New Mexico Environmental Public Health Tracking (NM EPHT) User Manual

The New Mexico Environmental Public Health Tracking (NM EPHT) Program at the New Mexico Department of Health integrates environmental and public health information systems. NM EPHT is supported through the Centers for Disease Control and Prevention (CDC) National Environmental Public Health Tracking Program. The NM EPHT Program launched the Web site **NM Tracking** to enable the public, researchers, and other users to learn about and explore relationships between environmental exposures and hazards and their associated health effects.

NM Tracking: https://nmtracking.org/

Web Browser and Software Requirements

Supported Browsers: Internet Explorer (IE) 8 - 10; Firefox 27 or later; Google™ Chrome 32 or later; Safari 4 or later

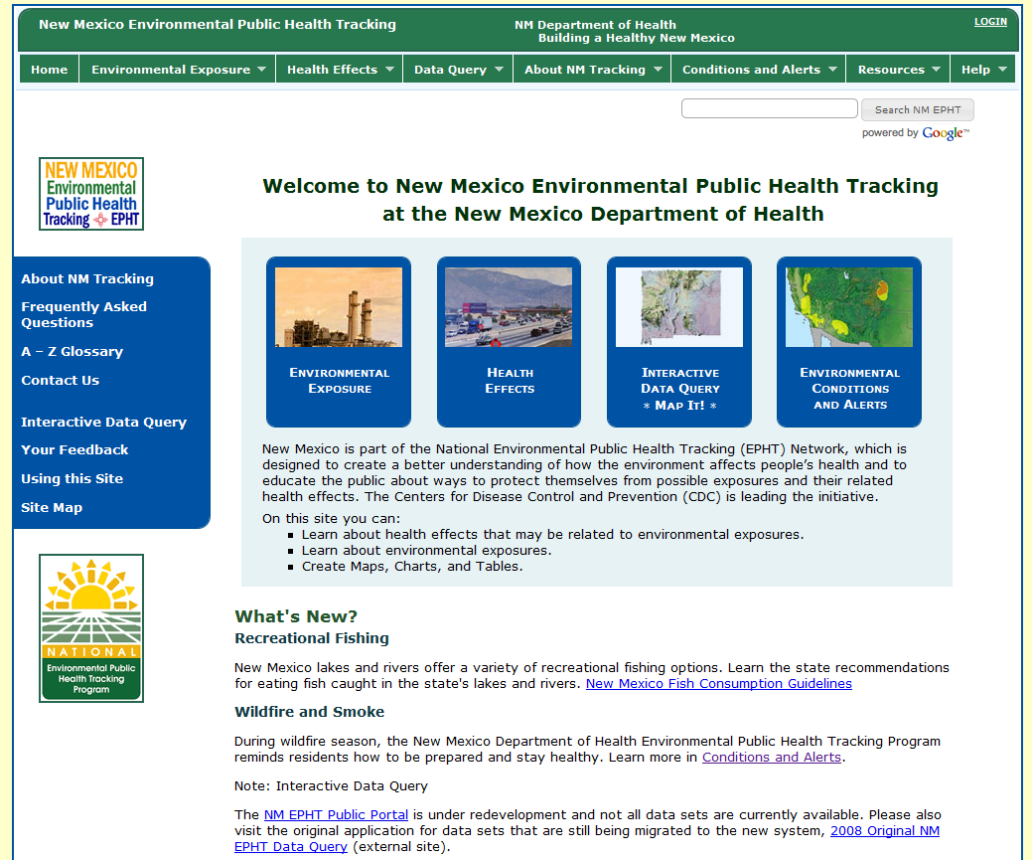


Figure 1 NM Tracking Home Page

More Information

This document is the primary reference for user access to NM Tracking; additional documentation is available online.

1) Online Help: https://nmtracking.org/en/online_help/
2) Using this Site: https://nmtracking.org/online_help/
3) Frequently Asked Questions (FAQ): https://nmtracking.org/en/resources/faq/
4) Contact Us: https://nmtracking.org/en/nmdoh_contact/

LOGIN

You are automatically logged in with a public account. The LOGIN option is for restricted-access and administrative purposes only.

Main Menu

The Main Menu has eight menu tabs (Figure 2) across the top of the page: Home, Environmental Exposure, Health Effects, Data Query, About NM Tracking, Conditions and Alerts, Resources, and Help. Each of these headings links to an information page. Interactive Data Query, under Data Query, links to the NM Tracking data query and visualization application.



Figure 2 Menu Categories

You can access the information under each heading in two ways.

1) Select a heading to see a specific page. For example, click on “Health Effects” to see a page with general information about and links to each Health Effects category.
2) Hover your mouse over the heading and select from the sub-menu (Figure 3).



Figure 3 Menu with drop-down choices

Navigation Box

The left-hand navigation box (Figure 4) is located below the NM EPHT logo, and has two areas of information: the top, with links that change depending on the page, and the bottom, with links (listed below) that remain the same.

Interactive Data Query: NM Tracking interactive data query and visualization tool

Your Feedback: Send feedback about NM Tracking, includes links to external forms

Using this Site: Using and navigating the Web site, contacting the NM Department of Health

Site Map: Lists sections in the Web site



Figure 4 Navigation Box

Search NM EPHT

Located in the upper right corner (Figure 5) is a **Google search** option that specifically searches the NM EPHT Web site. After entering your search terms (same as in Google) click *Search NM EPHT*.

Note: The search engine displays results in a Google page. Each result links to an NM Tracking page.

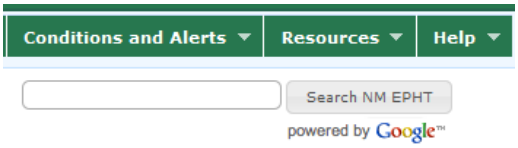


Figure 5 Search NM EPHT

Home Page Links

The NM Tracking home page has four boxed icons (Figure 6) that link the user to key areas of the site: Environmental Exposure, Health Effects, Interactive Data Query, and Environmental Conditions and Alerts. Each of these is also a heading in the main menu.



Figure 6 Home Page Links

Interactive Data Query

The interactive data query application can be accessed from several locations: 1) as an option in the drop-down list under *Data Query* in the main menu; 2) in the *Interactive Data Query* box on the NM Tracking home page; 3) from the blue navigation box on the left side of the Web pages; and 4) from the URL https://nmtracking.org/en/data_query/.

When the application opens, you will see an empty box (Figure 7). Data are selectable from the Domain tabs across the top and the Indicator tabs along the left side. The Domain choices along the top are: Environmental Exposures, Health Effects, Population and Geography, and Compare Data. Each of these has different options along the left side. Information about each of these indicators and measures can be found on the NM Tracking site.

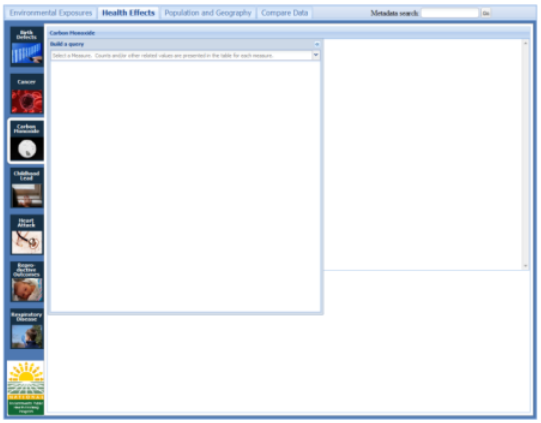


Figure 7 Interactive Data Query—Default view

Note: **Compare Data** is different from **Environmental Exposures**, **Health Effects**, and **Population and Geography** in that it allows you to compare two sets of data after you have set up the initial data queries.

To **query a data set**, click on its icon in the left-side menu tabs. Each data set has a variable number of steps to build a query. These range from selecting from one data source to numerous parameter-selection steps. There are two common types of pages: one where a county-boundary map appears immediately (Figure 8) and one where the map appears after you submit the query (Figure 9).

For the map-after-query option, a series of blue drop-down boxes appears, with several questions about the data you want to see. The questions involve the geographic extent, time period, and measure-specific parameters. You do not need to select these options; you can simply click *Submit* and the default map and data will appear (Figure 10).

The output/results interface has three areas.

1) Graphics
2) Legend (top right)
3) Data Table (across the bottom)

At the top of the Interactive Data Query Box is a **metadata search** option. Enter your key word(s) to search metadata for the included data types. Click the *Go* button after typing in your choice, and a pop-up window will appear with the results. Clicking on a link will take you that metadata file.

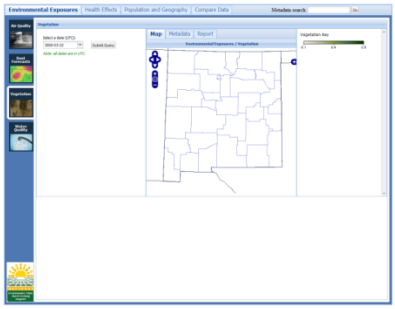


Figure 8 Interactive Query Tool—Map-first option



Figure 10 Interactive Query Tool—example of output

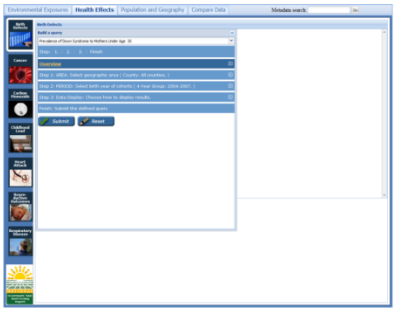


Figure 9 Interactive Query Tool—Map-after-query option

The Graphical Output

This appears as a map when it first opens (Figure 12). There are four tabs across the top: **Map**, **Chart**, **Metadata**, and **Report**. The one being displayed is highlighted white. The title is a description of the data you queried.

On the **map**, you can zoom in and out, change the transparency, and move the map (Figure 11).

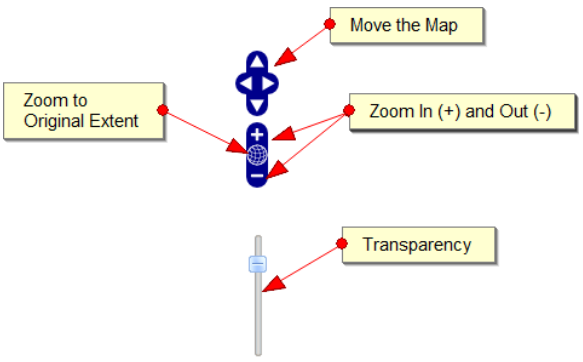


Figure 11 Map Controls

The **chart** option allows you to flip the data axes (Figure 13).

The **metadata** record provides Federal Geographic Data Committee (FGDC) compliant metadata content for each data type. HTML and XML versions can be generated by clicking on the links in the upper right corner.

The indicator **report** is a summary document for the data and provides additional environmental health information. An HTML version of the report can be generated as a new window by clicking on the link in the upper right corner.

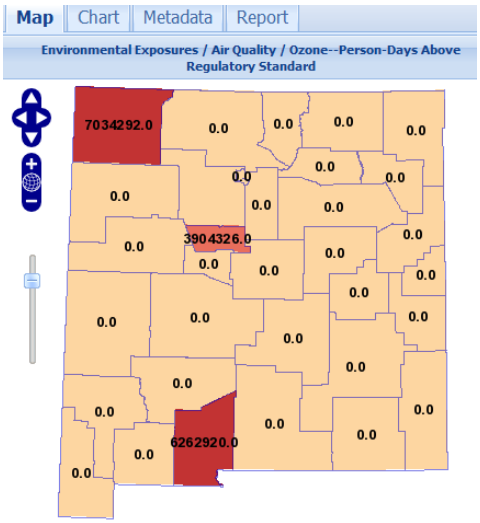


Figure 12 Graphical Output—Map

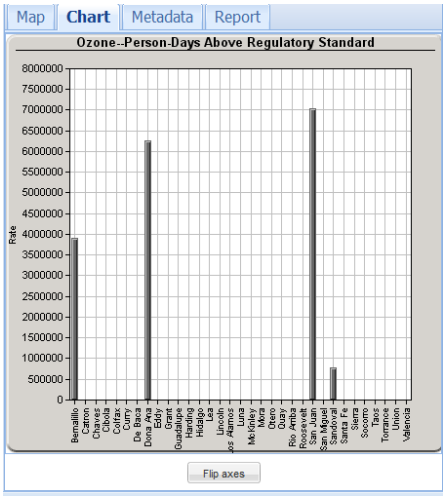


Figure 13 Graphical Output—Chart

Legend

The legend is located on the right side of the Interactive Data Query window (Figure 14). It includes information about the data being queried and the parameters you selected.

The legend is divided into three sections: title, boundary, and data-range (legend information); Summary Statistics; and Query Parameters. Legend information includes a descriptive title for the visible map and the descriptive information about the mapped layers. Summary statistics summarize the visible layers into minimal NM statistics. Query Parameters display the selections from the query-builder section.

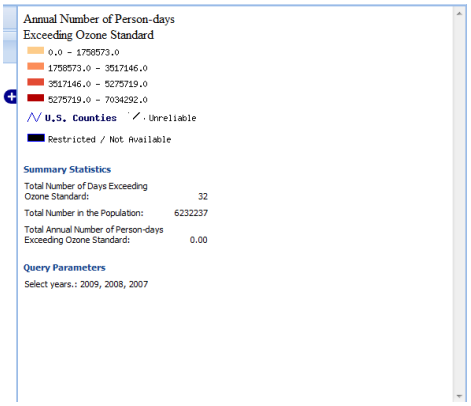


Figure 14 Interactive Data Query—Legend

Map Layers

To turn map layers on and off, press the blue "+" symbol on the left side of the legend/right side of the map. The symbol expands (Figure 15) to display available data layers. Turn a layer on or off by clicking the checkbox to the left.

Available layers include: Shaded Relief, various NM-IBIS options, County Boundaries, Water Boundaries, County Picker, and NM-IBIS Labels. (NM-IBIS: New Mexico's Indicator-Based Information System; NM-IBIS is the NM Tracking health and environmental data provider)

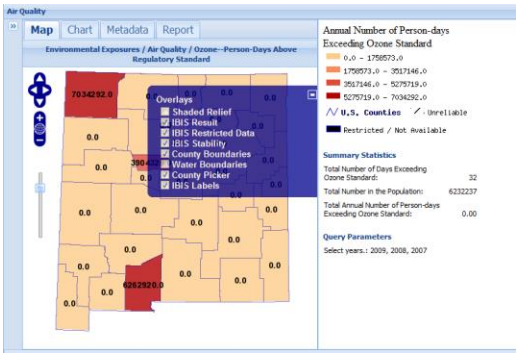
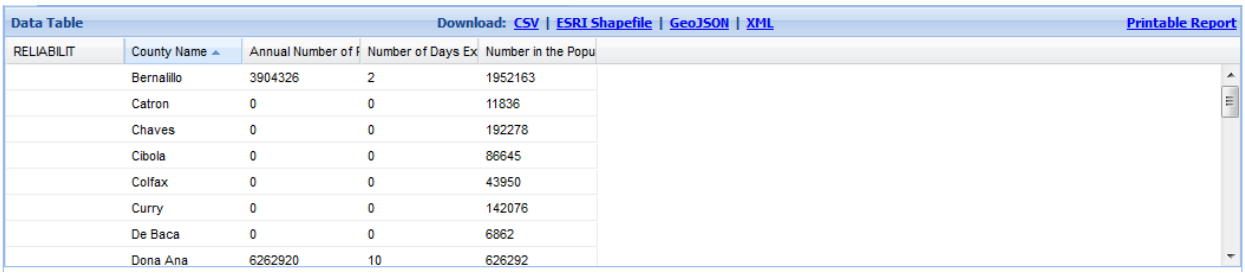


Figure 15 Interactive Data Query—Layer Selection Expanded

Data Table

The display in the bottom of the interactive data query (Figure 16) provides the map data in table form and as downloadable CSV, ESRI Shapefile, GEOJSON, and XML files.



RELIABILIT	County Name	Annual Number of F	Number of Days Ex	Number in the Popu
	Bernalillo	3904326	2	1952163
	Catron	0	0	11836
	Chaves	0	0	192278
	Cibola	0	0	86645
	Colfax	0	0	43950
	Curry	0	0	142076
	De Baca	0	0	6862
	Dona Ana	6262920	10	626292

Figure 16 Interactive Data Query—Table view

To highlight a geographic feature on the map, click on a row in the table. The user can also sort by the columns by clicking on the arrow on the right side of the column (Figure 17). To show or hide the column, check or uncheck the appropriate column in the drop down window.

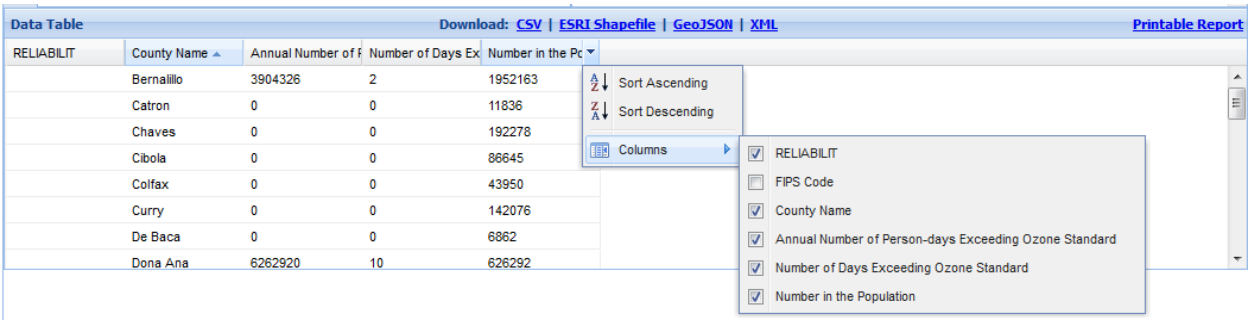


Figure 17 Interactive Data Query—Expanded column options

Data can be generated as a printable Report by clicking the *Printable Report* link in the upper right corner of the Data Table section. The generated report opens in a new window and includes the legend, map, chart, and table. You can save or print the report from your Web browser.

Compare Data

The **Compare Data** feature is located as a tab across the top of the Interactive Data Query. This feature uses queries that you have already generated and REQURES that queries have already been generated in the session.

After selecting the "Compare Data" tab, click the "Choose Query Results" from the upper right corner of each map box (Figure 18). A pop-up opens with the queries that the user has generated. Only data sets with the same type of geographic class (for example, county) are comparable.

To map results, choose query results for both windows—only one data set can be mapped at a time. Results are displayed that can be compared visually (Figure 19).

Compare between two data sets by selecting as many queries as wanted from the pop-up (Figure 20). The combined data can be viewed in a Chart or Table and can be printed and downloaded. If there are missing values from any of the queries, the item will not show up in the chart format.

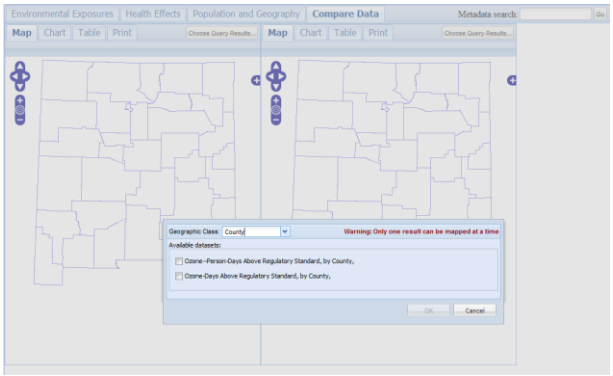


Figure 18 Compare Data—Choose Query Results

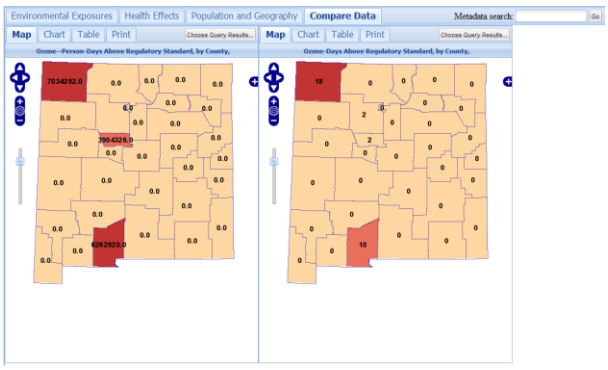


Figure 19 Compare Data—Results



Figure 20 Compare Data—Chart and Table views

Water Quality Tables

The Interactive Data Query Environmental Exposures **Drinking Water Contaminants** page displays query options and results for water contaminants by community water system. The **Drinking Water Quality** page displays tables and charts for water-contaminants data aggregated across community water systems. Tables are available as downloadable data and page displays.

Drinking Water Quality data are also available in the CMS “Environmental Exposure” page: Drinking Water Quality > Community Water System Data. Data are displayed by contaminant in Google tables.