



**NORTHWEST PORTLAND AREA
INDIAN HEALTH BOARD**
Environmental Public Health Program

STANDARD OPERATING PROCEDURE
Community Environmental Health Profiles

Approval: _____
Director Date

Purpose and Scope

The purpose of this standard operating procedure (SOP) is to provide guidance on methods to conduct Community Environmental Health Assessments (CEHAs), develop Community Environmental Health Improvement Plans (CEHIPs), and package the report as a Community Environmental Health Profile (CEHP). The intent is to promote community mobilization and tribal government involvement in identifying environmental health (EH) needs to prioritize needs and develop strategies to address the needs.

The Northwest Portland Area Indian Health Board (NPAIHB) Environmental Public Health (EPH) Program will develop CEHPs in partnership with tribal communities. The implementation method is based on principles of community engagement and guidelines from the Protocol for Assessing Community Excellence in Environmental Health and Mobilizing for Action through Partnerships and Planning models.

Responsibilities and Roles

NPAIHB

- Engage tribal partners to initiate the CEHA process
- Determine a plan and strategy for incentivizing the effort within each community
- Develop roles and responsibilities and inform Tribal and other stakeholders about their role
- Collect and organize as much of the data as possible, with input and information from tribal partners
- Create a database
- Ensure requested Tribal Resolutions are completed
- Conduct site visits for community engagement or when needed
- Ensure completion of CEHP is delivered on time and in an appropriate time frame
- Work with all stakeholders to implement the strategies and recommendations identified in the CEHIP

Tribal Collaborating Staff

- Provide relevant environmental health data to the lead facilitator
- Engage in communication with various tribal/federal/local stakeholders when necessary
- Co-design and facilitate methods for collecting community input and tribal traditional ecological knowledge (TEK) data

Key Terms

Community Assets: Individuals, associations, institutions, resources, and financial sources that help to build a future in a particular area; and can also be mobilized to address environmental problems facing the community.

Community Environmental Health Assessment (CEHA): A process intended to involve affected residents and other stakeholders in identifying and addressing environmental health problems in their communities.

Community Environmental Health Improvement Plan (CEHIP): A long-term, systematic effort to address environmental health problems based on the results of the CEHA.

Community Environmental Health Profile (CEHP): A comprehensive document that includes key indicators of health outcomes, describing the population health status of a community and factors that have the potential to influence health outcomes, such as health care access and quality, health behaviors, social factors, and the physical environment. The social factors and the physical environment are critical because they represent the conditions in which people are born, live, work, and play. For example, neighborhoods with affordable healthy food, safe and accessible housing, and quality environments can positively influence behaviors and help to create healthy lifestyles.

Community Surveys or Focus Groups: A community survey is a method of collecting data from a filtered target audience to help you understand an issue particular to them. In a community survey, representatives from a target audience as survey participants or Focus Groups. These people provide in-depth information about the needs and experiences of the community. Taking surveys in a public place -- setting up a booth or table in the parking lot at a local store, at a tribal community center, or other gathering places -- provides an opportunity to get some exposure for your organization and gather a sample of convenience.

Environmental Health Indicator: Data that provides information about a population's health status in relation to environmental factors. Tribes can use these data to assess health or a factor associated with health, such as an environmental health hazard, exposure risk factor, or an intervention, in a specified population through direct or indirect measures.

Key Informant Interview: A key informant interview is conducted to obtain vital information about a community. It is used to gather information for a needs assessment and utilize the findings for effective prevention planning. It is also used to assess if the needs in your community have changed over time. The information is typically obtained from a community member (key informant) who is in a position to know the community or the particular issue of interest.

Social Determinants of Health (SDOH): The World Health Organization (WHO) created the conceptual framework for action on the SDOH in 2008, based on established theories (material cum structuralist theory, social production of health model, psycho-social model, ecosocial theory) as well as an assumption that health is a social concept. The WHO, Centers for Disease

Control and Prevention (CDC), and others identify social, economic, and political factors such as income, education, occupation, gender, race, and ethnicity, and how they influence a person's socioeconomic position, which, in turn, plays a role in determining health outcomes. These factors lead to living conditions affecting health and quality of life and are called the "social determinants of health. *Healthy People (HP) 2030* highlights the importance of addressing the SDOH by including SDOH as one of its increased focus areas and five overarching goals to "Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all." *HP 2030* groups SDOH into five domains: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context.

Tribal Traditional Ecological Knowledge (TEK): Tribal TEK is a blend of Indigenous ways of knowing and Western science representing a cumulative body of knowledge, practice, and belief, evolving by adaptive processes; passed down through generations by cultural transmission; about relationships of living beings (including humans) with one another and with their environment.

Procedures

I: PREPARATION AND COMMUNITY INTRODUCTIONS

- Become familiar with environmental health indicators and the type of core data that will need to be collected (SEE ATTACHMENT 1)
- Connect with the primary Tribal environmental health contact informally to describe and promote the effort. Send an overview of the project and the data indicators in a follow-up email.
- Schedule a virtual meeting with environmental health contact(s). Prior to meeting:
 - Research and become familiar with the Tribal government and various departments/programs pertinent to the CEHA. (Ex. air quality, water resources, housing, etc.)
 - **If Tribal programs are limited or non-existent, turn to local health authorities and other entities that govern environmental health of the community.
 - Determine the focus or mission of each department/program. Then, be prepared with each department/program's scope to discuss how each may be involved and how to include them.
- Select dates for in-person introductions, project discussion, and strategizing. Work with EH contact(s) to identify who else should be present at the meeting. Set the agenda and share the data indicators and a one-page project description with all attendees. You may also collect initial data during this visit.

NOTE: Don't forget to set a meeting with the Tribal Legal Counsel as a Resolution is most often sought by various departments, and data sharing agreements may need to be developed.

II: PRIMARY DATA COLLECTION (COMMUNITY ENGAGEMENT)

Community engagement and community input serve as the focal points of the CEHA. The community members are place-based, which means they live, work and play within the environment(s) being assessed. There are many ways to get their input regarding environmental health, including surveys, key informant interviews, and community visits.

- **Surveys-** An environmental health survey (both hard copy and online) is vital in getting community input. Depending on the situation, these surveys can be distributed in various fashions (set out in the clinic, mailed, filled out at community events, administered over the phone, etc.)
 - **Seek advice from the Tribal public information officer on the best way to generate feedback.
 - ** Experience with surveys in smaller communities such as a Tribal Reservation has shown mixed results with getting feedback or not. Due to this variability, other ways of primary data collection (even if qualitative) should be considered and sought.
- **Key Informant Interviews-** Interviews can be done over the phone or on a site visit to the community. Conduct these with Tribal employees as well as with community leaders. Tribal employees in the environmental and health fields will allow you to gain information from an informed source, someone that is place-based and someone that faces the communities' problems on a daily basis.
- **Community Visits-** Through community visits, feedback can come in many ways.
 1. Facilitated discussions or focus groups primarily focused on the CEHA project.
 2. To attract an audience, you can create an event that serves as an educational seminar on an environmental 'hot topic' in the community.
 3. Attendance at a scheduled community event also serves as a great way to generate feedback and community engagement.

III: SECONDARY DATA COLLECTION SOURCES

The Community Environmental Health Indicators (Attachment 1) includes potential data sources for each indicator identified. Some are specific and link to a publicly available data set, and others are more general, where the source of information will likely vary by community. Use the information under the "Data Source" column as a starting point for data collection efforts.

The following resources will help you find health data on the community.

Contacts for Tribal Data Important to Planning and Public Health

- The federal, state, local, or tribal health department. The state health department and its website often have health resources for the community. In addition, they may have health information for the county or even for the census tract(s) (census tracts are small, statistical subdivisions of a county). Sometimes local and tribal health departments also track this information or have created profiles based on data available from the state.

- The state, local, or tribal public safety department. The tribal public safety department or federal or state law enforcement keeps records of crime rates, types of crime, and incidence and often have this data available by neighborhood, census tract, or community statistical area. Police departments can also be the best resource for traffic crash statistics. They have data identifying the types of crashes, the areas with the highest crash rates, and if alcohol was a factor.
- The federal, state, local, or tribal transportation department. Not all places have an independent department of transportation. In some places, the transportation network's planning, construction, and maintenance are handled by a department of public works or related agencies. These departments may also be a good resource for records on traffic crashes, as well as information on traffic safety improvements that have been done in the community.
- Census tract data is one of the best sources for creating a tribal community health profile.
- The Tribal or IHS clinics and NPAIHB tribal epi-center will have important information on health outcomes, disease prevalence and incidence rates, and overall health status.
- The Environmental Protection Agency (EPA) or tribal natural resource or environmental program(s) including fisheries, air quality, land conservation or management, etc. may have essential data to further understand the environmental status and conditions. For example, they may have current and historical information on air pollution, water and stream quality and conditions, the health of cultural resources, pesticide use, and ecosystem threats.
- Tribal housing programs and authorities may have data related to housing quality and conditions that can help understand other social determinants of health in the community.

Online Resources for Local Data Important to Planning and Public Health

County Health Ranking and Roadmaps: The Rankings are based on a population health model that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. This website allows you to compare your county to your state and the nation. <http://www.countyhealthrankings.org/>

- Step 1: Click on your state on the map.
- Step 2: On the left-hand side is a column listing the state counties. Click on a county to see its: Health Outcomes (morbidity and mortality); and Health Factors (health behaviors, clinical care, social and economic factors, and physical environment).
- Optional: Scroll down the main page and click on “Build Your Own Roadmap.” Building your roadmap will provide you with the tools and resources to help make your community a healthier place to live, learn, work, and play.

CDC and State Environmental Health Tracking Networks: The Environmental Health Tracking Networks provide county and state-level data. The data is simple to understand and often graphically displayed. The data is also compared to outcomes and indicators in other counties in the state, which can be helpful. This information is limited for tribes since it is county-based. Still, it can provide a practical, quick snapshot when understanding environmental conditions and health outcomes for the general area. <https://www.cdc.gov/nceh/tracking/>

CDC Chronic Disease Indicators (CDI): "[A] cross-cutting set of 97 indicators that were developed by consensus and that allows states and territories and large metropolitan areas to uniformly define, collect, and report chronic disease data that are important to public health practice. In addition to providing access to state-specific indicator data, the CDI website is a gateway to additional information and data resources." This is state data and is not broken out by county or race; therefore, its use is limited in tribal CEHAs. It may help make comparisons between disease incidence and prevalence. <https://www.cdc.gov/cdi/index.html>

Behavioral Risk Factor Surveillance System: The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based or tribal-based system of health surveys that generate information about a jurisdiction's health, health risk behaviors, and health care access. BRFSS data can help identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs.

- Youth Risk Behavior Surveillance System (YRBSS): The Youth Risk Behavior Surveillance System (YRBSS) monitors six health-risk behaviors contributing to the leading causes of death and disability among youth and adults. YRBSS includes a national school-based survey conducted by CDC and state, territorial, tribal, and local surveys conducted by state, territorial, and local education and health agencies and tribal governments.

Food Environment Atlas: This map tool highlights several food access issues, including grocery store proximity, availability of convenience and specialty food stores, WIC and SNAP authorized stores, restaurants, availability of local foods and farmer's markets, socioeconomic data, food prices, and taxes, and health and physical activity.

Food Desert Locator: The map highlights pink census tracts considered food deserts. Food deserts are geographical areas where many residents cannot easily access a supermarket or large grocery store that offers healthy and affordable food. The United States Department of Agriculture's Economic Research Service and Environmental Systems Research Institute created the map.

Community Health Status Indicators (CHSI): CHSI provides an overview of key health indicators for local communities. CHSI gives detailed information about your county and a comparison to counties similar in population composition and selected demographics.

- HINT: "Risk factors for premature death" is an excellent and straightforward way to show in graph form the risk factors in your county for the leading chronic disease killers in the U.S. These factors can be attributed to a built environment that does not encourage healthy behaviors.

CDC WONDER Database: The menu-driven system makes the information resources of the Centers for Disease Control and Prevention (CDC) available to public health professionals and the public. The system provides a single access point to CDC and other public health reports and data systems.

EPA Databases: Including "My Environment," "EJScreen," "TRI," and "AirNow," among others.

Tribal Epi-Centers: The Indian Health Service (IHS) funds Epi-Centers in each IHS Area. The centers house a wealth of data related to health conditions, behavioral risk factors, and other potential health data.

IHS WebEHRS: Records of past and current environmental health activities and inspections. The facility and tribal community may access these to understand past violations and findings.

IV: PUBLIC/TRIBAL ENVIRONMENTAL HEALTH DATA GATHERING

General Guidelines

- Develop an 'Issue Profile' for each indicator. This is simply a document that serves as the running notes on the indicator, which includes data tables/figures and references.
 - Begin by comparing data to national and local (state/county) standards. For example, this includes Safe Drinking Water Act (SDWA) compliance, National Ambient Air Quality Standards (NAAQS), etc.
 - For housing and child care centers it is a must to inquire at the tribal level and obtain recent inspection sheets by IHS employees (if applicable).
- Engage all stakeholders when involved with certain situations such as Superfund or hazardous waste sites to gather all data related to human health and gauge communication between parties.
- When ready, develop a 'Profile Description' for each indicator. The description serves as an individual report that will eventually go into the Community Environmental Health Profile (CEHP). It should summarize the information collected and stored in the "Issue Profile" stated clearly. This will allow you to focus on one indicator at a time and sift through what is and is not needed from the 'Issue Profile.'

Collection of Social & Environmental Determinants of Health Data

- Use the websites and public sources of data listed to start. Then, log all findings in the 'Issue Profile' for each indicator including maps, graphs, charts, facts and figures. Also, log any challenges or concerns with the data.
- Administer survey(s) and conduct key informant interviews to collect TEK and information about current health status, needs, and priorities. Include all in the 'Issue Profile,' including direct quotes.
- Work with tribal EH staff and other partners (s) to identify natural resources/environmental, housing, and other program staff to request tribe-specific data related to each program.
- HINT: Work with EH staff and other tribal partners to determine the best way to survey community members and to help identify key informants

Collection of Health Outcomes & Exposures Data

If needed, obtain permission from the Tribe to work with agencies/organizations with the needed Tribal health data.

- In "Attachment 1," you will find a section labeled "HEALTH OUTCOMES AND EXPOSURES," which lists health outcomes related to environmental exposures. Use these indicators along with other pertinent health data related to environmental exposures.
- Summarize data and graph trends over time. Determine prevalence rates if data permits and compare to national and local levels (aggregated tribal data or state/county).
- In most cases, you will deal with a small population and small sets of data. Many Tribes, in this case, will like to see their data compared to aggregated tribal data in the region.

Collection of Public Health Infrastructure Data

- Start by using the tribal website to understand as much as possible the structure and the different programs within the Tribe and how the Tribe may organize roles and responsibilities.
- Note the mission statement of each program you may work with at any point and link the CEHA project to their mission statement.
- Work with tribal EH staff and other partners (s) to identify natural resources/ environmental, housing, climate change, and other program staff to collect data from
- HINT: make a list of the questions you want to ask each program or staff regarding codes, policies, organizational structure, and so on in advance and offer to administer questions via phone or in writing via email so people can respond in whatever way is most convenient
- HINT: Some of this data may be easier to collect in person. You may need to bounce from one tribal office to another to get a complete picture of any one of the indicators.

V: CEHA REPORT DEVELOPMENT, INPUT, & DISTRIBUTION

A Community Environmental Health Profile Report should be developed that includes the “Profile Description” for each indicator and other data that helps describe the environmental health status and understand needs within the community. It should also describe the process, partners, and next steps. The CEHA report should be shared with community members in partnership with the Tribe, and input should be solicited at all levels. This might be achieved by hosting a large community meeting where the report findings are presented and time is provided to allow community members to ask questions and provide input to help identify priorities and action items for the CEHIP. The best strategy and forum to present the CEHA findings and gather input to develop the CEHIP should be determined with tribal partners.

VI: RECOMMENDED ACTION PLAN/ENVIRONMENTAL HEALTH IMPROVEMENT PLAN

A CEHIP is a long-term, structured effort to address local environmental health problems. To perform this task, select the indicators to formulate goals based on ranking criteria such as (a.) population characteristics, (b.) health outcomes related to the issue, (c.) geography, (d.) status of the issue – is it improving or worsening?, (e.) level of community concern, and (f.) feasibility to address the issue. This task will also involve identifying and mapping the assets that pertain to each chosen indicator.

VII: COMMUNITY ENVIRONMENTAL HEALTH PROFILE

The compilation includes all data and information, including the descriptions of aggregate health data, indicators ranking, and the CEHIP.

The report's language should not be technical and avoid all emotional words or phrases and words that may create the appearance of bias or slanted viewpoint. The Community Environmental Health Profile should be written to inform the community members about the environmental health status of where they live, work, and play. It should be simple and include

graphs, charts, or other appropriate images to convey information clearly and succinctly. Technical information pertinent to the project can be attached in an appendix to help with readability and not overwhelm readers.

VIII: ATTACHMENTS & RESOURCES

- Attachment 1: Community Environmental Health Indicators

References

- CDC- Protocol for Assessing Community Excellence in Environmental Health (PACE-EH). http://www.cdc.gov/nceh/ehs/ceha/pace_eh.htm
- CDC-Climate Change and Health/Extreme Heat. <http://ephtracking.cdc.gov/showClimateChangeHealth.action>
- EPA-Community- Focused Exposure and Risk Screening Tool (C-FERST) <https://www.epa.gov/healthresearch/update-community-focused-exposure-and-risk-screening-tool-c-ferst>
- EPA- Outdoor Air Quality. <https://www.epa.gov/outdoor-air-quality-data>
- EPA- Toxics Release Inventory. https://www.epa.gov/toxics-release-inventory-tri-program?utm_medium=email&utm_source=govdelivery
- NACCHO. Mobilizing for Action through Planning and Partnerships (MAPP). <http://www.naccho.org/programs/public-health-infrastructure/mapp>
- US Census- Fact Finder. <https://data.census.gov/cedsci/>
- USDA-Food Environment. <https://www.ers.usda.gov/data-products/food-environment-atlas/>