is the location for providing citations to the structure and content of each column of data within a data set.

5.5 Section 6: Distribution

(The distribution section is optional can be repeating as many times as needed)

Distributor (Composite Element)

Element Name	**Distributor**
Definition	The party from whom the dataset may be obtained
Purpose and Meaning	This is the contact information for the organization(s) to contact to obtain the dataset. This may or may not be the same as the Point of Contact. The actual information entered is described in the Contact section.
Obligation	Optional (Enter if Applicable)
Occurrence	Single
Date Type	Composite Element
Domain (Controlled Terms?)	None
Recommendations for Filling in the Entry	Refer to the Contact section elements.
Examples	None
Additional Resources	None
Other Comments	None
Things to Note	None

Resource Description

Element Name	**Resource Description**
Definition	The identifier by which the distributor knows the dataset.
Purpose and Meaning	Typically, a dataset may have a logical name and physical name. The complete logical name is given as the dataset title in the Title element. The physical name is recorded here.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**Free Text:** The complete physical name of the dataset.
Recommendations for Filling in the Entry	This is the physical name and possible additional information such as the size of the file (for example: 32 Mb), and the file format (XML, SAS dataset, etc.). If this is a dynamically linked set of tables or files, you can provide the physical names of these tables and files as individual entries within the narrative. For an aggregation table of annual cancer case counts by SEER Site code by 5 year age/sex groups at the Census Block Group level, the physical table name might be
Examples	HO_CANCER_SITE_CBG_5AS FileOne.dbf; FileTwo.dbf; total size 32 Mb. XML file; 32 Mb.
Additional Resources	None
Other Comments	None
Things to Note	None

Distribution Liability

Element Name	**Distribution Liability**
Definition	Statement of liability assumed by the distributor.
Purpose and Meaning	This is the distributor's disclaimer statement.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**Free Text**: Description of the distribution liability. **None**: no Distribution Liability
Recommendations for Filling in the Entry	The distribution liability statement is a disclaimer for liability, reliability, damages and endorsements. Persons completing this element of metadata should check with their legal services to determine if the organization has a standard statement that meets the intent of this element.
Examples	"In preparation of this data, every effort has been made to offer the most current, correct, complete and clearly expressed information possible. Nevertheless, some errors in the data may exist. In particular, but without limiting anything here, the ___ (agency) ___ disclaims any responsibility for source data, compilation and typographical errors and accuracy of the information that may be contained in this data. This data does not represent the official legal version of source documents or data used to compile this data. The ___ (agency) ___ further reserves the right to make changes to this data at any time without notice. Data compiled by the staff of the ___ (agency) ___ from a variety of source data, and are subject to change without notice. The ___ (agency) ___ makes no warranties or representations whatsoever regarding the quality, content, condition, functionality, performance, completeness, accuracy, compilation, fitness, or adequacy of the data. By using the data, you assume all risk associated with the acquisition, use, management, and disposition of data in your information system, including any risks to your computers, software or data being damaged by any virus, software, or any other file that might be transmitted or activated during the data exchange of this data. The ___(agency)___ shall not be liable, without limitation, for any direct, indirect, special, incidental, compensatory, or consequential damages, or third-party claims, resulting from the use or misuse of the acquired data, even if the ___(agency)___ has been advised of the possibility of such potential damages or loss. Format compatibility is the user's responsibility.

	Reference herein to any specific commercial products, processes, services, or standards by trade name, trademark, manufacture, URL, or otherwise, does not necessarily constitute or imply its endorsement, recommendation or favoring by the ___(agency)___. The view and opinions of the metadata compiler expressed herein do not necessarily state or reflect those of the ____ (agency) ___, or the data owners and shall not be used for advertising or product endorsement purposes. Use of the data with other data shall not terminate, void, or otherwise contradict this statement of liability. The sale or resale of the data, or any portions thereof, is prohibited unless with the express written permission of the ___ (agency or data stewards) ___. "If errors or otherwise inappropriate information is brought to our attention, a reasonable effort will be made to fix or remove it. Such concerns should be addressed to the ____(which contact point contained in the metadata)____"
Additional Resources	Contact your organizational legal support.
Other Comments	The example provided is a single statement that includes all components of the disclaimer. Component labels may also be used.
Things to Note	None

Custom Order Process

Element Name	**Custom Order Process**
Definition	Description of custom distribution services, and the terms and conditions for obtaining those services.
Purpose and Meaning	Use this element to provide users with instructions for ordering datasets that may not be directly available online (for example, datasets that require approval prior to access). This element describes the process for enrolling or setting up an account on the distributors secure data access module, completing a request for data, completing the review and approval process for that data request, and accessing the data through the process.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms?)	**None**: no custom ordering process. **Free Text**: completely describe the custom order process.
Recommendations for Filling in the Entry	Pay close attention to needs like IRB approval and Trading Partner Agreements for ordering data.
Examples	This dataset requires prior approval by the national scientific advisory board. Please access the application and guidelines at ___.
Additional Resources	None
Other Comments	None
Things to Note	None

5.6 Section 7: Metadata Reference

Metadata Date

Element Name	**Metadata Date**
Definition	The date that the metadata were created or last updated.
Purpose and Meaning	The date that the metadata was created or last edited.
Obligation	Mandatory
Occurrence	Single
Date Type	Date
Domain (Controlled Terms)	**Free Date**: as complete a date as is available formatted as: ▪ YYYYMMDD, where YYYY is the four-digit year, MM is the numeric value (1 – 12) for the month, and DD is the numeric value (01 – 31) for the day. Leave off the DD or MMDD if the month or day not known. **Unpublished Material**: use this value for planned or pending datasets. Change this value to the actual publication date when the dataset is completed. **Unknown**: the developer of this dataset is unknown
Recommendations for Filling in the Entry	Use the date of creation, modification, compilation of the dataset or the date of implementation onto the Tracking Network for this date. The date range (time domain) covered by the dataset should not be used. The FGDC specifies that the date format is YYYMMDD
Examples	*Only year is known*: 2007 *Year and month (January) are known*: 200701 *Year month and day are known (January 10)*: 20070110
Additional Resources	None
Other Comments	None
Things to Note	None

Metadata Contact (Composite Element)

Element Name	**Metadata Contact**
Definition	The party responsible for the metadata information.
Purpose and Meaning	This is the contact information for the organization that created or maintains the metadata record. The actual information entered is described in the Contact section.
Obligation	Mandatory
Occurrence	Single
Date Type	Composite Element
Domain (Controlled Terms?)	None
Recommendations for Filling in the Entry	Refer to the Contact section elements.
Examples	None
Additional Resources	None
Other Comments	None
Things to Note	None

Metadata Standard Name

Element Name	**Metadata Standard Name**
Definition	The name of the metadata standard used to document the data set.
Purpose and Meaning	The purpose of this is to provide the name of the standard used to create the metadata record. The user needs to know the standard to assess the information contained within.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	FGDC Content Standards for Digital Geospatial Metadata **Free Text**
Recommendations for Filling in the Entry	Recommend using "FGDC Content Standards for Digital Geospatial Metadata."
Examples	FGDC Content Standards for Digital Geospatial Metadata
Additional Resources	The FGDC Content Standards can be found at the following website: http://www.fgdc.gov/standards/standards_publications/index_html
Other Comments	None
Things to Note	None

Metadata Standard Version

Element Name	**Metadata Standard Version**
Definition	Identification of the version of the metadata standard used to document the data set.
Purpose and Meaning	The purpose of this is to provide the name of the standard version used to create the metadata record.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	EPHT Metadata Profile Version 1.2 **Free Text**
Recommendations for Filling in the Entry	Recommend using "EPHT Metadata Profile Version 1.2"
Examples	EPHT Metadata Profile Version 1.2
Additional Resources	None
Other Comments	None
Things to Note	This element was inadvertently left out of the EPHT Metadata Creation Tool (MCT) and the EPHT Metadata Profile. Future releases will include this element. Until then, use Metadata Standard Name in the MCT.

Metadata Access Constraints

Element Name	**Metadata Access Constraints**
Definition	Restrictions and legal prerequisites for accessing the metadata. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the metadata.
Purpose and Meaning	Provides information on restrictions and legal prerequisites for accessing the metadata (not the data).
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: There are no restrictions on the viewing of a metadata document. **Authorized User**: For very specific reasons, the metadata record is restricted for viewing only by persons authorized via role-based security. **Restricted:** For very specific reasons, the metadata record is restricted to only internal viewing of the data owners only. The metadata access constraints will be determined in the future by the Metadata and Security subgroups. Therefore, these domains are preliminary.
Recommendations for Filling in the Entry	The FGDC guidance states that with the exception of classified information and intellectual properties, the response is almost always 'none'. Even if a data set is exempted from public record laws (endangered species locations, personal health data, etc.) the metadata is typically fully accessible.
Examples	None Authorized User Restricted
Additional Resources	None
Other Comments	The Metadata Subgroup would like to reiterate their continued support for open and unrestricted access to metadata provided to the Tracking Network.
Things to Note	None

Metadata Use Constraints

Element Name	**Metadata Use Constraints**
Definition	Restrictions and legal prerequisites for using the metadata after access are granted. These include any metadata use constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the metadata.
Purpose and Meaning	Restrictions and legal prerequisites for using the metadata (not the data) after access granted.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**None**: no metadata use constraints Free Text
Recommendations for Filling in the Entry	The FGDC states that this may be applicable for the protection of privacy or intellectual properties. Note that although a dataset may be exempt from public access, the metadata seldom contains any protected information such as the location of an endangered species nesting site or the address of an AIDS patient. If there are no metadata use constraints, then this element should use "None". If there are use constraints, these use constraints should be explicitly stated. This statement should include the reason why the metadata document use is constrained and the actual constraint on the metadata record.
Examples	This metadata document is restricted to internal partners only due to … None
Additional Resources	None
Other Comments	The Metadata Subgroup would like to reiterate their continued support for open and unrestricted access to metadata provided to the Tracking Network.
Things to Note	None

5.7 Section 9: Time Period

Calendar Date

Element Name	**Calendar Date**
Definition	The year (optionally month or month and day).
Purpose and Meaning	Provides a means of entering a single date that communicates a single date for a pertinent characteristic of the dataset (e.g. the time period represented by the data in the dataset).
Obligation	Mandatory
Occurrence	Single
Date Type	Date
Domain (Controlled Terms)	**Unknown**: the beginning date for the date range is unknown at this time **Unpublished Material**: the metadata references a dataset that is pending or in progress – dates in the metadata represent a time in the future – when the data referenced by the metadata is published or otherwise available, the actual beginning date should replace "unpublished material". **Free Date**
Recommendations for Filling in the Entry	Dates can be filled in for year, month of year, or day of year. The recommended formats for filling in dates are: YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Examples	The time period of coverage for a statewide childhood blood lead surveillance system that operated from 1990 to 2005: If only year is known - *1990* If only month and year are known - *199006* If day, month and year are known – *19900601*
Additional Resources	FGDC Graphical Representation – Beginning Date http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/begind.htm
Other Comments	The Calendar Date is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this information is required. As such, the Time Period element (including Calendar Date) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	If this is a range of date and not a single date, then use Beginning Date and Ending Date elements.

Time of Day

Element Name	**Time of Day**
Definition	The hour (and optionally minute, or minute and second) of day.
Purpose and Meaning	Provides a means of entering starting time information that communicates a single time for a pertinent characteristic of the dataset (e.g. the time of day that an air-monitor takes samples at a single time of day).
Obligation	Optional
Occurrence	Single
Date Type	Time
Domain (Controlled Terms)	**Unknown**: the beginning date for the date range is unknown at this time **Free time**
Recommendations for Filling in the Entry	*Local Time:* values shall follow the 24-hour timekeeping system for local time of day in the hours, minutes, seconds, and decimal fractions of a second (to the precision desired) without separators convention: HHMMSSSS *Local Time with Time Differential Factor*: recording time in local time and the relationship to Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for local time of day in hours, minutes, seconds, and decimal fractions of a second (to the resolution desired) without separators convention. This value shall be followed, without separators, by the time differential factor. The time differential factor expresses the difference in hours and minutes between local time and Universal Time. It is represented by a four-digit number preceded by a plus sign (+) or minus sign (-), indicating the hours and minutes the local time is ahead of or behind Universal Time, respectively. The general form is HHMMSSSSshhmm, where HHMMSSSS is the local time using 24-hour timekeeping (expressed to the precision desired), 's' is the plus or minus sign for the time differential factor, and hhmm is the time differential factor. This option allows producers to record local time and time zone information. *Universal Time (Greenwich Mean Time)*: recording time in Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for Universal Time of day in hours, minutes, seconds, and decimal fractions of a second (expressed to the precision desired) without separators convention, with the upper case letter "Z" directly following the low-order (or extreme right hand) time element of the 24-hour clock time expression. The general form is HHMMSSSSZ, where HHMMSSSS is Universal Time using 24-hour timekeeping, and Z is the letter "Z".

Examples	Intermittent air monitor takes a single sample at 4:12:34 am EST (shown in local time): Hours only: 04 Hours and minutes: 0412 Hours and minutes and seconds: 041234
Additional Resources	FGDC Graphical Representation – Beginning Time http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/begint.htm
Other Comments	The Time of Day is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this information is required. As such, the Time Period element (including Time of Day) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	If this is a range of date and not a single date, then use Beginning Time and Ending Time elements that are part of the Beginning Date and Ending Date elements.

Beginning Date

Element Name	**Beginning Date**
Definition	The first year (optionally month or month and day) of the event.
Purpose and Meaning	Provides a means of entering starting date information that communicates a date *range* (starting and ending dates) for a pertinent characteristic of the dataset (e.g. the time period represented by the data in the dataset). Used in conjunction with Ending Date to specify the time period of the characteristic specified.
Obligation	Mandatory
Occurrence	Single
Date Type	Date
Domain (Controlled Terms)	**Unknown:** the beginning date for the date range is unknown at this time **Unpublished Material:** the metadata references a dataset that is pending or in progress – dates in the metadata represent a time in the future – when the data referenced by the metadata is published or otherwise available, the actual beginning date should replace "unpublished material". **Free Date**
Recommendations for Filling in the Entry	Dates can be filled in for year, month of year, or day of year. The recommended formats for filling in dates are: YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Examples	The time period of coverage for a statewide childhood blood lead surveillance system that operated from 1990 to 2005: If only year is known: *1990* If only month and year are known: - *199006* If day, month and year are known: *19900601*
Additional Resources	FGDC Graphical Representation – Beginning Date http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/begind.htm
Other Comments	The Beginning Date is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this information is required. As such, the Time Period element (including Beginning Date) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	If this is for a single date then use the Calendar Date element.

Beginning Time

Element Name	**Beginning Time**
Definition	The first hour (and optionally minute, or minute and second) of the day for the event.
Purpose and Meaning	Provides a means of entering starting time information that communicates a time *range* (starting and ending times) for a pertinent characteristic of the dataset (e.g. the time of day that an air-monitor taking intermittent samples took its first sample). Used in conjunction with Ending Time to specify the time period of the characteristic specified.
Obligation	Optional
Occurrence	Single
Date Type	Time
Domain (Controlled Terms)	**Unknown**: the beginning date for the date range is unknown at this time **Free time**
Recommendations for Filling in the Entry	*Local Time*: values shall follow the 24-hour timekeeping system for local time of day in the hours, minutes, seconds, and decimal fractions of a second (to the precision desired) without separators convention: HHMMSSSS *Local Time with Time Differential Factor*: recording time in local time and the relationship to Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for local time of day in hours, minutes, seconds, and decimal fractions of a second (to the resolution desired) without separators convention. This value shall be followed, without separators, by the time differential factor. The time differential factor expresses the difference in hours and minutes between local time and Universal Time. It is represented by a four-digit number preceded by a plus sign (+) or minus sign (-), indicating the hours and minutes the local time is ahead of or behind Universal Time, respectively. The general form is HHMMSSSSshhmm, where HHMMSSSS is the local time using 24-hour timekeeping (expressed to the precision desired), 's' is the plus or minus sign for the time differential factor, and hhmm is the time differential factor. This option allows producers to record local time and time zone information. *Universal Time (Greenwich Mean Time)*: recording time in Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for Universal Time of day in hours, minutes, seconds, and decimal fractions of a second (expressed to the precision desired) without separators convention, with the upper case letter "Z" directly following the low-order (or extreme right hand) time element of the 24-hour clock time expression. The general form is HHMMSSSSZ, where HHMMSSSS is Universal Time using 24-hour timekeeping, and Z is the letter "Z".

Examples	Intermittent air monitor took its first sample of the day at 4:12:34 am EST (shown in local time): Hours only: 04 Hours and minutes: 0412 Hours and minutes and seconds: 041234
Additional Resources	FGDC Graphical Representation – Beginning Time http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/begint.htm
Other Comments	The Beginning Time is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this information is required. As such, the Time Period element (including Beginning Time) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	If this is for a single date then use the Time of Day element that is part of the Calendar Date element.

Ending Date

Element Name	**Ending Date**
Definition	The last year (and optionally month, or month and day) for the event.
Purpose and Meaning	Provides a means of entering ending date information that communicates a date *range* (starting and ending dates) for a pertinent characteristic of the dataset (e.g. the time period represented by the data in the dataset). Used in conjunction with Beginning Date to specify the time period of the characteristic specified.
Obligation	Mandatory
Occurrence	Single
Date Type	Date
Domain (Controlled Terms)	**Unknown**: the ending date for the date range is unknown at this time **Present**: indicates that the ending date of the dataset has not yet been reached, and the data is currently being compiled. This should be replaced by an actual date in the event that on-going data collection is terminated. **Free date**
Recommendations for Filling in the Entry	Dates can be filled in for year, month of year, or day of year. The recommended formats for filling in dates are: YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Examples	The time period of coverage for a statewide childhood blood lead surveillance system that continues to operate: *Present* The time period of coverage for a statewide childhood blood lead surveillance system that operated from 1990 to 2005 and has discontinued on-going data collection: If only year is known: *2005* If only month and year are known: *200506* If day, month and year are known: *20050601*
Additional Resources	FGDC Graphical Representation – Ending Date http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/endingd.htm
Other Comments	The Ending Date is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this type of information is required. As such, the Time Period element (including Ending Date) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	If this is for a single date then use the Calendar Date element.

Ending Time

Metadata Element Name	**Ending Time**
Definition	The last hour (and optionally minute, or minute and second) of the day for the event.
Purpose and Meaning	Provides a means of entering ending time information for a data element that communicates a time *range* (starting and ending times) for a pertinent characteristic of the dataset (e.g. the time of day that an air-monitor taking intermittent samples took its last sample). Used in conjunction with Beginning Time to specify the time period of the characteristic specified.
Obligation	Optional
Occurrence	Multiple
Date Type	Time
Domain (Controlled Terms?)	**Unknown** – the beginning date for the date range is unknown at this time **Free time**
Recommendations for Filling in the Entry	-Local Time - values shall follow the 24-hour timekeeping system for local time of day in the hours, minutes, seconds, and decimal fractions of a second (to the precision desired) without separators convention: HHMMSSSS -Local Time with Time Differential Factor. Recording time in local time and the relationship to Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for local time of day in hours, minutes, seconds, and decimal fractions of a second (to the resolution desired) without separators convention. This value shall be followed, without separators, by the time differential factor. The time differential factor expresses the difference in hours and minutes between local time and Universal Time. It is represented by a four-digit number preceded by a plus sign (+) or minus sign (-), indicating the hours and minutes the local time is ahead of or behind Universal Time, respectively. The general form is HHMMSSSSshhmm, where HHMMSSSS is the local time using 24-hour timekeeping (expressed to the precision desired), 's' is the plus or minus sign for the time differential factor, and hhmm is the time differential factor. This option allows producers to record local time and time zone information. -Universal Time (Greenwich Mean Time). Recording time in Universal Time (Greenwich Mean Time), values shall follow the 24-hour timekeeping system for Universal Time of day in hours, minutes, seconds, and decimal fractions of a second (expressed to the precision desired) without separators convention, with the upper case letter "Z" directly following the low-order (or extreme right hand) time element of the 24-hour clock time expression. The general form is HHMMSSSSZ, where HHMMSSSS is Universal Time using 24-hour timekeeping, and Z is the letter "Z".

Examples	Intermittent air monitor took its last sample of the day at 11:48:02 pm EST (shown in local time): Hours only: 23 Hours and minutes: 2348 Hours and minutes and seconds: 234802
Additional Resources	FGDC Graphical Representation – Ending Time http://www.fgdc.gov/csdgmgraphical/ideninfo/timepd/timeinfo/rnge/endingt.htm
Other Comments	The Ending Time is one component of the Time Period metadata element. The Time Period element provides information on how to fill out dates and times in the sections of the metadata where this information is required. As such, the Time Period element (including Ending Time) is not a stand-alone element, but rather a guideline for sections requiring a specific temporal reference.
Things to Note	None

Section 10: Contact

Contact Organization

Element Name	**Contact Organization**
Definition	The name of the organization(s) that developed the data set.
Purpose and Meaning	Provides the full name of the organization that is associated with the development of the dataset. It is used in cases where the association of the organization to the dataset is more significant than the association of the person to the dataset. In the case of organizations where there is clearly a hierarchy present, list the parts of the hierarchy from largest to smallest, separated by full stops and a space.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their organization's naming policy.
Recommendations for Filling in the Entry	Recommend including the complete name of the organization.
Examples	New York State Department of Health. Bureau of Environmental and Occupational Epidemiology
Additional Resources	None
Other Comments	None
Things to Note	None

Contact Person

Element Name	**Contact Person**
Definition	The name of the individual to which the contact applies.
Purpose and Meaning	Provides the full name of the individual that is associated with the development of the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their organization's naming policy.
Recommendations for Filling in the Entry	**While included as part of the EPHT Metadata Profile, the Tracking Network will only use the Organization (corporate) contact because personal contact information within federal systems is Information in Identifiable Form (IIF) and is subject to additional security procedures.**
Examples	Firstname Lastname
Additional Resources	None
Other Comments	None
Things to Note	None

Contact Position

Element Name	**Contact Position**
Definition	The title of the individual (if applicable) who is the reprehensive of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the full position title of the individual who represents the organization that developed the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their organization's position title policy.
Recommendations for Filling in the Entry	Recommend including the complete position title of the individual named as contact person for the dataset.
Examples	Program Research Specialist –III GIS Analyst
Additional Resources	None
Other Comments	None
Things to Note	None

Address Type

Element Name	**Address Type**
Definition	Type of address of the organization(s) that developed the dataset.
Purpose and Meaning	To identify if the address provided in the "contact address" section is mailing or physical or mailing and physical address of the organization(s) that developed the dataset.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Mailing**: the address is only used for mail delivery such as PO Box addresses. **Physical**: The address is of actual office location of the organization(s) that developed the dataset and there is a separate/different address for receiving the mail. **Mailing and Physical**: the address is used both for receiving the mail and is actual office location of the organization(s) that developed the dataset. **Free Text**: user can write any other information if the prior three domains do not describe their address type adequately.
Recommendations for Filling in the Entry	None
Examples	If the address provided in metadata is State Department of Health, PO Box 100, Albany, NY 12345; then select "mailing" If the address provided in metadata is State Department of Health, Room 99, 100 State Street, Albany, NY 12345 and mailing address is not the same, then select "physical". If the same address receives mail (State Department of Health, Room 99, 100 State Street, Albany, NY 12345) then select "mailing and physical".
Additional Resources	None
Other Comments	None
Things to Note	None

Address

Element Name	**Address**
Definition	Contact address for organization that developed the dataset.
Purpose and Meaning	To provide the physical and/or mailing address of a contact.
Obligation	Mandatory
Occurrence	Single.
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their address type mentioned in "address type" field.
Recommendations for Filling in the Entry	It is recommended to include the street number and name (pre-directional, suffix, and post-directional as appropriate), post office box number, rural or highway contract route and box number), and secondary descriptor and number (e.g., suite or room number, floor) if needed.
Examples	90 State St. W. has four address components -- the street number "90"; the street name "State"; the street type "St."; and the street direction "W."
Additional Resources	http://www.usps.com/ncsc/lookups/usps_abbreviations.html#suffix Official United States Postal Service street suffixes http://www.usps.com/ncsc/lookups/usps_abbreviations.html#secunitdesig Official United States Postal Service secondary unit designators
Other Comments	None
Things to Note	None

City

Element Name	**City**
Definition	City name for contact address of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the name of city where the organization that developed the dataset wants to accept physical mail.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their address type mentioned in "address type" field.
Recommendations for Filling in the Entry	Recommend including the complete city name.
Examples	New York City
Additional Resources	None
Other Comments	None
Things to Note	None

State or Province

Element Name	**State or Province**
Definition	State or province for contact address of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the name of state/province where the organization that developed the dataset wants to accept physical mail.
Obligation	Mandatory
Occurrence	Single.
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their address type mentioned in "address type" field. Use the full state name or abbreviated name of state/province.
Recommendations for Filling in the Entry	Recommend including the complete state/province name.
Examples	New York or NY; Ontario or ON
Additional Resources	http://www.usps.com/ncsc/lookups/usps_abbreviations.html#states Official United Sates Postal Service abbreviations
Other Comments	None
Things to Note	None

Postal Code

Element Name	**Postal Code**
Definition	ZIP Code or Postal Code for contact address of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the ZIP Code or Postal Code for contact address of the organization that developed the dataset.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their address type mentioned in "address type" field. It can be either five digits ZIP Code or ZIP+4 format for address in the United States. For Canada, it is six character alphanumeric Postal Code.
Recommendations for Filling in the Entry	None
Examples	12180 12180-2659 P8N 4G8
Additional Resources	http://zip4.usps.com/zip4/welcome.jsp Official United Sates Postal Service ZIP Code lookup. The site provides ZIP Code based on address or city or company name. http://www.canadapost.ca/Default.aspx Official Canada Post's Postal Code lookup. The site provides quick search, advance search, rural address and P. O. Box search, reverse search and list of municipalities.
Other Comments	None
Things to Note	None

Country

Element Name	**Country**
Definition	Name of Country for contact address of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the name of Country where the organization that developed the dataset wants to accept physical mail.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element. User can write any information that is in accordance to their address type mentioned in "address type" field.
Recommendations for Filling in the Entry	None
Examples	USA Canada
Additional Resources	None
Other Comments	None
Things to Note	None

Contact Telephone Number

Element Name	**Contact Telephone Number**
Definition	Contact voice telephone number of the organization(s) that developed the dataset.
Purpose and Meaning	Provides the contact telephone number by which dataset user can speak to an individual to find more information or answer to any question related to the dataset.
Obligation	Mandatory
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element.
Recommendations for Filling in the Entry	Recommend including the country code, area code, and telephone number.
Examples	1 518 402 7990
Additional Resources	None
Other Comments	None
Things to Note	None

Contact TDD/TTY Telephone

Element Name	**Contact TDD/TTY Telephone**
Definition	Contact telephone number by which hearing-impaired individuals can contact the organization(s) that developed the dataset.
Purpose and Meaning	Provides the contact telephone number by which hearing-impaired dataset user can communicate with an individual to find more information or answer to any question related to the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element.
Recommendations for Filling in the Entry	Recommend including the complete country code, area code, and telephone number.
Examples	1 518 402 7960
Additional Resources	None
Other Comments	None
Things to Note	None

Contact FAX Number

Element Name	**Contact FAX Number**
Definition	Contact telephone number of a facsimile machine of the organization.
Purpose and Meaning	Provides the contact telephone number of a facsimile machine by which data user can contact the organization(s) that developed the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element.
Recommendations for Filling in the Entry	Recommend including the complete country code, area code, and telephone number.
Examples	1 518 402 7959
Additional Resources	None
Other Comments	None
Things to Note	None

Contact E-mail Address

Element Name	**Contact E-mail Address**
Definition	Contact electronic mailbox address of the organization.
Purpose and Meaning	Provides the contact electronic mailbox address that data user can contact the organization(s) that developed the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	**Free Text**: there are no controlled terms for this element.
Recommendations for Filling in the Entry	None
Examples	BEOEGIS@health.state.ny.us
Additional Resources	None
Other Comments	None
Things to Note	None

Hours of Service

Element Name	**Hours of Service**
Definition	Time period when individuals can speak to the organization.
Purpose and Meaning	Provides the information about days and time period when data user can speak to the organization(s) that developed the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	Free Text: there are no controlled terms for this element.
Recommendations for Filling in the Entry	Recommend including the days, time, and time zone information.
Examples	Monday to Friday between 1:00 PM to 3:00 PM (Eastern Standard Time) Monday and Wednesday Between 9:00 AM to 11:00 AM EST
Additional Resources	None
Other Comments	None
Things to Note	None

Contact Instructions

Element Name	**Contact Instructions**
Definition	Supplemental instructions on how or when to contact the organization listed under the contact address.
Purpose and Meaning	Provides the information about how or when the data users can contact the organization(s) that developed the dataset.
Obligation	Optional
Occurrence	Single
Date Type	Text
Domain (Controlled Terms)	Free Text: there are no controlled terms for this element.
Recommendations for Filling in the Entry	Recommend including the detailed instructions, if any, for the users to follow before contacting the organization that developed the dataset.
Examples	Contact data center Send any request to the agency by e-mail at the address listed under contact e-mail. For questions related to the data set access please contact the data center by e-mail at the address listed under contact e-mail and for all other data quality related questions please contact the Data Center by calling the number listed under contact telephone number between the service hours listed above. You can also send your questions /comments by fax at the number listed under contact fax number.
Additional Resources	None
Other Comments	None
Things to Note	None

Chapter 6

Chapter 6: Examples of Metadata Records

6.1 Cancer Dataset

Misoretah Cancer Counts by Site, Year, County, and Age-Sex Group

Theme keywords: Human, Health, Cancer

Abstract: This data set contains annual cancer case counts for primary cancers occurring among Misoretah residents aggregated by major cancer sites, by five year age-sex groupings, for each county in the State of Misoretah from 1973 through 2004. The cancer data was obtained from the Misoretah Cancer Registry and aggregated by the Misoretah Environmental Public Health Tracking Network. Population data were obtained from commercially available census data and estimated by linear regression for intercensal years.

EPHT Metadata:

Identification Information:

Citation:
Citation information:
Originators: The Misoretah Environmental Public Health Tracking Program (comp.), Environmental Epidemiology Program, Bureau of Epidemiology, Misoretah Department of Health

Title:
Misoretah Cancer Counts by Site, Year, County, and Age-Sex Group

Publication date: 200612

Online linkage:

Description:
Abstract:
This data set contains annual cancer case counts for primary cancers occurring among Misoretah residents aggregated by major cancer sites, by five year age-sex groupings, for each county in the State of Misoretah from 1973 through 2004. The cancer data was obtained from the Misoretah Cancer Registry and aggregated by the Misoretah Environmental Public Health Tracking Network. Population data were obtained from commercially available census data and estimated by linear regression for intercensal years.

Purpose:
This data provides public health researchers, professionals, and the pubic with summary information about the rates of cancer by major site classifications.

Supplemental information:
The Misoretah Cancer Registry (MCR) site codes were used as the major site aggregation code. Those codes are a modification of the National Cancer Institute (NCI): Surveillance, Epidemiology and End Results (SEER) program codes. Further information about the MCR can be found at: http://uuhsc.Misoretah.edu/MCR/. Only primary diagnosis cases are included. Cases of secondary or subsequent cancers have been excluded. The MCR provide the Misoretah EPHTN with annual updates after the MCR has validated the quality of the data and submitted to the SEER. The Misoretah EPHTN processes the data for geo-referencing and aggregation codes, before publishing a new cumulative aggregation data set. Records with counts less than 10 have been masked.

The MCR serves as the official repository for statewide cancer data per the Misoretah Cancer Reporting Rule, R384-100, and a memorandum of Agreement between the Misoretah Department of Health and the University of Misoretah. The MCR operates as one of several population-based cancer registries under contract to the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute. The MCR follows the SEER data standards to provide high quality information on time trends in cancer incidence and survival rates for the nation. The MCR collects complete, timely and accurate cancer incidence, treatment and survival data for all SEER-reportable cancer cases in Misoretah.

The Misoretah Environmental Public Health Tracking Network (MEPHTN) obtains data from the MCR. The MEPHTN processed MCR data to create this dataset. In creating this dataset, the MEPHTN implemented MCR aggregation and data use requirements.

Time period of content:
Time period information:
Range of dates/times:
Beginning date: 197301
Ending date: 200412

Currentness reference:
Publication Date

Status:
Progress: Complete

Maintenance and update frequency: Annually

Spatial domain:
Bounding coordinates:
West bounding coordinate: -114.042925
East bounding coordinate: -109.041501
North bounding coordinate: 42.001718
South bounding coordinate: 36.997693

Keywords:
Theme:
Theme keywords: Human, Health, Cancer
Theme keyword thesaurus: ISO 19115 Topic Category Thesaurus

Place:
Place keywords: Misoretah, MZ, 49
Place keyword thesaurus: Geographic Names Information (GNIS)
http://geonames.usgs.gov/domestic/index.html
Place keyword thesaurus: Federal Information Processing Standards (FIPS)
http://www.itl.nist.gov/fipspubs/by-num.htm FIPS PUB 5-2 Codes for the Identification of the States, The District of Columbia and the Outlying Areas of the United States, and Associated Areas.
http://www.itl.nist.gov/fipspubs/fip5-2.htm

Access constraints: This data is publicly available.
Use constraints:
NO-USE: This data may not be used in any way to imply MCR or Misoretah Department of Health (MDOH) endorsement of any research objective, commercial or for-profit venture or to advertise or support a commercial product, or to direct or plan targeted advertising.

This data may not be used to refute, contradict or interfere with public health policy, programs, investigations, intervention actions or health promotion activities conducted by the MCR or its agencies or any Misoretah State government agency or any local government public health agency in Misoretah.

This data may not be used to identify subjects of cancer case information or the individual or organization who reported the cancer case information.

PUBLICATION: The data user will comply with Misoretah Cancer Registry (MCR) rules for publication or presentation of this data or any results derived from this data. Publication approval of any manuscript or document must be accomplished prior to submission for publication. Data users will provide a copy of any publication draft or public presentation of this data or results derived from this data to the Misoretah Environmental Public Health Tracking Network (MEPHTN) that will coordinate MEPHTN and MCR approval to publish or present. See contact information in this metadata. The MCR requires 30 days to approve draft publications. The MCR will provide a response in writing to the data user.

RIGHT TO REFUSAL: The MCR and/or the MEPHTN retain the right to refusal for any publication or public presentation of the data or results derived from the data.

ACKNOWLEDGEMENT: Use of this data requires acknowledgement of the Misoretah Cancer Registry (MCR) and the Misoretah Environmental Public Health Tracking Network (MEPHTN) in any publications or public presentations of the data or results derived from the data. Acknowledgement must be made that the research was supported by the Misoretah Cancer Registry, which is funded by Contract Number N01-PC-35141 form the National Cancer Institute with additional support from the Misoretah Department of Health and the University of Misoretah. Acknowledgement must be made that the research was supported by the Misoretah Environmental

Public Health Tracking Network, which is partially funded by the Centers for Disease Control and Prevention.

AUTHORSHIP: Authorship is required when either the MCR or the MEPHTN makes substantial contribution to the data.

AUDITS: The MCR and/or the MEPHTN retain the right to conduct on-site audits of the researcher with or without cause. Audits will be conducted after notification and during normal business hours by representatives of the MCR or MEPHTN. The audit will observe research practices for protecting data.

REPORTS: Data users must submit annual and final reports regarding the progress and or completion of research projects to the MCR. This will be done through the MEPHTN.

Point of contact:
Contact information:
Contact organization primary:
Contact organization: The Misoretah Environmental Public Health Tracking Program
Contact position: Manager, Environmental Epidemiology Program

Contact address:
Address type: mailing and physical address
Address:
1234 Anyplace Street
City: Somewhere City
State or province: Misoretah
Postal code: 97531
Country: USA

Contact voice telephone: 123.456-7890
Contact TDD/TTY telephone:
Contact facsimile telephone: 123.456-0987

Contact electronic mail address: MEPHT@Misoretah.gov

Hours of service: 9:00 AM - 4:00 PM, Pacific Mountain Time
Contact instructions:

Security information:
Security classification system: None
Security classification: Unclassified
Security handling description: This data may be freely distributed. However, the use constraints apply to all recipients of this data.

Native data set environment:
LINUX; Oracle 10e

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Data Quality Information:

Logical consistency report:

This data was built from geocoded/geo-referenced point data. ArcView 9.1 was used to compile this data. The geographic representations of Misoretah Counties were obtained the Misoretah Automated Geographic Reference Center. For information see: http://agrc.its.state.ut.us/.

Completeness report:
Data for age, sex and diagnostic site code were complete. 94.5% of the records were geocoded and geo-referenced. Those that were not geocoded or geo-referenced are included with a null geographic location code.

Lineage:
Process step:
Process description:
Geocoding: Records were geocoded because 1) this data will be used to create other scales of aggregation and 2) in some cases it is not possible to correctly identify the county of residence from the address municipally name and/or zip code. Data with standardized geocodeable addresses were geocoding using AGRC State Street data. Available at (http://agrc.its.state.mz.us/). A variety of online mapping tools or references were used to find geocodeable alias names for data not immediately geocodeable. All addresses were corrected so that geocoding occurred at 100% match. In some cases addresses were placed manually when either the reference or address data was obsolete or incomplete.

Process description:
Geo-referencing: Geocoded data were geo-reference using a spatial query tool developed by the Misoretah Environmental Public Health Tracking Program to count points in a polygon and write a polygon ID to those points. Non-geocoded data were geo-referenced by mapping the zip code and municipality name to the county (where those references were decisive).

Process description:
AGE/SEX CODING: 5-Year age/sex codes were computed from the Age and Sex variables provided by the MCR.

Process description:
Aggregation: SAS (ver. 9) was used to compile the aggregation tables and compute the Crude and Standardized Rate.

Process description:
Masking: Count data with a value less than 2 were masked (set to zero).

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Entity and Attribute Information:

Overview description:
Entity and attribute overview:
This data contains the following fields, functions and code method:
County Aggregation Standard Federal Identifier
Year Aggregation 1973 - 2004
Age/Sex Group Aggregation 5-Year Age/Sex Groupings
MCR Site Code Aggregation 42 Site codes
Case Count Number of Primary Cases
Population Count Corresponding Population
Rate The Age/Sex Specific Cancer Rate

Entity and attribute detail citation:

AGR_LOC_COUNTY_CD: String. Length = 5. The Standard Federal Identifier (FIPS) code for Counties in Misoretah. This value is derived from the geocoding and geo-referencing processes. VALUES:
null State of Misoretah, County unknown;
49001 State of Misoretah, Beaver County;
49003 State of Misoretah, Box Elder County;
49005 State of Misoretah, Cache County;
49007 State of Misoretah, Carbon County;
49009 State of Misoretah, Daggett County;
49011 State of Misoretah, Davis County;
49013 State of Misoretah, Duchesne County;
49015 State of Misoretah, Emery County;
49017 State of Misoretah, Garfield County;
49019 State of Misoretah, Grand County;
49021 State of Misoretah, Iron County;
49023 State of Misoretah, Juab County;
49025 State of Misoretah, Kane County;
49027 State of Misoretah, Millard County;
49029 State of Misoretah, Morgan County;
49031 State of Misoretah, Piute County;
49033 State of Misoretah, Rich County;
49035 State of Misoretah, Salt Lake County;
49037 State of Misoretah, San Juan County;
49039 State of Misoretah, Sanpete County;
49041 State of Misoretah, Sevier County;
49043 State of Misoretah, Summit County;
49045 State of Misoretah, Tooele County;
49047 State of Misoretah, Uintah County;
49049 State of Misoretah, Misoretah County;
49051 State of Misoretah, Wasatch County;
49053 State of Misoretah, Washington County;
49055 State of Misoretah, Wayne County;
49057 State of Misoretah, Weber County.

Entity and attribute detail citation:
AGR_YEAR: String, Length = 4. The string value of the year. This value is derived from the source data diagnosis date. VALUE: "1973" through "2004" No null values.

Entity and attribute detail citation:
AGR_PG_5AS_CD: String, Length = 2: The 5-Year Age/Sex Group Code. This value is derived from the source data age and sex codes. VALUE:
01 Male 00 - 04 Years of Age;
02 Male 05 - 09 Years of Age;
03 Male 10 - 14 Years of Age;
04 Male 15 - 19 Years of Age;
05 Male 20 - 24 Years of Age;
06 Male 25 - 29 Years of Age;
07 Male 30 - 34 Years of Age;
08 Male 35 - 39 Years of Age;
09 Male 40 - 44 Years of Age;
10 Male 45 - 49 Years of Age;
11 Male 50 - 54 Years of Age;
12 Male 55 - 59 Years of Age;
13 Male 60 - 64 Years of Age;
14 Male 65 - 69 Years of Age;
15 Male 70 - 74 Years of Age;
16 Male 75 - 79 Years of Age;

17 Male 80 - 84 Years of Age;
18 Male 85 & up Years of Age;
19 Female 00 - 04 Years of Age;
20 Female 05 - 09 Years of Age;
21 Female 10 - 14 Years of Age;
22 Female 15 - 19 Years of Age;
23 Female 20 - 24 Years of Age;
24 Female 25 - 29 Years of Age;
25 Female 30 - 34 Years of Age;
26 Female 35 - 39 Years of Age;
27 Female 40 - 44 Years of Age;
28 Female 45 - 49 Years of Age;
29 Female 50 - 54 Years of Age;
30 Female 55 - 59 Years of Age;
31 Female 60 - 64 Years of Age;
32 Female 65 - 69 Years of Age;
33 Female 70 - 74 Years of Age;
34 Female 75 - 79 Years of Age;
35 Female 80 - 84 Years of Age;
36 Female 85 & up Years of Age.

Entity and attribute detail citation:
AGR_DIAG_SITE_CD: String, Length = 2 The Misoretah Cancer Registry Diagnostic Site Code.
VALUE:
01 Oral cavity and pharynx;
02 Esophagus;
03 Stomach;
04 Small intestine;
05 Colon;
06 Rectum and recto-sigmoid junction;
07 Anus, anal canal and anorectum;
08 Liver and interhepatic bile duct;
09 Gallbladder and biliary ducts;
10 Pancreas;
11 Other digestive system;
12 Larynx;
13 Lung and bronchus;
14 Other respiratory system;
15 Bones and joints;
16 Soft tissue (including heart);
17 Cutaneous melanoma;
18 Other non-melanoma skin cancers;
19 Breast;
20 Cervix;
21 Uterus;
22 Ovary;
23 Other female genital;
24 Prostate;
25 Testis;
26 Other male genital;
27 Bladder;
28 Kidney and renal pelvis;
29 Other urinary;
30 Eye and orbit;
31 Brain;
32 Other central nervous system;
33 Thyroid;

34 Other endocrine;
35 Hodgkin's lymphoma;
36 Non-Hodgkin's lymphoma;
37 Multiple myeloma;
38 Lymphocytic leukemia;
39 Myeloid leukemia;
40 Monocytic leukemia;
41 Other leukemia;
42 Other sites/types not otherwise specified.

Entity and attribute detail citation:
COUNT_CASES: Long Integer, Length = 5 The case count for primary cases of cancer by location, year, age/sex group and site.

Entity and attribute detail citation:
COUNT_POPULATION: Long Integer, Length = 5 The corresponding population count by location, year, and age/sex group. This data is linked from a master population table maintained by the Misoretah Environmental Public Health Tracking Program.

Entity and attribute detail citation:
RATE_RAW: Single Float, Length = 8, Precision = 2 The age/sex specific cancer rate per 100,000. This value is computed as: 100000 * COUNT_CASES / COUNT_POPULATION

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Distribution Information:

Resource description: HO_CANCER_CNTY_YR_5AS_SITE

Distribution liability:
DISCLAIMER OF LIABILITY, RELIABILITY, DAMAGES AND ENDORSEMENT.

The Misoretah Public Health Tracking Network (U-EPHTN) is maintained, managed and operated by the Environmental Epidemiology Program (EEP) within the Misoretah Department of Health (MDOH).

In preparation of this data, every effort has been made to offer the most current, correct, complete and clearly expressed information possible. Nevertheless, some errors in the data may exist. In particular, but without limiting anything here, the Misoretah Department of Health disclaims any responsibility for source data, compilation and typographical errors and accuracy of the information that may be contained in this data. This data does not represent the official legal version of source documents or data used to compile this data. The MDOH further reserves the right to make changes to this data at any time without notice.

This data compiled by the staff of the EEP from a variety of source data, and are subject to change without notice. The MDOH makes no warranties or representations whatsoever regarding the quality, content, condition, functionality, performance, completeness, accuracy, compilation, fitness or adequacy of the data.

By using this data, you assume all risk associated with the acquisition, use, management, and disposition of this data in your information system, including any risks to your computers, software or data being damaged by any virus, software, or any other file that might be transmitted or activated during the data exchange of this data. The MDOH shall not be liable, without limitation, for any direct, indirect, special, incidental, compensatory, or consequential damages, or third-party claims,

resulting from the use or misuse of the acquired data, even if the MDOH or its agency has been advised of the possibility of such potential damages or loss.

Format compatibility is the user's responsibility.

Reference herein to any specific commercial products, processes, services, or standards by trade name, trademark, manufacture, URL, or otherwise, does not necessarily constitute or imply its endorsement, recommendation or favoring by the MDOH. The view and opinions of the metadata compiler expressed herein do not necessarily state or reflect those of the MDOH, or the data owners and shall not be used for advertising or product endorsement purposes.

Use of this data with other data shall not terminate, void or otherwise contradict this statement of liability.

The sale or resale of this data, or any portions thereof, is prohibited unless with the express written permission of the MDOH.

If errors or otherwise inappropriate information is brought to our attention, a reasonable effort will be made to fix or remove it. Such concerns should be addressed to the EEP program manager (See Point of Contact contained in this metadata file)

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Metadata Reference Information:

Metadata date: 20070320

Metadata contact:
Contact information:
Contact organization primary:
Contact organization: The Misoretah Environmental Public Health Tracking Program
Contact position: Metadata Administrator

Contact address:
Address type: mailing and physical address
Address:
Misoretah State Health Building
1234 Anyplace Street
City: Somewhere City
State or province: Misoretah
Postal code: 97531
Country: USA

Contact voice telephone: 123.456-7890
Contact TDD/TTY telephone:
Contact facsimile telephone: 123.456-0987

Contact electronic mail address: MEPHT@Misoretah.gov

Hours of service:
Contact instructions:

Metadata standard name: FGDC Content Standard for Digital Geospatial Metadata
http://www.fgdc.gov/standards/projects/FGDC-standards-projects/metadata/base-metadata/v2_0698.pdf
Metadata standard version: Version 2.0 FGDC-STD-001-1998

Metadata access constraints: None

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6.2 Air Pollution Data

Misoretah Air Pollution Data

Theme keywords: Air Quality Monitoring, Air Pollution, Ozone, Nitrogen Oxide, Nitrogen Dioxide, Hydrogen Sulfide, Sulfur Dioxide, Carbon Monoxide, Ammonia Gas

Abstract: File contains raw hourly average air quality data for Misoretah on November 5, 2006. The data was obtained from 100 automated, continuous instruments at 33 locations around the state.

EPHT Metadata:

- Identification Information
- Entity and Attribute Information
- Metadata Reference Information

Identification Information:

Citation:
Citation information:
Originators: Misoretah Department of Natural Resources

Title:
Misoretah Air Pollution Data

Publication date: 20061105

Online linkage: http://www.somewebsite.gov/env/esp/aqm/ALLREP.txt

Description:
Abstract:
File contains raw hourly average air quality data for Misoretah on November 5, 2006. The data was obtained from 100 automated, continuous instruments at 33 locations around the state.

Purpose:
Data collected for use in determining whether an area meets the National Ambient Air Quality Standard, whether the public is being exposed to unhealthy conditions, to identify air pollution trends, and to determine the source of air pollution problems.

Supplemental information:
This data has only been subject to preliminary automated quality assurance procedures. Special conditions such as power outages and equipment malfunction can produce invalid data. Quality assured data is available by contacting the Misoretah Department of Natural Resources Air Pollution Program.

Time period of content:
Time period information:
Single date/time:
Calendar date: 20061105

Currentness reference:
Publication Date

Status:
Progress: Complete
Maintenance and update frequency: Air quality data collected continuously and updated on an hourly basis. This data file is for a single date and considered complete.

Spatial domain:
Bounding coordinates:
West bounding coordinate: -96.1
East bounding coordinate: -88.77
North bounding coordinate: 40.94
South bounding coordinate: 35.66

Keywords:
Theme:
Theme keywords: Air Quality Monitoring
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Air Pollution
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Ozone
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Nitrogen Oxide
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Nitrogen Dioxide
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Hydrogen Sulfide
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Sulfur Dioxide
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Carbon Monoxide
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Theme:
Theme keywords: Ammonia Gas
Theme keyword thesaurus: General Multilingual Thesaurus (GEMET)

Place:
Place keywords: Misoretah
Place keyword thesaurus: Geographic Names Information System (GNIS)

Access constraints: None.
Use constraints:
Data made available for the purpose of public awareness and should not be used in any medical study.

Point of contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Natural Resources Air Pollution Program
Contact position: Air Quality Program Director

Contact address:
Address type: Mailing Address
Address:
PO Box 176
City: Some City
State or province: Misoretah
Postal code: 69999
Country: USA

Contact voice telephone: 1-999-999-9999
Contact TDD/TTY telephone:
Contact facsimile telephone:

Contact electronic mail address: cleanair@some.msr.gov

Hours of service: 8:00 am - 5:00 pm Monday - Friday
Contact instructions:

Native data set environment:
ASCII

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Entity and Attribute Information:

Overview description:

Entity and attribute overview:
Data is organized by Logger Id and Logger Name. Each parameter measured at the site is a separate attribute. These are identified by common chemical symbols: NO - Nitrogen Oxide, NO2 - Nitrogen Dioxide, NOX - Total Nitrogen Oxides, NH3 - Ammonia Gas, NT - Total Nitrogen Compounds, H2S - Hydrogen Sulfide, SO2 - Sulfur Dioxide (1 PPM Limit), SO2S - Secondary SO2 (5 PPM Limit), O3 - Ozone, O3S - Back up Ozone measurement, CO - Carbon Monoxide.

Hourly averages are displayed under each attributes name. They are recorded in the most common units used for each parameter type: parts per million (PPM), microgram per cubic meter (uG/M3), degrees centigrade (DEG C), parts per billion (PPB), miles per hour (MPH) and compass degrees (DEG).

Data from all loggers includes wind direction, wind speed and temperature. Several loggers also contain data for relative humidity.

An hourly average can be replaced with a status flag. These flags are used to indicate various problems. The most common flags are "D" (instrument disabled, usually used during weekly checks of instrument performance), "B" (bad status, usually because of instrument malfunction), "R" (a suspicious rate of change in the data from one hour to the next), or "P" (indicates a power outage during the reporting period).

Entity and attribute detail citation:
http://www.dnr.mo.gov/env/esp/aqm/allguide.htm

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Metadata Reference Information:

Metadata date: 20061107

Metadata contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Health And Senior Services
Contact person: Metadata Administrator

Contact address:
Address type: Mailing and Physical Address
Address:
920 Some Dr. PO Box 570
City: Some City
State or province: Misoretah
Postal code: 6999-0570
Country: USA

Contact voice telephone: 999-999-9999
Contact TDD/TTY telephone: The telephone number by which hearing-impaired individuals can contact the organization or individual.
Contact facsimile telephone: 999-888-888

Contact electronic mail address: metadata@some.msr.gov

Hours of service: 8:00 am - 4:00 pm Monday - Friday.
Contact instructions:
Contact_Instructions

Metadata standard name: FGDC Content Standards for Digital Geospatial Metadata
Metadata standard version: FGDC-STD-001-1998

Metadata access constraints: None.

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6.3 Asthma Hospitalizations Data

Misoretah Asthma Hospitalization

Theme keywords: Hospitalization, Asthma, Environmental Public Health Tracking (surveillance) Initiative, PHASE Project

Abstract: Misoretah asthma hospitalization data for the years 2001-2004.

EPHT Metadata:

Identification Information:

Citation:
Citation information:
Originators: Misoretah Department of Health and Senior Services

Title:
Misoretah Asthma Hospitalization

Publication date: Unpublished

Online linkage: None

Description:
Abstract:
Misoretah asthma hospitalization data for the years 2001-2004.

Purpose:
Dataset developed for use as part of a pilot test for the CDC and EPA PHASE toolset.

Supplemental information:
Data has been deidentified to protect patient confidentiality. It contains 464,692 total observations.

Time period of content:
Time period information:
Range of dates/times:
Beginning date: 20010101
Ending date: 20041231

Currentness reference:
20060728

Status:
Progress: Complete
Maintenance and update frequency: None planned.

Spatial domain:
Bounding coordinates:
West bounding coordinate: -96.1
East bounding coordinate: -88.77
North bounding coordinate: 40.94
South bounding coordinate: 35.66

Keywords:
Theme:
Theme keywords: Hospitalization
Theme keyword thesaurus: Medical Subject Headings (MeSH)

Theme:
Theme keywords: Asthma
Theme keyword thesaurus: Medical Subject Headings (MeSH)

Theme:
Theme keywords: Environmental Public Health Tracking (surveillance) Initiative
Theme keyword thesaurus: National Environmental Public Health Tracking Program Communications Library Definitions

Theme:
Theme keywords: PHASE Project
Theme keyword thesaurus: National Environmental Public Health Tracking Program Communications Library Definitions

Place:
Place keywords: Misoretah
Place keyword thesaurus: Geographic Name Information System (GNIS)

Access constraints: A formal written request for access to dataset must be made directly to the data custodian documenting what is needed and how data is to be used.
Use constraints:
This information is being provided by the Misoretah Department of Health and Senior Services and every effort has been made to assure the accuracy of the data. However, no responsibility is assumed by the department in the use of the data, related materials or how it is represented by those who access this information.

Point of contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Health and Senior Services
Contact position: Director of Asthma Unit

Contact address:
Address type: Mailing and Physical
Address:
Some Drive, PO Box 570
City: Some City
State or province: Misoretah
Postal code: 6999-0570
Country: USA

Contact voice telephone: 999-999-9999
Contact TDD/TTY telephone:
Contact facsimile telephone:

Contact electronic mail address: no.asthma@some.msr.gov

Hours of service: 8:00am - 4:30pm Monday-Friday
Contact instructions:
Contact_Instructions

Native data set environment:
SAS v9.0. /u6/SAS_worke5ff000043AA_holmes/one.sas7bdat

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Entity and Attribute Information:

Overview description:
Entity and attribute overview:
Dataset contains several attributes relating with hospitalization for asthma. These include the following:

* Admission date MMDDYY
* Admission hour
* Age at admission
* The number of asthma records the person has
* The number of records a person has
* Asthma diagnosis code if person had asthma
* Asthma ICD9 Code that is on the record
* Earliest asthma record date
* Birth Date MMDDYYYY
* Charge for service
* County of residence
* Discharge date MMDDYYYY
* Discharge hour
* Disposition spelled out

* Disposition on discharge
* Date of first procedure.
* Diagnosis-related group
* First diagnosis
* Second diagnosis
* Injury code
* Ethnicity
* Primary hospital (acute care)
* Primary hospital (new born)
* Record ID number
* Length of stay
* Individual ID number for each patient
* First source of payment
* Observation hours
* Place of injury
* Hospital service area
* First procedure
* Second procedure
* Race of patient
* Race of patient spelled out
* Sex of patient
* Source of admission
* State of residence
* Census tract
* Type of admission
* In or outpatient admission

Entity and attribute detail citation:
Dataset dictionary.

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Metadata Reference Information:

Metadata date: 20061107

Metadata contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Health and Senior Services
Contact position:

Contact address:
Address type: Mailing and Physical Address
Address:
Some Drive, PO Box 570
City: Some City
State or province: Misoretah
Postal code: 69999-0570
Country: USA

Contact voice telephone: 999-999-9999
Contact TDD/TTY telephone: Contact_TDD/TTY_Telephone
Contact facsimile telephone: 999-999-9999

Contact electronic mail address: no.asthma@some.msr.gov

Hours of service: 8:00am - 4:00pm Monday - Friday
Contact instructions:
Contact_Instructions

Metadata standard name: FGDC Content Standards for Digital Geospatial Metadata
Metadata standard version: FGDC-STD-001-1998

Metadata access constraints: None

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6.4 Drinking Water Data System

Misoretah Safe Drinking Water Information System (SDWIS)

Theme keywords: SDWIS, Drinking Water, water, Safe Drinking Water Information System, Drinking water quality

Abstract: This database contains information on the public water systems in Misoretah. Basic system information is maintained and includes information on population, contact person's name and phone number, county served, number of connections, sources of water used and Consumer Confidence reports. Data also include coliform testing, chemical testing, nitrate results, and lead and copper testing. Contact reports, rule violations, and public notices are also included in the system.

EPHT Metadata:

Metadata elements shown with blue text are defined in the Federal Geographic Data Committee's (FGDC) *Content Standard for Digital Geospatial Metadata (CSDGM)*. Elements shown with green text are defined in the *ESRI Profile of the CSDGM*. Elements shown with a green asterisk (*) will be automatically updated by ArcCatalog. ArcCatalog adds hints indicating which FGDC elements are mandatory; these are shown with gray text.

Identification Information:

Citation:
Citation information:

Originators: Drinking Water Program, Misoretah Department of Human Services, Public Health Division

Title:
Misoretah Safe Drinking Water Information System (SDWIS)

Publication date: 20070417

Online linkage: http://170.104.158.45/

Description:
Abstract:
This database contains information on the public water systems in Misoretah. Basic system information is maintained and includes information on population, contact person's name and phone number, county served, number of connections, sources of water used and Consumer Confidence reports. Data also include coliform testing, chemical testing, nitrate results, and lead and copper testing. Contact reports, rule violations, and public notices are also included in the system.

Purpose:
To assure Misoretahians safe drinking water. The program focuses resources on the areas of highest public health benefit and promotes voluntary compliance with drinking water standards. It emphasizes prevention of contamination through source protection, technical assistance to water systems, and training of water system operators.

Supplemental information:
The Drinking Water Program administers and enforces drinking water quality standards for public water systems in the State of Misoretah.

What the Misoretah Drinking Water Program is doing:

- Reducing or preventing contamination of public drinking water supplies
- Improving water system operation and management through training and technical assistance programs for water system operators, managers, engineers, and lab staff
- Improving adequacy, reliability, and viability of public water systems
- Increasing public knowledge, participation, and support for safe drinking water
- Conducting an efficient and effective regulatory program that implements federal Environmental Protection Agency safe drinking water standards and state drinking water regulations.

Time period of content:
Time period information:
Range of dates/times:
Beginning date: 1988
Ending date: Present

Currentness reference:
Publication Date

Status:
Progress: Complete
Maintenance and update frequency: Monthly

Spatial domain:
Bounding coordinates:

West bounding coordinate: -124.961735
East bounding coordinate: -116.415546
North bounding coordinate: 46.344729
South bounding coordinate: 41.914842

Keywords:
Theme:
Theme keywords: SDWIS, Drinking Water, water, Safe Drinking Water Information System
Theme keyword thesaurus: none

Theme:
Theme keywords: Drinking water quality
Theme keyword thesaurus: CHT

Place:
Place keywords: Misoretah, MS
Place keyword thesaurus: GNIS

Access constraints: None
Use constraints:
None

Point of contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Human Services, Drinking Water Program
Contact position: Data Management & Compliance Assurance

Contact address:
Address type: Mailing and Physical
Address:
800 NE Misoretah Street
City: Anycity
State or province: Misoretah
Postal code: 97000
Country: USA

Contact voice telephone: 999-999-9999
Contact facsimile telephone: 999-999-9999

Contact electronic mail address: DMCA@state.ms.us

Hours of service: Monday-Friday; 8:00-5:00
Contact instructions:
Email or Call

Security information:
Security classification system: None
Security classification: Unclassified
Security handling description: None

Native data set environment:
Microsoft Windows 2000; SQL Server

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Data Quality Information:

Logical consistency report:
None

Completeness report:
Information about omissions, selection criteria, generalization, definitions used, and other rules used to derive the data set. This information is currently unknown.

Lineage:
Process step:
Process description:
Data is entered into the EPA provided SDWIS/State database. Data is updated and provided through a website query (http://170.104.158.45/) or through a data request.

Process date: Unknown

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Entity and Attribute Information:

Overview description:
Entity and attribute overview:
Drinking water quality standards reduce the risk of waterborne disease and chronic health problems. The Drinking Water program is increasing the number of Misoretahians who are served by public water systems that meet safe drinking water standards. Over 100 communities have made improvements to meet the 1974 standards (23 contaminants), and 179 communities have improved their systems to meet the 1986 standards (77 contaminants). Improvements remain to be made by at least 146 communities under the 1986 standards. The Drinking Water program is beginning to focus on standards to be set under the 1996 Safe Drinking Water Act.

In Misoretah, there are 3,617 public water systems of which 893 are community water systems serving 2.5 million people. There are 343 non- transient, non-community systems (schools, factories, and commercial businesses), 1,470 transient, non-community systems (campgrounds and rest areas) and 911 state-regulated systems (small subdivisions and mobile home parks).

Types of data in the Misoretah SDWIS database are: environmental contaminants; regulatory emission monitoring; demographics; and drinking water media.

A link to the detailed data dictionary is provided in the Entity and Attribute Detailed Citation.

Entity and attribute detail citation:
https://iaspub.epa.gov/reports/rwservlet?edrreportpdf&19996

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Distribution Information:

Distributor:
Contact information:

Contact organization primary:
Contact organization: Misoretah Department of Human Services
Contact position: Water Quality Program Manager

Contact address:
Address type: Mailing and Physical
Address:
800 NE Misoretah Street, #827
City: Portland
State or province: Misoretah
Postal code: 97000
Country: USA

Contact voice telephone: 999-999-9999
Contact facsimile telephone: 999-999-999

Contact electronic mail address: good.water@state.my.us

Hours of service: Monday-Friday; 8:00-5:00
Contact instructions:
Call or Email

Resource description: Data is in a SQL Server database with over 1 million records and approximately 75,000 records collected annually.

Distribution liability:
In preparation of data, every effort has been made to offer the most current, and correct data possible. Nevertheless, inadvertent errors in data may occur. The State of Misoretah disclaims any responsibility for data errors and accuracy of the information that may be contained within the SDWIS database. The State of Misoretah reserves the right to make changes at any time without notice.

Custom order process:
Data is updated and provided through a website query (http://170.104.158.45/) or through a data request.

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Metadata Reference Information:

Metadata date: 20070417

Metadata contact:
Contact information:
Contact organization primary:
Contact organization: Misoretah Department of Human Services
Contact position: Director of Metadata Services

Contact address:
Address type: Mailing and Physical
Address:

800 NE Misoretah Street, #827
City: Portland
State or province: Misoretah
Postal code: 97000
Country: USA

Contact voice telephone: 999-999-9999
Contact facsimile telephone: 999-999-9999

Contact electronic mail address: meta.services@state.my.us

Hours of service: Monday-Friday; 8:00-5:00
Contact instructions:
Call or Email

Metadata standard name: FGDC Content Standards for Digital Geospatial Metadata
Metadata standard version: FGDC-STD-001-1998

Metadata access constraints: None
Metadata use constraints:
None

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Chapter 7

Chapter 7: Terms and Acronyms

Attribute: A field within a database table. A single complete fact of data. See also Entity.

CDC: The Centers for Disease Control and Prevention (www.cdc.gov). The CDC is an agency of the U.S. Department of Health and Human Services, based in Atlanta Georgia. The CDC is the federal government agency responsible for developing and applying disease prevention and control measures. The CDC comprises a number of coordinating centers. The Coordinating Center for Environmental Health and Injury Prevention includes the National Center for Environmental Health (www.cdc.gov/nceh). The Environmental Public Health Tracking Program (www.cdc.gov/nceh/tracking) is a program within the National Center for Environmental Health. See also EPHT and Tracking Network.

Certification download: See Certificate.

Certificate (digital certificate, identity certificate, or public key certificate): A small file installed on a computer to link a digital signature (a personal identification number) and a public encryption key (a form of encrypting data sent over the internet) issued by a certificate authority (e.g., VeriSign). The certificate is useful for authenticating user identity and for establishing a means of secure exchange of data. Because a certificate is a file installed on a computer, the certificate also binds the user to a specific computer. An alternative is the use of security tokens (hardware token, authentication token or cryptographic token) or Computer Access Cards (CAC, smart card or integrated circuits card) that are devises issued to the user but can only be used on any computer with hardware to accept those devises.

CIESIN: Center for International Earth Science Information Network. The CIESIN is a center within the Earth Institute at Columbia University. The CIESIN specializes in online data and information management, spatial data integration and training, and the interdisciplinary aspects of social, environmental and information sciences. The CIESIN is a resource for standardizing metadata. (www.ciesin.columbia.edu)

Composite Element: See Element.

Content: The content within the EPHTN includes indicator data stores, metadata describing those data stores, tools for linking, analyzing, modeling, visualizing and reporting on those data stores; and products for training network partners.

Dataset: One or more data tables that are related or referenced to each other and generally pertain to a specific data subject. The term data set used synonymous with data table or with data files.

Datum: See Spatial Projection

DBMS: Database Management System is a computer software application (e.g., Oracle, SAS, MS Access) designed for the purposes of managing databases using a standardized schema for organizing data, applying queries to the data, enforcing value rules on the data and providing security to the data. A DBMS complies with a general set of standards that allow different systems to interact with its data and vice-versa.

Descriptive: The presentation of facts and/or observations about data to convey information about the nature, quality, structure, source, use, and processes of that data. Descriptive data are also useful for historical reference and for comparison.

Discovery: Discovery is the interactive process of disclosure of information through documentation by a data provider and the critical examination of that documentation by a potential user to determine its usefulness for a particular enquiry or application.

DSA: Data Sharing Agreement (also Trading Partner Agreement). A formal agreement that describes the roles, responsibilities, and liabilities of data owners or stewards and data sharing partners. This agreement may also describe the content of the data to be shared, limitations placed on the use and disclosure of the data, and the processes to accomplishing data sharing.

Dublin Core: The Dublin Core is a metadata element standard for describing information resources in many domains. This standard was developed by the Dublin Core Metadata Initiative (dublincore.org) within the Online Computer Library Center at Dublin Ohio. The Dublin Core is a generalized set of elements that describe ownership and structure of information that can be applied as a minimum standard for datasets. The Dublin Core also establishes a standardized syntax for organizing its elements and completing entry information within the elements. Information Technologies is a reference model that other encoding guidelines can be compared.

Dx: Formally, the diagnosis, but for the purpose of this manuscript, the diagnostic code. There are a number of diagnostic encoding systems. Codes may be from an national or international standard or proprietary to the disease tracking organization. The International Classification of Diseases (ICD) is published by the World Health Organization (www.who.int). Two versions; ICD-9-CM (www.cdc.gov/nchs/icd9.htm) and ICD-10 (www.who.int/classifications/icd/en/) are commonly used. However, other codes may be used for specific diseases (e.g., ICD-O-3 or SEER site codes for cancer).

Element: A component of metadata. If one considers a metadata document to be a record in a dataset table, the metadata element is synonymous with an attribute (i.e., a field in the table). There are three kinds of elements; simple, compound or composite. Simple elements consist of a single field on any type (e.g., a string, a number, a date, etc.). A compound element consists of multiple simple fields related to each other (e.g., a date field and a time field to make a date/time). A composite element is a higher level of organization and consists of a collection of simple or compound fields all related to a particular subject (e.g., contact point).

Entity: A table within a dataset. A table consists of an organized collection and structure of data elements in rows (records) and columns (fields). See also attribute.

EPA: The (U.S.) Environmental Protection Agency (sometimes USEPA) is an agency of the federal government (www.epa.gov). The EPA is charged with protecting human health and with safeguarding the quality o f the natural environment.

EPHT: Environmental Public Health Tracking is the ongoing collection, integration, analysis, interpretation, and dissemination of environmental hazard monitoring and human exposure and health effects surveillance.
See www.cdc.gov/nceh/tracking/network.htm.

EPHTN: See Tracking Network.

FIPS: Federal Information Processing Standards (www.itl.nist.gov/fipspubs/) are publicly announced standards developed by the federal government for use by all government agencies and contractors. FIPS codes include standards for encoding data and some encryption standards. FIPS codes for places, counties, states, and countries are frequently used in geospatial data. These codes are comparable to the ISO 3166 standards.

FGDC: Federal Geographic Data Committee (www.fgdc.gov). An interagency committee housed by the National Geospatial Program Office (www.usgs.gov/ngpo/) working to publish the National Spatial Data Infrastructure. As part of that infrastructure, the FGDC developed standards for metadata on geospatial data that can be applied to a broad range of data constructs. The EPHT adopted the FGDC metadata standards.

Geospatial: The integration and interactive functionality of spatial (multi-dimensional) referencing and analytical methods applied to geographic datasets. Geospatial is often used in conjunction with geographic information systems (GIS).

GIS: Geographic Information Systems: A computer application system, protocols and standards used to capture, store, edit, layer, analyze, manage, and share geographic data and applying spatial methods on those data.

GNIS: Geographic Names Information System contains registered named and locational information about physical and cultural features located throughout the United States and its territories. The US Geological Survey developed the GNIS (www.usgs.gov) in cooperation with the US Board on Geographic Names (www.geonames.usgs.gov) to promote the

standardization of feature names. The GNIS database is a registry of official federal names for features cross-referenced with variant and alternative names.

IRB: Institutional Review Board (also known as the Independent Ethics Committee or Ethical Review Board). The IRB is mandated by Title 45 CFR Part 46 (Research Act of 1974) for research involving human subjects. See the Office of Human Research Protection website (http://www.hhs.gov/ohrp/) for more information.

ISO: International Organization for Standardization (http://www.iso.org/). The ISO is an international standard-setting body composed from the 158 member national standard bodies. ISO standards are widely recognized and often become law through adoption or by treaty law. ISO standards are published as Technical Report (when complete), Technical Specification (when still under development) or as ISO Guides (general guides related to international standards).

LDAP: Lightweight Directory Access Protocol is a network protocol for querying and modifying directory services. The LDAP provides a means for secure, role-based access and authentication of users accessing a network system.

Metadata: Metadata is a data record that describes a unique dataset (a set of one or more related data tables). Metadata describes ownership, content, structure, mutability, use, and function of the dataset. See Chapter 2 for a detailed discussion of metadata with respect to the EPHT.

MOA: Memorandum of Agreement (also Memorandum of Understanding). See also DSA.

NAWQA: The National Water-Quality Assessment Program (NAWQA) provides an understanding of water-quality conditions and how those conditions may vary locally, regionally, and nationally; whether conditions are getting better or worse over time; and how natural features and human activities affect those conditions.

PHIN: Public Health Information Network (www.cdc.gov/phin/) is a collaborative CDC sponsored forum for advancing interoperable public health information systems in the many organizations that participate in public health. The goal of this national initiative is to implement a multi-organizational standards-based business and technical architecture for public health information systems. The CDC Information Council governs the PHIN with membership from ASTHO, NACCHO, and CDC.

SEER site codes: See Dx. A schema developed by the National Cancer Institute, Surveillance Epidemiology, and End Results (SEER, seer.cancer.gov) program. The SEER site codes group cancers by forty-two anatomical or system sites.

Spatial Domain: The window or envelope within which spatially referenced data is maintained. The minimum limits of spatial scale values in all coordinates that completely include spatially referenced data.

Spatial Projection: The technology, methodology and scaling values used to present three dimensional geospatial data on a two dimensional plane. There are a number of standardized projections. Scaling values can use standard geographic measures (latitude and longitude) or metric measures (meters, feet, etc.). Periodic geographic surveys usually set scaling values. The names of spatial projections may reference those surveys (i.e., North American Datum 1983).

Standard: An established, authoritative, and accepted set of criteria to guide development, implementation, and evaluation.

State Plane: See also Spatial Projection. The State Plane is a modification of a national spatial projection applicable for a specific state domain. State planes reduce scale values by a set amount (false northing and false easting) for easier manipulation.

Thesaurus: A compilation and organization of a set of words, phrases references and other information about a particular field or set of concepts. See also Vocabulary

TPA: Trading Partner Agreement. See also DSA.

Tracking Network: The network integrates data from environmental hazards monitoring, human exposure monitoring and health effects surveillance into a network of standardized and consistent data. The network will also include metadata and applications for the discovery, access, query, and analysis of the data.

URL: Uniform Resource Locator. A standardized and uniform syntax for global identifiers of network retrievable documents. For example: http://en.wikipedia.org/wiki/URL is the locator for the Wikipedia document from which this definition was derived. The term URL is also used for Uniform Resource Identifier (URI) and Name (URN) although those terms are not strictly synonymous.

UTM: Universal Transverse Mercator is a coordinate system based on a grid overlaid on the Earth's surface. UTM are distinctive from latitude and longitude in the use of a UTM grid zone identifier and a large metric x and y coordinate (generally in the order of 10^5 to 10^6). Often the grid coordinate has an offset; therefore, it is important to know the datum and plane used. An advantage of the UTM is the ability to derive measures of distance between two points in a small scale. A disadvantage is the distortion that occurs.

VADS: Vocabulary Access and Distribution System (http://www.cdc.gov/phin/vocabulary/index.html). The PHIN VADS is a web-based vocabulary server. See also Vocabulary.

Vocabulary: A standardized and limited list or collection of words or word phrases (allowed entries) used for entry into a data attribute (field). For example, the vocabulary allowed for the data field "sex" might include "male," "female," and "unknown."

WAMS: Wide Area Measurement System.

XMI: XML Metadata Interchange is a standard for exchanging metadata information via XML. XMI standards are found in the ISO/IEC 19503:2005 Information Technology. See also XML.

XML: Extensible Markup Language is a general-purpose markup language that supports a wide variety of data transactions. A key feature of XML is the tags and hierarchy that surround data elements. The advantage of using XML to conduct data transactions are that the sender and recipient of the data do need to be informed about the others data structures. A disadvantage to XML is the increased size of the data transaction.

Chapter 8

Chapter 8: Citations and References

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Baca, Murtha ed. 2000. Introduction to Metadata: Pathways to Digital Information, version 2. Getty Information Institute. URL: http://www.getty.edu/research/conducting_research/standards/intrometadata/index.html

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Federal Geographic Data Committee. 1998. Content Standard for Digital Geospatial Metadata. Federal Geographic Data Committee. Washington, D.C.

National Information Standards Organization. 2004. Understanding Metadata. Bethesda, MD: NISO Press. URL: http://www.niso.org/standards/resources/UnderstandingMetadata.pdf

Appendix A: EPHTN Metadata Profile

Element	Field	Definition	Short Name	Element Type	Domain	Format
Section 1: IDENTIFICATION						
Citation	**Citation (1.1)**	**Information to be used to reference the data set.**	**citation**	**Compound**		
Originator	Originator (8.1)	The name of an organization or individual that developed the data set. If the name of editors or compilers are provided, the name must be followed by "(ed.)" or "(comp.)" respectively.	origin	Text	"Unknown"; Free Text	
Publication Date	Publication_Date (8.2)	The date when the data set is published or otherwise made available for release.	pubdate	Date	"Unknown"; "Unpublished Material"; Free Date	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Title	Title (8.4)	The name by which the data set is known.	title	Text	Free Text	
URL	On-line_Linkage (URL) (8.10)	The name of an online computer resource that contains the data set. Entries should follow the Uniform Resource Locator convention of the Internet. (Complete if applicable).	online	Text	Free Text	
Description	**Description (1.2)**	**A characterization of the data set, including its intended use and limitations.**	**descript**	**Compound**		
Abstract	Abstract (1.2.1)	A brief narrative summary of the data set.	abstract	Text	Free Text	
Purpose	Purpose (1.2.2)	A summary of the intentions with which the data set was developed.	purpose	Text	Free Text	
Supplemental Info	Supplemental_Info (1.2.3)	Other descriptive information about the data set. (Complete if applicable).	supplinf	Text	Free Text	
Time Period of Content	**Time_period_of_content (1.3)**	**Time period for which the data set corresponds to the currentness reference.**	**timeperd**	**Compound**		
Currentness	Currentness_Reference (1.3.1)	The basis on which the time period of content information is determined.	current	Text	"Ground Condition"; "Publication Date"; Free Text	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Time Period Information	**Time_Period_Information (9.0)**	**Information about the date of an event (Use Single or Multiple or Range of Dates).**	**timeinfo**	**Compound**	**See Section 9**	
Status	**Status (1.4)**	**The state of and maintenance information for the data set.**	**status**	**Compound**		
Progress	Progress (1.4.1)	The state of a data set.	progress	Text	"Complete, "In Work"; "Planned"	
Maintenance and Update Frequency	Maintenance_and_Update_Frequency (1.4.2)	The frequency that changes are made to the data set after the initial data set is completed.	update	Text	"Continually"; "Daily"; "Weekly"; "Monthly"; "Annually"; "Unknown"; "As needed"; "Irregular"; "None planned"; Free Text	
Spatial Domain	**Spatial_Domain (1.5)**	**The geographic area covered by the data set.**	**spdom**	**Compound**		
West Bounding Coordinate	West_Bounding_Coordinate (1.5.1.1)	Western-most coordinate of the limit of coverage expressed in longitude.	westbc	Real	-180.0 < = West Bounding Coordinate < 180.0	Longitudes east of the prime meridian shall be specified by a plus (+) sign preceding the three digit designating degrees of longitude. Longitudes west of the prime meridian shall be designated by a minus (-) sign.
East Bounding Coordinate	East_Bounding_Coordinate (1.5.1.2)	Eastern-most coordinate of the limit of coverage expressed in longitude.	eastbc	Real	-180.0 < = East Bounding Coordinate < = 180.0	Longitudes east of the prime meridian shall be specified by a plus (+) sign preceding the three digit designating degrees of longitude. Longitudes west of the prime meridian shall be designated by a minus (-) sign.
North Bounding Coordinate	North_Bounding_Coordinate (1.5.1.3)	Northern-most coordinate of the limit of coverage expressed in latitude.	northbc	Real	-90.0 < = North Bounding Coordinate < = 90.0	Latitudes North of the Equator shall be specified by a plus (+) sign, preceding the two digits designating degrees. Latitudes south of the Equator shall be designated by a minus (-) sign .
South Bounding Coordinate	South_Bounding_Coordinate (1.5.1.4)	Southern-most coordinate of the limit of coverage expressed in latitude.	southbc	Real	-90.0 < = South Bounding Coordinate < = 90.0	Latitudes North of the Equator shall be specified by a plus (+) sign, preceding the two digits designating degrees. Latitudes south of the Equator shall be designated by a minus (-) sign .

Element	Field	Definition	Short Name	Element Type	Domain	Format
Keywords	**Keywords (1.6)**	**Words or phrases summarizing an aspect of the data set.**	**keywords**	**Compound**		
Theme Keyword Thesaurus	Theme_Keyword_Thesaurus (1.6.1.1)	Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.	themekt	Text	"None"; Free Text	
Theme Keyword	Theme_Keyword (1.6.1.2)	Common-use word or phrase used to describe the subject of the data set.	themekey	Text	Free Text	
Place Keyword Thesaurus	Place_Keyword_Thesaurus (1.6.2.1)	Reference to a formally registered thesaurus or a similar authoritative source of place keywords.	placekt	Text	"None"; "Geographic Names Information System"; Free Text	
Place Keyword	Place_Keyword (1.6.2.2)	The geographic name of a location covered by a data set. (Includes city, county, state, state acronym, regional descriptions and references).	placekey	Text	Free Text	
Access Constraints	Access_Constraints (1.7)	Restrictions and legal prerequisites for accessing the data set. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the data set.	accconst	Text	"None"; Free Text	
Use Constraints	Use_Constraints (1.8)	Restrictions and legal prerequisites for using the data set after access is granted. These include any use constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the data set.	useco	Text	"None"; Free Text	
Point of Contact	**Point_of_Contact (1.9)**	**Contact information for an organization that is knowledgeable about the data set.**	**ptcontac**	**Compound**	**See Section 10.**	
Security Information	**Security_Information (1.12)**	**Handling restrictions imposed on the data set because of national security, privacy, or other concerns.**	**secinfo**	**Compound**		
Security Classification System	Security_Classification_System (1.12.1)	Name of the classification system.	secsys	Text	Free Text	
Security Classifcation	Security_Classification (1.12.2)	Name of the handling restrictions on the data set.	secclass	Text	"Top secret"; "Secret"; "Confidential"; "Restricted"; "Unclassified"; "Sensitive"; "Free text"	
Security Handling Description	Security_Handling_Description (1.12.3)	Additional information about the restrictions on handling	sechandl	Text	Free Text	
Native Data Set Environment	Native_Data_Set_Environment (1.13)	A description of the data set, including the name of the software, computer operating system, file name, and data set size.	native	Text	Free Text	
Section 2: DATA QUALITY INFORMATION						
Logical Consistency Report	Logical_Consistency_Report (2.2)	An explanation of the fidelity of relationships in the data set and tests used.	logic	Text	Free Text	
Completeness Report	Completeness_Report (2.3)	Information about omissions, selection criteria, generalization, definitions used, and other rules used to derive the data set.	complete	Text	Free Text	
Lineage	**Lineage (2.5)**	**Information about the events, parameters, and source data which constructed the data set, and information about the responsible parties.**	**lineage**	**Compound**		
Process Step	**Process_Step (2.5.2)**	**Information about a single event.**	**procstep**	**Compound**		
Process Description	Process_Description (2.5.2.1	An explanation of the event and related parameters or tolerances.	procdesc	Text	Free Text	
Process Date	Process_Date (2.5.2.3)	The date when the event was completed.	procdate	Date	Free Date	
Section 5: ENTITY AND ATTRIBUTES						
Overview Description	**Overview_Description (5.2)**	**Description of the entities, attributes, attribute values, and related characteristics encoded.**	**overview**	**Compound**		
Entity and Attribute Overview	Entity_and_Attribute_Overview (5.2.1)	Detailed summary of the information contained in a data set.	eaover	Text	Free Text	
Entity and Attribute Detail Citation	Entity_and_Attribute_Detail_Citation (5.2.2)	Reference used to the complete description of the entity types, attributes, and attribute values for the data set.	eadetcit	Text	Free Text	
Section 6: DISTRIBUTION INFORMATION						
Distribution Information	**Distribution_Information (6)**	**Information about the distributor of the options for obtaining the data**	**distinfo**	**Compound**		
Distributor	**Distributor (6.1)**	**The part from whom the data set may be obtained**	**distrib**	**Compound**	**See Section 10.**	
Resource Description	Resource_Description (6.2)	The identifier by which the distributor knows the data set.	resdesc	Text	Free Text	
Distribution Liability	Distribution_Liability (6.3)	Statement of the liability assumed by the distributor.	distliab	Text	Free Text	
Custom Order Process	Custom_Order_Process (6.5)	Description of custom distribution services available, and the terms and conditions for obtaining these services.	custom	Text	Free Text	

Element	Field	Definition	Short Name	Element Type	Domain	Format
Section 7: METADATA REFERENCE						
Metadata Date	Metadata_Date (7.1)	The date that the metadata were created or last updated.	metd	Date	Free Date	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Metadata Contact	**Metadata_Contact (7.4)**	**The party responsible for the metadata information.**	**metc**	**Compound**	**See Section 10**	
Metadata Standard Name	Metadata_Standard_Name (7.5)	The name of the metadata standard used to document the data set.	metstdn	Text	"FGDC Content Standards for Digital Geospatial Metadata"; Free Text	
Metadata Access Constraints	Metadata_Access_Constraints (7.8)	Restrictions and legal prerequisites for accessing the metadata. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the metadata.	metac	Text	Free Text	
Metadata Use Constraints	Metadata_Use_Constraints (7.9)	Restrictions and legal prerequisites for using the metadata after access is granted. These include any metadata use constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the metadata.	metuc	Text	"None"; Free Text	
Section 9: TIME PERIOD INFORMATION (Enter EITHER a single Date OR multiple dates)						
Single Date	**Single_Date (9.1)**	**Means of encoding a single date and time.**	**sngdate**	**Compound**		
Calendar Date	Calendar_Date (9.1.1)	The year (optionally month or month and day).	caldate	Date	"Unknown"; Free Date	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Time of Day	Single_Time (9.1.2)	The hour (and optionally minute, or minute and second) of day.	time	Time		
OR						
Multiple Dates	**Multiple_Dates (9.2)**	**Means of encoding multiple individual dates. (Complete if applicable).**	**mdattim**	**Compound**		
Range of Dates	**Range_of_Dates (9.3)**	**Means of encoding a range of dates. (Complete if applicable).**	**rngdates**	**Compound**		
Beginning Date	Beginning_Date (9.3.1)	The first year (optionally month or month and day) of the event.	begdate	Date	"Unknown"; Free Date	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Beginning Time	Beginning_Time (9.3.2)	The first hour (and optionally minute, or minute and second) of the day for the event.	begtime	Time		
Ending Date	End_Date (9.3.3)	The last year (and optionally month or month and day) for the event.	enddate	Date	"Unknown"; "Present"; Free Date	YYYY for years; YYYYMM for month of year; YYYYMMDD for day of the year
Ending Time	End_Time (9.3.4)	The last hour (and optionally minute, or minute and second) of the day for the event.	endtime	Time		
Section 10: CONTACT INFORMATION						
Contact Information	**Contact_Information (10.0)**	**This section provides a means of identifying individuals and organizations, and is used by other sections of the metadata standard. This section is never used alone.**	**cntinfo**	**Compound**		
Contact Organization	Contact_Organization (10.2)	The name of the organization.	cntorg	Text	Free Text	
Contact Position	Contact_Position (10.3)	Title of the individual. (Complete if applicable).	cntpos	Text	Free Text	
Contact Address	**Contact_Address (10.4)**	**The address for the organization.**	**cntaddr**	**Compound**		
Address Type	Address_Type (10.4.1)	Address type.	addrtype	Text	"Mailing"; "Physical"; "Mailing and Physical"; Free Text	
Address	Address (10.4.2)	Contact address for organization.	address	Text	Free Text	
City	City (10.4.3)	Contact address city.	city	Text	Free Text	
State or Province	State_or_Province (10.4.4)	Contact address state or province.	state	Text	Free Text	
Postal Code	Postal_Code (10.4.5)	Contact address Zip or postal code.	postal	Text	Free Text	
Country	Country (10.4.6)	Contact address country.	country	Text	Free Text	
Contact Telephone Number	Contact_Voice_Telephone (10.5)	The telephone number by which individuals can speak to the organization.	cntvoice	Text	Free Text	
Contact TDD/TTY Telephone	Contact_TDD/TTY_Telephone (10.6)	The telephone number by which hearing-impaired individuals can contact the organization. (Complete if applicable).	cnttdd	Text	Free Text	
Contact Fax Number	Contact_Facsimile_Telephone (10.7)	The telephone number of a facsimile machine of the organization. (Complete if applicable).	cntfax	Text	Free Text	
Contact E-mail Address	Contact_Electronic_Mail_Address (10.8)	The address of the electronic mailbox of the organization. (Complete if applicable).	cntemail	Text	Free Text	
Hours of Service	Hours_of_Service (10.9)	Time period when individuals can speak to the organization. (Complete if applicable).	hours	Text	Free Text	
Contact Instructions	Contact_Instructions (10.10)	Supplemental instructions on how or when to contact the organization. (Complete if applicable).	cntinst	Text	Free Text	

Template is based on a subset of the Federal Geographic Data Committee's ***"Content Standard for Digital Geospatial Metadata" Version 2 - 1998. (FGDC-STD-001 June 1998)*.** The complete FGDC standard can be viewed at **www.fgdc.gov/metadata/contstan.html *Areas in gray are descriptive headings. Data entry elements are in white.**

Appendix B: Keywords from ISO 19115 Topic Categories

Code Number	Topic	Description
001	farming	rearing of animals and/or cultivation of plants
002	biota	flora and/or fauna in natural environments
003	boundaries	legal land descriptions
004	Climatology, Meteorology, Atmosphere	processes and phenomena of the atmosphere
005	economy	economic activities, conditions, and employment
006	elevation	height above or below the earth's surface
007	environment	environmental resources, protection, and conservation
008	geoscientific information	information pertaining to the earth sciences
009	health	health, health services, human ecology, and safety
010	imagery, base maps, earth cover	base maps
011	intelligence, military	military bases, structures, activities
012	inland waters	inland water features, drainage systems and characteristics
013	location	positional information and services
014	oceans	features and characteristics of salt water bodies
015	planning, cadastre	information used for future use of the land
016	society	characteristics of society and culture
017	structure	man-made construction
018	transportation	means and aids for conveying persons and/or goods
019	utilities, communication	energy, water and waste systems, and communications infrastructure

CHANGE REQUEST AND TRACKING FORM

Use this form to identify and describe a problem encountered when using the metadata user guide, or to describe a requested change to the user guide. If you have encountered multiple problems or have multiple change requests, use a separate form for each problem or request.

YOUR NAME	
YOUR EMAIL	
YOUR PHONE	
YOUR OPERATING ENVIRONMENT	
DATE	

PLEASE DESCRIBE PROBLEM OR REQUESTED CHANGE (*Give as much detail as possible, use additional pages as necessary. If this request is for the application, please describe your actions that resulted in the problem. Include other software you had open at the time*):

EMAIL COMPLETED FORM TO: METADATA USER GUIDE CHANGE MANAGER

Email: ephtmetadata@cdc.gov.

CHANGE MANAGER (only)	
RECEIVED	
REVIEWED	
ACTION	
COMPLETED	