



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PUBLIC HEALTH
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August 1, 2023

Greetings Honorable Tribal Leaders and Tribal Partners:

SUBJECT: HEAL Act Updates – Environmental Justice Assessments, Environmental Justice in Agency Budgeting and Funding; and Draft Guidance for State Agencies using Environmental Health Disparities Map

In accordance with [chapter 43.376 RCW](#), the [Washington State Centennial Accord of 1989](#), and [DOH Consultation and Collaboration Procedure](#), we invite collaboration with Indian tribes and tribal organizations in the development of policies, agreements, and program implementation that directly affects Indian tribes and tribal people. We are writing today to share Department of Health (DOH) updates to implementation of the [Healthy Environment for All \(HEAL\) Act](#) and invite your input into the [Environmental Health Disparities map](#) technical guidance.

HEAL Act Updates

As of July 1, 2023, the DOH has begun implementation of [environmental justice assessments](#) for significant agency actions, as defined by RCW [70A.02.010](#). As environmental justice assessments are initiated, they will be posted to the [DOH Environmental Justice webpage](#) and filed with the Office of Financial Management here: <https://ofm.wa.gov/budget/budget-related-information/agency-activities/environmental-justice-assessment-notice>.

Additionally, starting July 1, 2023 and as per RCW [70A.020.080](#), the DOH must consider environmental justice principles when making decisions about budgets or funding for programs that create environmental benefits or cause environmental harms. We have published an initial list of agency processes and new programs that are subject to this requirement on the [DOH Environmental Justice webpage](#) and will be adding to this list as additional programs are identified.

Please direct your written comments or requests for additional information regarding significant agency actions and consideration of environmental justice principles to Leah Wood, Equity and Environmental Justice Consultant, at 360-913-2580 or Leah.Wood@doh.wa.gov.

Environmental Health Disparities (EHD) Map Updates

Under the [HEAL Act](#), including [RCW 43.70.815](#), the DOH is required to develop technical guidance for agencies of how to use the EHD map's features, and explanation of map and limitations. The EHD map is a tool being used by state agencies in support of their HEAL Act obligations and to identify environmental health disparities, in combination with other tools.

The Washington State Department of Health has created the first part of this guidance and is inviting comments. For additional information or to provide comments on the guidance please contact Jeff Bryant, Spatial Epidemiologist, by telephone at 360-236-3269 or by email at Jeffery.bryant@doh.wa.gov by August 18, 2023 so we can incorporate your input prior to releasing the guidance for agency use.

Please contact Candice Wilson, our agency's Tribal Policy Director, by telephone at 260-819-7626 or by email at candice.wilson@doh.wa.gov if you have any tribal policy related questions.

Please forward this information to any interested party.

Sincerely,



Lauren Jenks, Assistant Secretary, Environmental Public Health

Enclosure: Guidance for State Agencies using Environmental Health Disparities Map

cc: Umair A. Shah, MD, MPH, Secretary of Health, Department of Health
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Kristin Peterson, Chief of Policy, Planning & Evaluation, Department of Health
Elizabeth Perez, Chief of Public Affairs and Equity, Department of Health
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Sierra Rotakhina, Environmental Justice Council Manager
The Hon. Jarred-Michael Erickson, Confederated Tribes of the Colville Reservation
The Hon. Misty Napeahi, Tulalip Tribes
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A First Step to Identify Overburdened Communities: Using the Environmental Health Disparities Map and Supplemental Tools

What is the Environmental Health Disparities Map?

The [Washington Environmental Health Disparities \(EHD\) map](#) is an interactive mapping tool. It compares Washington communities based on their exposure and vulnerability to environmental health risks. It can help find communities experiencing greater environmental health burdens. The [Healthy Environment for All \(HEAL\) Act](#) requires state agencies to identify overburdened communities and vulnerable populations and to conduct environmental justice assessments. It mentions the EHD map as a tool that could be used for these activities.

How was the Environmental Health Disparities Map Created?

We created the EHD map with the help of community organizations, researchers, and government. We built the current map using factors identified by communities during listening sessions. It is a living tool we update based on community feedback and evolving science and data.

The EHD map uses a cumulative impact model to compare Washington communities. Cumulative impacts are when factors interact to have a larger impact than each factor on its own. Cumulative environmental health impacts are the combination of several environmental and health impacts. Cumulative impact assessments are important for addressing environmental justice issues. They show how social factors, such as poverty, combine with preexisting health conditions to increase the risk for health impacts from environmental hazards. The HEAL Act references the EHD map as a cumulative impact model that agencies can use as part of their processes for conducting equitable community engagement and environmental justice assessments.

In the EHD map we define communities as census tracts. The size of census tracts varies based on population density. The average size is 5,000 people, but the size varies from about 2,000 to 8,000 people.

How to Use the Environmental Health Disparities Map

We recommend watching our [four-minute video](#) that shows the map functions.

The EHD map is one of the “topics” available on our Information by Location tool. Each topic is divided into themes and measures.

- Topic: the top level of the map, represents the overall rank combining data for all of the measures in the topic
- Theme: a group of related measures whose ranks have been combined
- Measures: individual indicators of health, environmental conditions or socioeconomic status

There is a menu box at the top left of the Information by Location tool. At the top of the menu box there are five symbols – each leading to a different tab on the menu. The first tab lets you select which topic you want, in this case, the EHD map. The next tab is where you can add overlays to see other

feature on the maps, such as hospital or farmworker housing locations. The remaining tabs allow you to look up locations by address or census tract number, find out background information about the map and its data, and get usage tips.

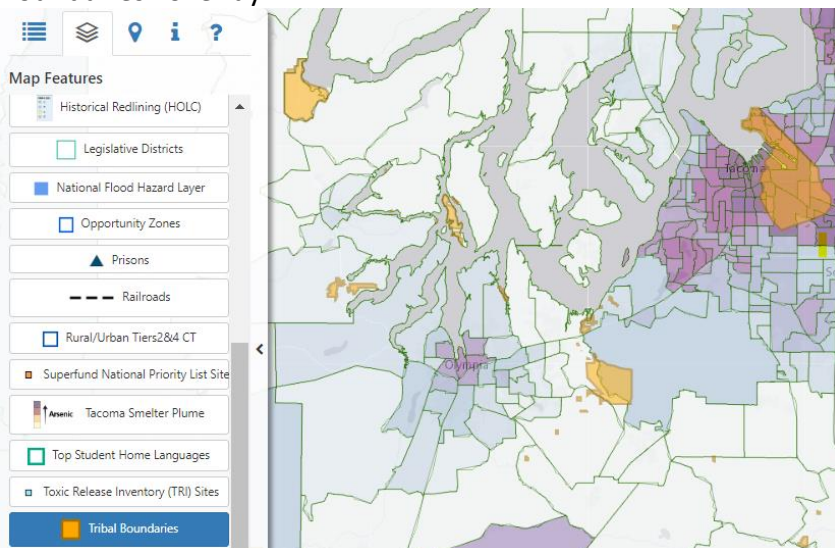
When you click on a census tract on the map, you can see the community’s rank and demographic information. The map displays a community's overall environmental health disparity rank between 1 (least burden) and 10 (highest burden). Each rank represents 10% of the communities. For example, if a community is ranked an 8, then 70% of Washington communities have a lower level of environmental health burden. At the same time, 20% have a greater level of burden. You can see the rank at the topic, theme, and measure level, depending on what you have selected in the menu box.

Least impacted							Most impacted		
1	2	3	4	5	6	7	8	9	10
10% of communities	10% of communities	10% of communities	10% of communities	10% of communities	10% of communities	10% of communities	10% of communities	10% of communities	10% of communities
70% of communities are less impacted							10% of communities are similarly impacted	20% of communities are more impacted	

Identifying Overburdened Communities and Vulnerable Populations

The [Clean Energy Transformation Act \(CETA\)](#) designates highly impacted communities as:

1. Determined by Department of Health using a cumulative impact analysis. We designated communities with an overall rank of 9 or 10 on the EHD map as “highly impacted.”
2. Census tracts that are fully or partially on Indian Country, as defined in 18 U.S.C. Sec. 1151. This Excel file lists census tracts and whether they include reservation, disputed lands, and off-reservation tribal lands. This information can also be viewed on the EHD map using the “Tribal Boundaries” overlay.



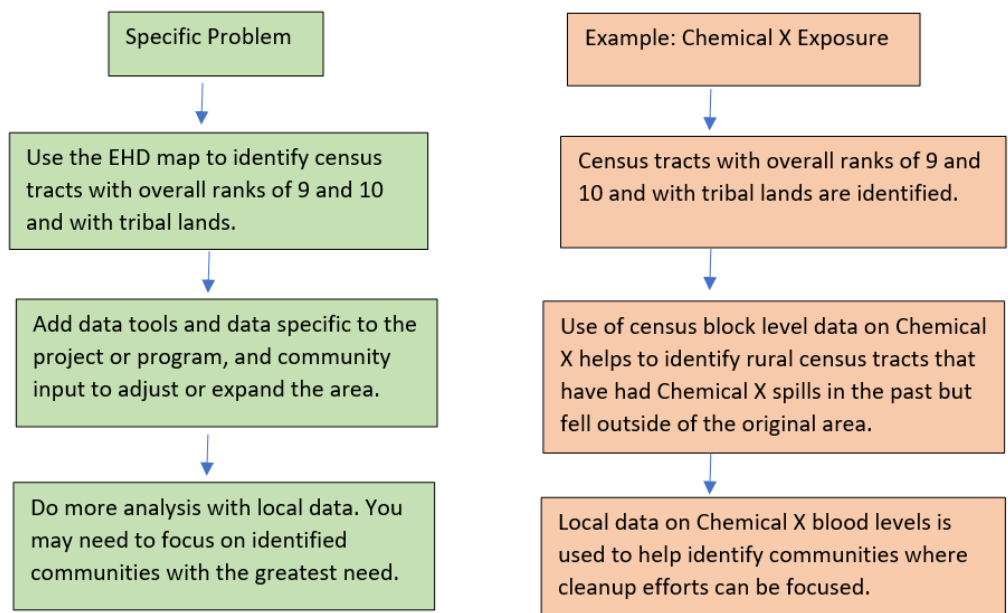
In the HEAL and Climate Commitment acts, overburdened communities and vulnerable populations are more broadly defined. Agencies will need to identify these for each project using guidance and advice from the Environmental Justice Council and the detailed process developed by the HEAL Interagency Workgroup (IAWG).

The EHD map is not the sole tool you should use to identify these communities. It is a good starting point, and it is included in the more detailed process created by the IAWG. For some projects, communities with an overall rank of 7 or 8 might be considered. You should also use additional data and tools related to your project and community knowledge. For example, in rural areas where census tracts are larger, you may wish to use relevant census block level data to get greater detail. The U.S. Environmental Protection Agency’s [EJScreen](#) has many datasets at the block level. Use your program area expertise to identify tools and methods that are appropriate to the project and the data you are working with.

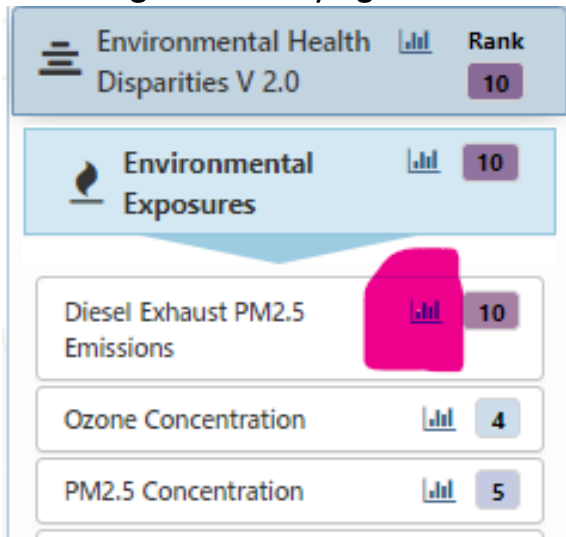
The EHD map is meant to be used as a starting point and combined with other tools
The EHD map shows which census tracts are experiencing greater environmental health burdens based on the cumulative impact of the map’s measures. This is part, but not all, of what contributes to a community being overburdened. The EHD map on its own is insufficient for identifying overburdened communities. The EHD map is not a replacement for community outreach or tribal consultation. Many new tools are being developed and can be used in conjunction with the EHD map or as an alternative. We list some tools at the end of this document. You should include other data, tools, and appropriate outreach in your decision making. We strongly encourage documenting methods and making them publicly available.


Using Additional Data with the EHD Map

This flow chart shows the basic way the EHD map is meant to be used. It is a starting point for analysis. You should add tools and data to meet the needs of the specific project or problem.



Accessing the underlying data



To access the data used to create the ranks, you can select the graph icon  next to the measure, like the highlighted example.

You can also export a data table with the underlying data. More information on how to export the data is [available online](#).

Our data is also available from the [Washington Geospatial Open Data Portal](#).

Limitations of the EHD Map

The EHD map is a useful model but does not address all environmental and health issues. Communities are made up of people, with diverse ideas, histories, and experiences. Be aware of the map's limits and apply your critical thinking and creativity.

- The EHD map does not include every environmental concern or population vulnerability. It currently includes 19 measures. You should use other data related to your project. For example, you should be cautious when using the EHD map to assess rural areas and tribal lands because of the uniqueness of the communities and large area of census tracts.
- The data on the EHD map are limited to current data collection methods. Each method has limitations. Please see the measure notes for more details on measure limitations.
- Because the EHD map ranks are relative, the differences in the underlying measures may be small. Please use the underlying measure data, following the instructions above, to look at the differences.
- Numbers are not the whole story. Consider the cultural differences, history and other characteristics of a community. Each situation will need different pieces of supporting information.
- There are some census tracts that have no data, or limited data, due to low population. A small number of cases or counts makes statewide comparisons more difficult. Rates calculated in these areas are widely variable from year to year and are more likely to be inaccurate.
- The EHD map uses data that is a snapshot in time. It is required by law to be updated once every 3 years.
- The data used in the EHD map is from the past. It should not be used as a predictive tool.

Next Steps for EHD Map Guidance Development

We will create:

- A description of the map overlays and their data sources.

- Examples of how agencies are successfully using the map in combination with other data.
- A video description of the technical aspects of the map and potential uses.
- A list of tools that may be useful in specific contexts where the map has limitations (such as rural areas). These lists may include supplementary tools that other agencies or tribal governments found useful and trustworthy.
- A description of how we develop new measures for the EHD map. We will explain how we get ideas from the public, tribes and others, how scientific literature guides the selection of our measures, how subject matter experts provide input, how we evaluate if the measures are appropriate, and who makes the decisions.
- An update of the map to 2020 census tracts from 2010 census tracts. There are about 400 new census tracts in the 2020 census tracts.
- Revised guidance documents as the EHD map is updated.

Next Steps for EHD Map Development

The HEAL Act requires us to seek feedback from representatives from overburdened communities and vulnerable populations. We do this through community engagement, tribal collaboration and listening sessions across the state and through opportunities for public comment.

We will develop:

- New indicators for asthma, wildfire smoke exposure, pesticide exposure, water quality, tree canopy and greenspace, and a group of climate change indicators.
- A comprehensive evaluation of the EHD map. Review and modify methods for existing measures as needed.
- Tools and measures that reflect tribal and community values and concerns.
- A tool to track changes in community ranking over time as new versions of the map are created.
- Ways to solicit feedback from overburdened communities and vulnerable populations through community engagement.
- Offer government-to-government tribal consultation and collaboration with federally recognized Indian tribes.

How to Reference the EHD Map

Washington State Department of Health. Washington Environmental Health Disparities Map. Version 2.0. <https://fortress.wa.gov/doh/wtn/WTNIBL/Map/EHD>. Published July 28, 2022

Contact the Environmental Health Disparities Map Team

If you have questions, concerns, or feedback on how to improve the EHD map or its corresponding tools, please let us know. We are available to consult on how to use the map or how to interpret information pertaining to the map. Below are links to tools and resources. We also encourage you to tell us about how you use our map. We are happy to hear from you to learn how the map could better serve you.

Questions relating directly to the EHD map can be directed to our email: EHDmap@doh.wa.gov.

Washington Tracking Network and EHD Map Resources:

[How to Export Data from the Data Portal](#)

[Information by Location Tool](#)

[Environmental Health Disparities Map Landing Page](#)

[Environmental Health Disparities Map](#)

[Environmental Health Disparities Map Technical Report](#)

[Washington State Geospatial Open Data Portal EHD map](#)

Additional Tools and Resources:

[Agency for Toxic Substances and Disease Registry – Environmental Justice Index](#)

[Council on Environmental Quality – Climate and Economic Justice Screening Tool](#)

[Centers for Disease Control and Prevention – Social Vulnerability Index](#)

[Environmental Protection Agency – EJSCREEN](#)

[University of Wisconsin – Area Deprivation Index](#)

[Washington State Department of Health - Clean Energy Transformation Act – Cumulative Impact Analysis](#)

[Washington State Department of Health – Guidelines for Working with Small Numbers](#)

[Washington State Department of Health – Guidelines for Using Rural-Urban Classification Systems for Public Health Assessment](#)

[Washington State Institute for Public Policy – Technical Review of the EHD Map](#)

[FEMA’s National Risk Index](#)

[U.S. Department of Transportation – Transportation Disadvantaged Census Tracts](#)