GBD Results Tool User Guide

This document provides a basic guide for using the GBD Results Tool. The tool allows retrieval of GBD 2019 results and includes the following:

- Results: All GBD causes, risks, impairments, etiologies, and injuries by nature
- Measures: deaths, years of life lost (YLLs), years lived with disability (YLDs), disability-adjusted life years (DALYs), prevalence, incidence, life expectancy, probability of death (PoD), healthy life expectancy (HALE), maternal mortality ratio (MMR), and summary exposure value (SEV)
- Metrics (units): number, rate, percent, years, and probability of death
- Years: 1990-2019; annual results for all measures
- Ages: All GBD age groups
- Sexes: males, females, both sexes
- **Locations**: GBD super regions, regions, countries, select subnational units, and custom regions (WHO regions, World Bank Income Levels, and more)

(The GBD Results Tool's <u>Codebook and Values Files</u> ZIP contains much more detailed information on value coding, and includes values hierarchies, results by measure, contexts by age, and metrics by measure definitions.)

The tool can return results both as a visualization (a web-based data table with line charts) and as a CSV file. The CSV file is downloadable from the tool's user interface.

The web-based data table displays rounded figures. For most queries, complete results with full statistical precision are only available via download.

Accessing the Tool

In Microsoft Edge, Internet Explorer 11, Google Chrome, Firefox, or Safari browsers, go to http://ghdx.healthdata.org/gbd-results-tool

Querying the Data

Specify your query parameters using the tool's controls. Results display in the table and line charts below the controls. The controls in the grid at the top are primarily drop-down menus.



Figure 1. GBD Results Tool user interface: drop-down menus.

There are two ways to make a selection in a drop-down menu:

- 1. **Click and Scroll**: Click on the down arrow button (or within the body of the menu), scroll, and check the box for a desired value.
- 2. **Autocomplete**: Start typing the name of a specific value, and when it appears, check the box beside it.





Figure 2. Selecting values from drop-downs: scroll or autocomplete.

To clear selections from any drop-down, click the "x".



Figure 3. Clearing existing selections.

Guidance for Querying the Data

Base: This menu offers three choices:

- **Single**: Select for single year estimates
- Change: Select for multi-year estimates for select year ranges
- **PoD**: Select for "Probability of death" estimates

(Note: "Probability of death" results can only be accessed by choosing this base, along with the "Probability of death" metric and measure.)

Context: This menu defines the type of indicator results you can access: GBD cause, risk, impairment, etc.

Each context includes a different set of measures. See the **Appendix: Context by Measure** for a table displaying the measures provided for each context.

Only certain causes are related with each risk, impairment, and injury by nature. The <u>Codebook</u> includes a **Results by Measure** file which shows the measures provided for each indicator – and to which causes each risk, impairment, etiology, and injury by nature are related.

To view **Cause** results:

- Select "Cause" in the Context drop-down
- Select the desired measure(s) in the Measure drop-down
- Select the desired cause(s) in the Cause drop-down

To view Risk results:

- Select "Risk" in the Context drop-down
- Select the desired measure(s) in the Measure drop-down
- Select the desired risk(s) in the Risk drop down
- Select the desired related cause(s) in the <u>Cause</u> drop-down*

To view **Impairment** results:

- Select "Impairment" in the Context drop-down
- Select the desired measure(s) in the <u>Measure</u> drop-down
- Select the desired impairment(s) in the <u>Impairment</u> drop down
- Select the desired related cause(s) in the Cause drop-down*

To view **Etiology** results:

- Select "Impairment" in the Context drop-down
- Select the desired measure(s) in the Measure drop-down
- Select the desired impairment(s) in the Etiology drop down
- Select the desired related cause(s) in the <u>Cause</u> drop-down*

To view **Injury by Nature** results:

- Select "Injury" in the Context drop-down
- Select the desired measure(s) in the Measure drop-down
- Select the desired injury (or injuries) in the <u>Injury</u> drop down
- Select the desired related cause(s) in the Cause drop-down*

(* Alternately, you can choose "select all" in the Cause drop-down; only results for causes related to the selected risks, impairments, etiologies, or injuries will be returned.)

To view **Life Expectancy**, **HALE**, or **SEV** results:

• Simply select one of these items in Context drop-down

NOTE: "Population," "Fertility," and "Mortality" are also included in the Context menu. Select any of these items, and one or more links will appear to a GHDx catalog record, or records. These records contain CSV files with results for these items.

Select the desired values for Location, Age, Sex, Year, and Metric in the other drop-down menus.

Click the **Search** button to execute a query.

Further Filtering Results

You can further filter results that appear in the data table using the text fields that appear directly below the table headers (e.g., Measure, Location, Sex, etc.).



Figure 4. Data table filters.

Just start typing the name of a desired value into one of the text fields and the results will automatically filter. For example, if your results include estimates for both deaths and DALYs, but you want to filter for DALYs only, start typing "DALYs" into the **Measure** field.

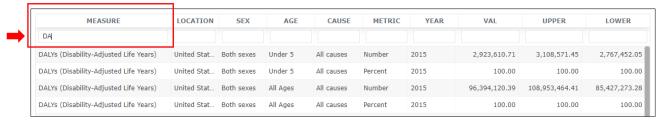


Figure 5. Filtering results by "Measure."

Large Results

Queries can produce large result sets. If your query would result in more rows than can be displayed in the tool's data table, the following message will appear:

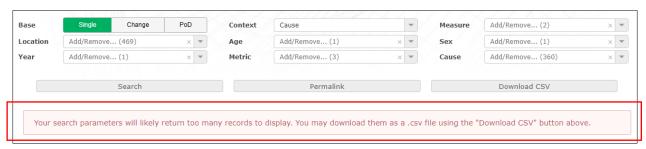


Figure 6. The "too many records to display" message.

Saving and Downloading Results

To save a query:

1. Click the **Permalink** button.

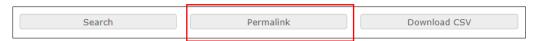


Figure 7. The Permalink button.

- 2. When the Permalink box appears, click the **Copy** button to save the link to your computer's clipboard.
- 3. Paste the link in an email, text document, or some other place where you can save and retrieve it.



Figure 8. The Permalink box.

To download a CSV:

1. Click the **Download CSV** button.



Figure 9. The Download CSV button.

- 2. Follow the prompts and select options in the IHME Data Download wizard.
- 3. Check the boxes to indicate you are a non-commercial user and that you have read IHME's user agreement and privacy policy.

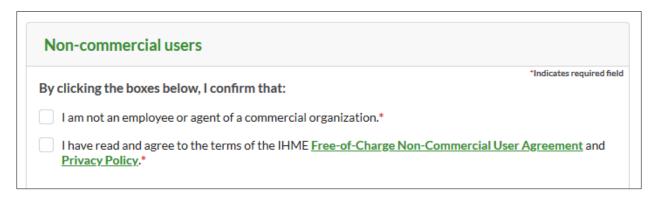


Figure 10. Checkboxes for Non-commercial Users.

4. Choose for your file(s) to include only **IDs** (numeric coding: e.g., 101, 429), **Names** (e.g., Canada, Breast cancer), or **Both**. Then enter your email and click **Submit**.

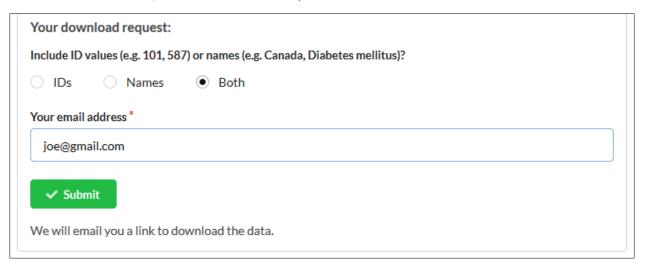


Figure 11. Value Options, Email, and Submission.

5. You will receive a message that you will receive an email when your downloads are ready.

A request may take up to several hours to complete, depending on the search parameters entered. You will receive a confirmation email with a link to a page where you may check the status of your request. When the process is complete, that page will contain the files' download links. You will receive a second email confirming that your download is ready.

Notes/Issues

- While the GBD Results Tool can be very powerful for querying and downloading GBD results, including many search parameters may cause some issues.
 - Queries with massive parameters can sometimes result in files that omit some results specified in the query – certain age groups, years, etc.
 - We recommend that you break your query down into smaller parts. For example, do not query all locations AND many or all causes, age groups, years, etc. at the same time.
 - A good rule of thumb would be to search by relatively narrow parameters first and see if the results appear in the data table. Then you may expand your parameters incrementally.
- The tool does not work with Internet Explorer versions 10 and earlier.

If you discover any issues not mentioned in this guide, please send a note to data@healthdata.org

Appendix: Troubleshooting

This troubleshooting appendix includes workarounds for some of the GBD Results Tool's known issues.

Combining Multiple CSV Files

Sometimes, queries will return data in multiple CSV files. Each file will contain a segment of the data and have identical columns and a header row.

To combine multiple CSV files in Excel:

- 1. Open the first file in the set you want to combine in Excel.
- 2. Open the next file in the set.
- 3. Select all cells below the first line in this next file.
 - a. Note: A simple way to do this is to select cell A2 (the first and leftmost datacontaining cell) and press the following keys: Control + Shift + \downarrow + \rightarrow .
- 4. Copy the selected cells.
- 5. Paste the copied cells into the first and leftmost blank cell in the first file.
- 6. Repeat steps 2-5 until the data from all files have been copied into the first one.

Opening CSV Files with Special Characters in Excel

Sometimes, queries result in files that contain special characters, such as place names with accents like "México." These characters may not display properly when the CSV file is opened in Excel. To solve this problem:

- 1. Open Notepad. [Note: this applies only to Windows; a solution for Mac users is forthcoming.]
- 2. Click File > Open (Ctrl + O)



Figure 12. Opening a CSV in Notepad.

3. Browse to and open the exported CSV, making sure to select "All Files" in the bottom right.

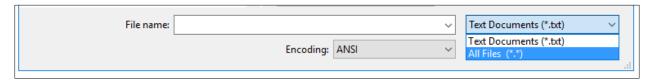


Figure 13. Selecting "All Files"

4. In the Encoding drop-down menu at the bottom, change from ANSI to UTF-8.

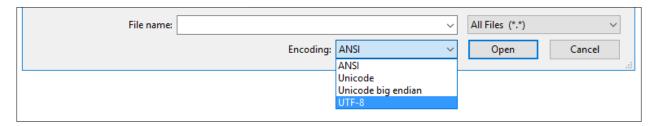


Figure 14. Selecting UTF-8 Encoding.

5. Save the file. When you reopen it in Excel, the special characters should appear correctly.

Appendix: Context by Measure

		CONTEXT							
MEASURE	Cause	Risk	Impairment	Etiology	SEV	HALE	Life	Injury	PoD
							expectancy		
Deaths	Х	Χ		Χ					
DALYs	Х	Х		Χ					
YLDs	Х	Х	Х	Χ				Х	
YLLs	Х	Х		Х					
Prevalence	Х		Х					Х	
Incidence	Х		Х					Х	
MMR	Х								
SEV					Х				
HALE						Х			
Life							Х		
expectancy									