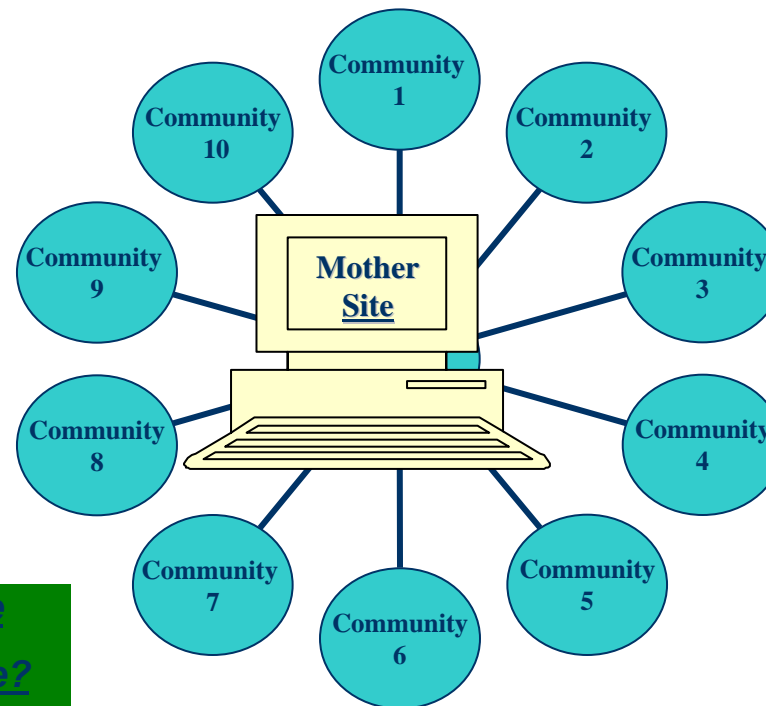


ECO HEALTH

Community Self Assessment



EcoHealth: WWW Sites



[Why the Mother Site](#)

[What is a Mother Site?](#)

[What is a Community Site?](#)

[Go to Framework](#) ►

[EcoHealth "Community Site"](#)

[EcoHealth "Mother Site"](#)

Why this Mother WWW site?

In recent years, there has been a tremendous increase in people's awareness of environmental issues and there is a growing concern over how their health is affected by hazards in their immediate environment. Despite this concern, most residents are unaware of the potential or actual environmental health risks occurring in their own community. There has been little guidance nor standard practical approaches on how they can address these issues. Consequently, this WWW site has been prepared to provide communities with a tool to assess issues of health and environment and to understand the process for gathering and interpreting information when they have such concerns. With this knowledge, communities can have a greater role in the process of investigating environment and health issues that affect them.



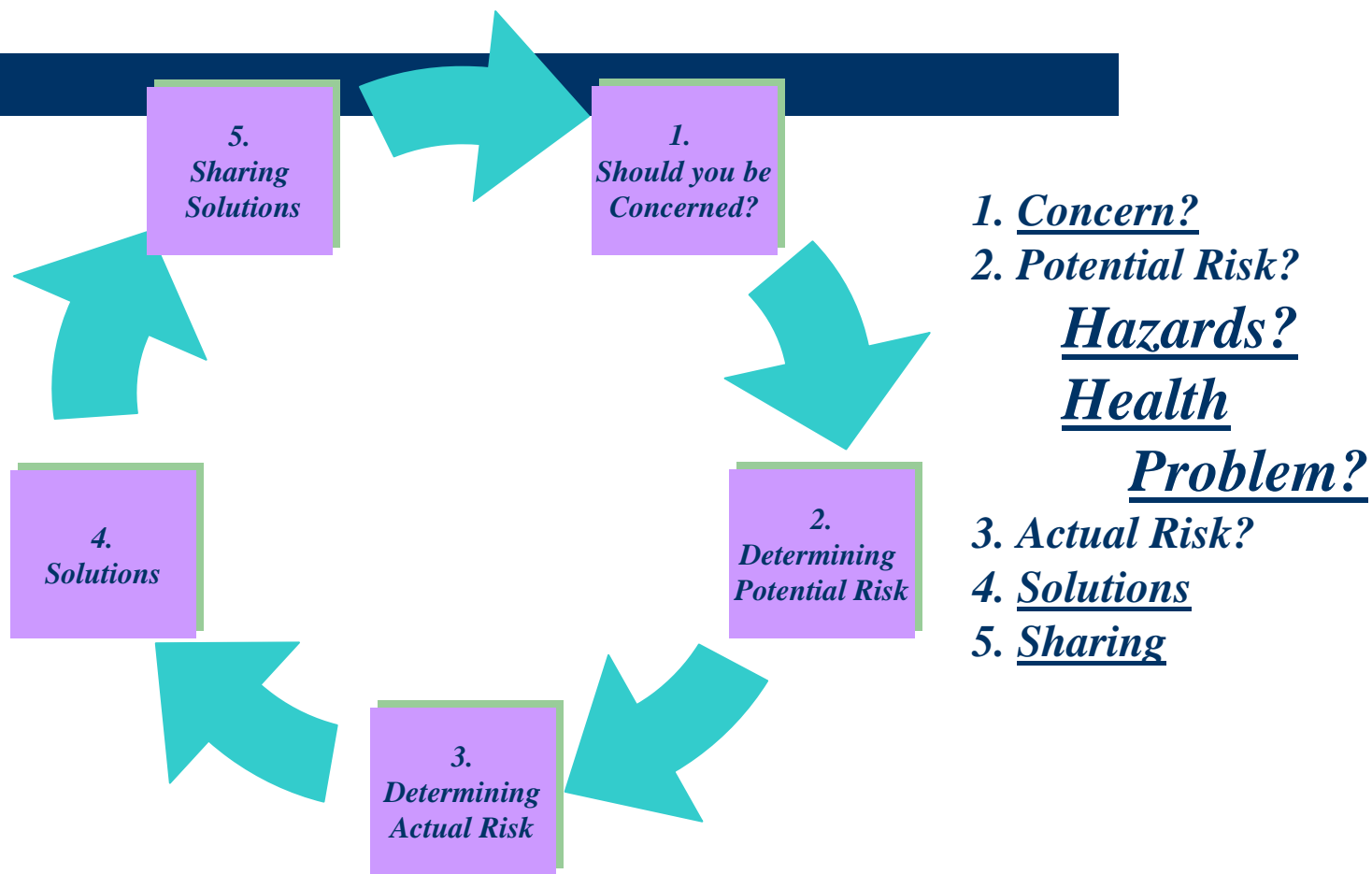
What is the Mother Site?

This WWW site provides a step-by-step processes that can be followed in performing an exposure assessment and a health profile of a community. If problems exist, the WWW site will assist the community plan and execute solutions to the problems. The site will over time collate and share the positive experience and results of communities with those facing similar problems.

It has been prepared to allow communities anywhere to address issues of health and the environment in areas of concern. The methods are general and can be used in any community concerned about people's exposure to environmental contaminants. With the permission of the Canadian Government, the WWW assessment framework builds heavily on the excellent document: *Investigating Human Exposure to Contaminants in the Environment: A Community Handbook*, prepared by the Great Lakes Health Effects Branch, Health Canada.



Step by Step Assessment Process Community Environmental Health Risks?



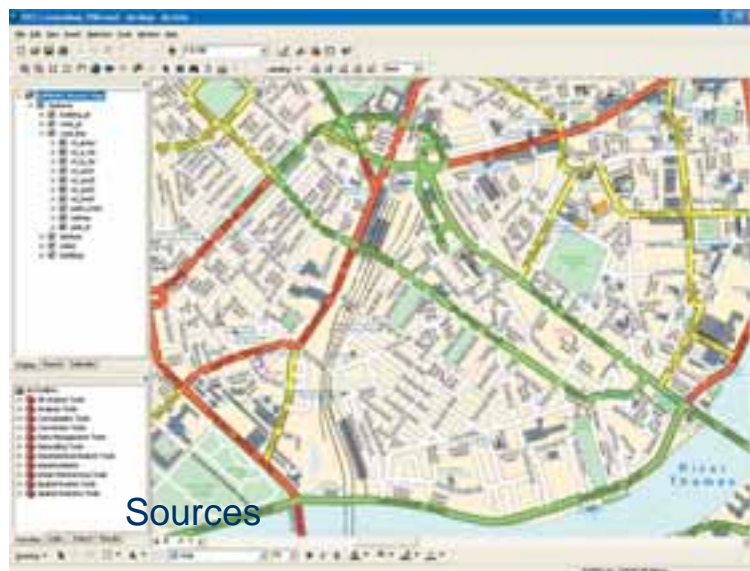
1. Concern?
2. Potential Risk?
Hazards?
Health
Problem?
3. Actual Risk?
4. Solutions
5. Sharing

EcoHealth WWW Mother Site

- Guidelines/Instructions for Creating a Community EcoHealth Site
- [Community Map Generator](#)
- [Links to Existing Data](#)
- [Pollution/Hazard Source Assessment Tools](#)
- [Exposure Assessment Tools](#)
- Community Health Assessment Tools
- [Links to Community Methods/Solutions/Organization](#)
- Blogs for Content and WWW Site Management
- Sources for Risk Measurement
- Interactive Planning Guide
- [Links to Technical “Green” Solutions](#)
- Case Studies of Community Solutions



EcoHealth: XYZ Community



Information Collection

- Existing Databases
- Source Survey
- Exposure Assessment
- Community Health Profile

References

ToxTown
EPA
EDF

Sources:

- Industries
- Agriculture
- Utilities
- Mines
- Radiation
- Waste Disposal
- Non-Point
- Sewage

Potential Hazards

- Chromium
- PCP
- Lead

Exposure Pathways

Risk Profile



Step 2: Determining Potential Risk

Potential Risk can be determined by conducting:

1. An assessment of potential hazards from pollution;
2. A community health profile.

Potential Risk from Hazards

This Step 2 examines if a potential health risk from environmental contaminants is present within your community. It involves a comprehensive self assessment and documentation of all potential sources of hazards that exist in the community. This inventory of possible sources is determined by answering a yes or no questionnaires provided by the EcoHealth Mother WWW site. Once all potential sources are identified, the toxic or hazardous substances that these sources use, produce or discard as waste and which could potentially contaminate the environment are identified. For example, if industry A exists, and if industry A uses chromium in the manufacturing process, then chromium is a potential risk in that community. EcoHealth Step 3, determines if an actual risk from chromium exists.





Potential Risk from Health Concerns



Step 4: Solution Resources

The Mother WWW site will assist communities plan and execute solutions for problems found to be present within their community. The Mother site will:

- *Maintain a categorized database and linkages to technical resources and solutions that a community will need to ameliorate the problem.*
- *Links to “Potential Sources” with green solutions*
- *Maintain data and provide access to case studies on how communities have solved problems.*



Step 5: Sharing Solutions

The Mother WWW site will maintain information on and links to communities that have solved problems and are willing to assist other communities discovering similar problems. In addition, the Mother site will maintain a library of case studies of successful community solutions

- South Bronx
- XYZ



Step 1

Should You Be Concerned?

Many community concerns are triggered by the suspicion that there is a health problem in the community and that it is related to environmental contamination. At this point action on investigating these concerns can be initiated by individuals or groups in the community, local politicians, and public agencies. An important decision for you will be whether to first do an exposure assessment or a community health profile. The decision will depend on the initial community concerns.

For example, there may be a source of contaminants in the community which people are concerned about. This may be the impetus to do an exposure assessment so that more can be discovered about the types of contaminants, how they travel through the environment, how people come into contact with them and to what extent people are exposed to them. On the other hand, people may believe that there is an unusual occurrence of a certain disease in their community. This may trigger the desire to perform an assessment of the health of the community, to find out if their initial concern is warranted.



What is a Exposure Assessment?

An exposure assessment is a study of how people in the community come into contact with environmental contaminants. It examines how much of which contaminant people are exposed to. It does so by tracing the pathways from the source of the contaminant through the environment to the people that might be affected. These exposure pathways may lead through the air, the water, the soil, food or any combination of these.}



Gather Initial Information

There are various sources that can help you to gather the data, information and knowledge needed for carrying out exposure assessments or community health profiles.

- ! On-Line Databases of environmental hazards
- Government agencies (municipal, state and federal);
- ! Other community residents;
- ! Universities and research centres;
- ! Owners/operators of industries or municipal facilities;
- ! Community and environmental organizations and associations;
- ! Libraries and archives; and
- ! Environmental professionals.

The information that can be obtained from these sources, whether private or public, will vary according to their policies and resources available for responding to public requests. There may also be costs associated in obtaining information as some agencies will charge fees to cover their costs of responding to these requests. The sources of information are described in more detail.



What is a Community Health Profile?

A community health profile is a kind of general medical check-up of the community as a whole. By gathering information on the health of many individuals, it is possible to create a picture of the health of the community. Through such a community survey, patterns will emerge: some diseases are more widespread than others, subgroups in the community suffer from different medical problems. By analysing these patterns and comparing them to other information such as lifestyles, places of work, and health patterns for other communities or the population as a whole, the community health profile can pinpoint areas of concern and suggest where environmental contaminants may be a problem.



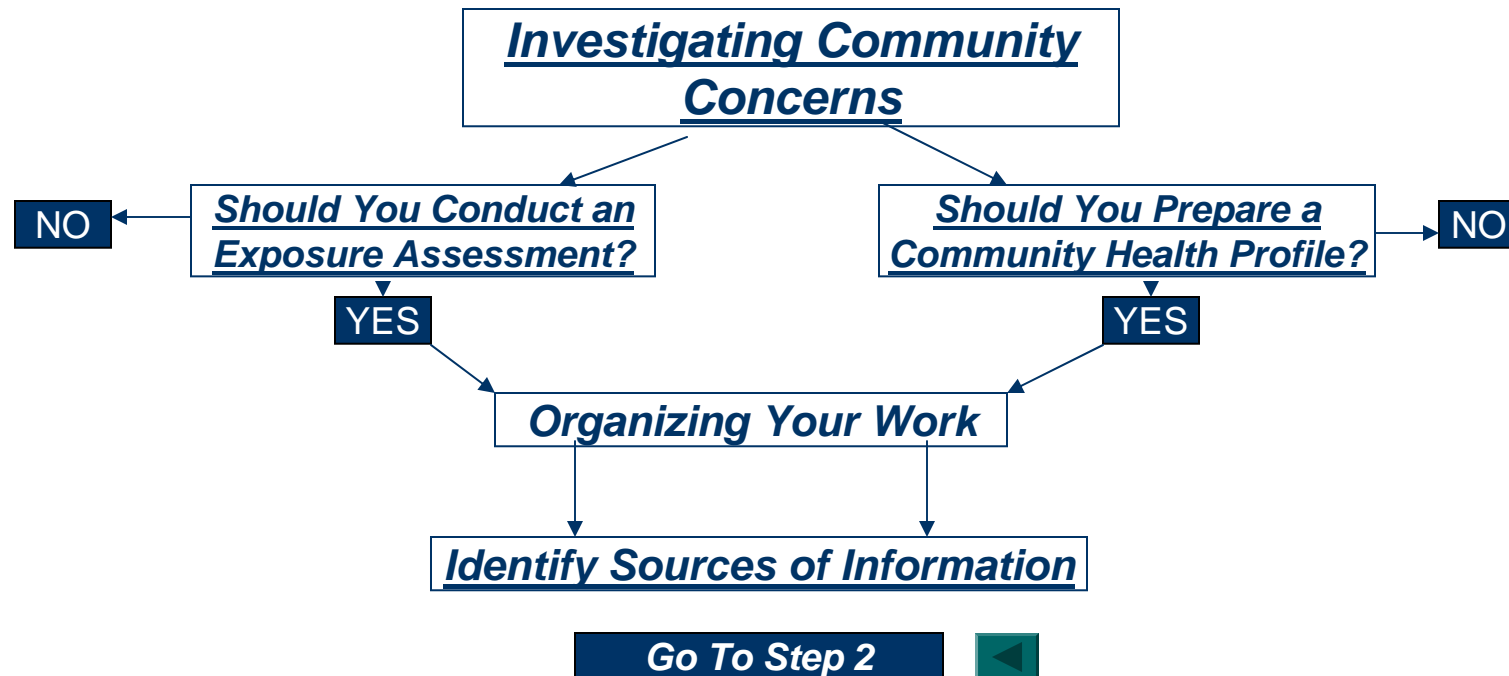
Community Site

- [Interactive Community Map](#)
- [Mining of Existing Databases for Area Specific Data](#)
- Community Profile of Potential Sources of Hazards (Map)
- Exposure Pathways of Potential Community Hazards
- Community Health Profile
- Sources/Methods/Requirements/Resources for Risk Measurement and Assessment
- Community Risk Profile
- Community Action Plan



Should You be Concerned ?

Getting Started; Step 1



Initial Sources of Information

- Environmental Professionals
- Libraries and Archives
- Community and Environmental Organizations
- Operators Private or Municipal Facilities
- Universities or Research Centers
- Community Residents
- Government Agencies

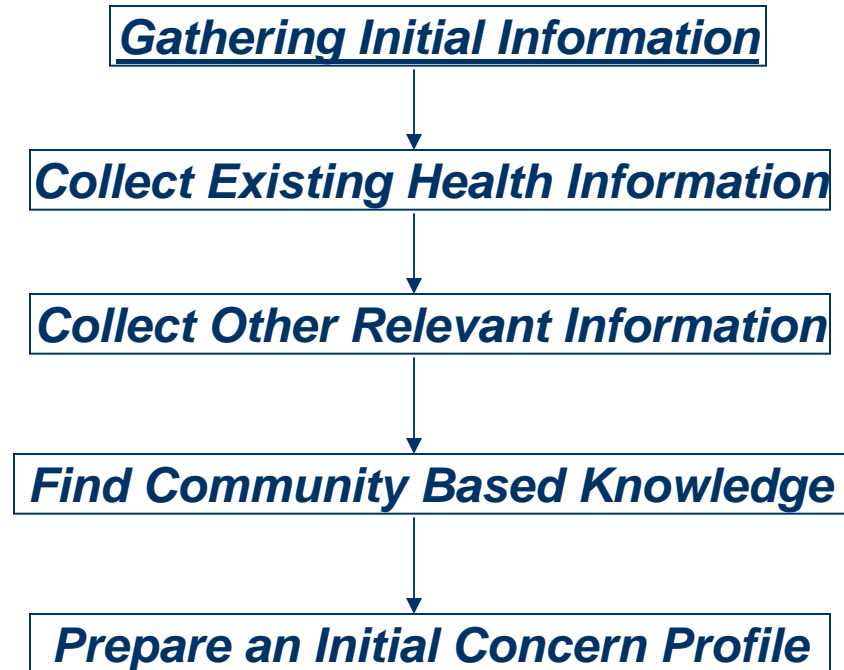
On-Line Pollutant Databases

- Scorecard
- EPA
- Tox-Map

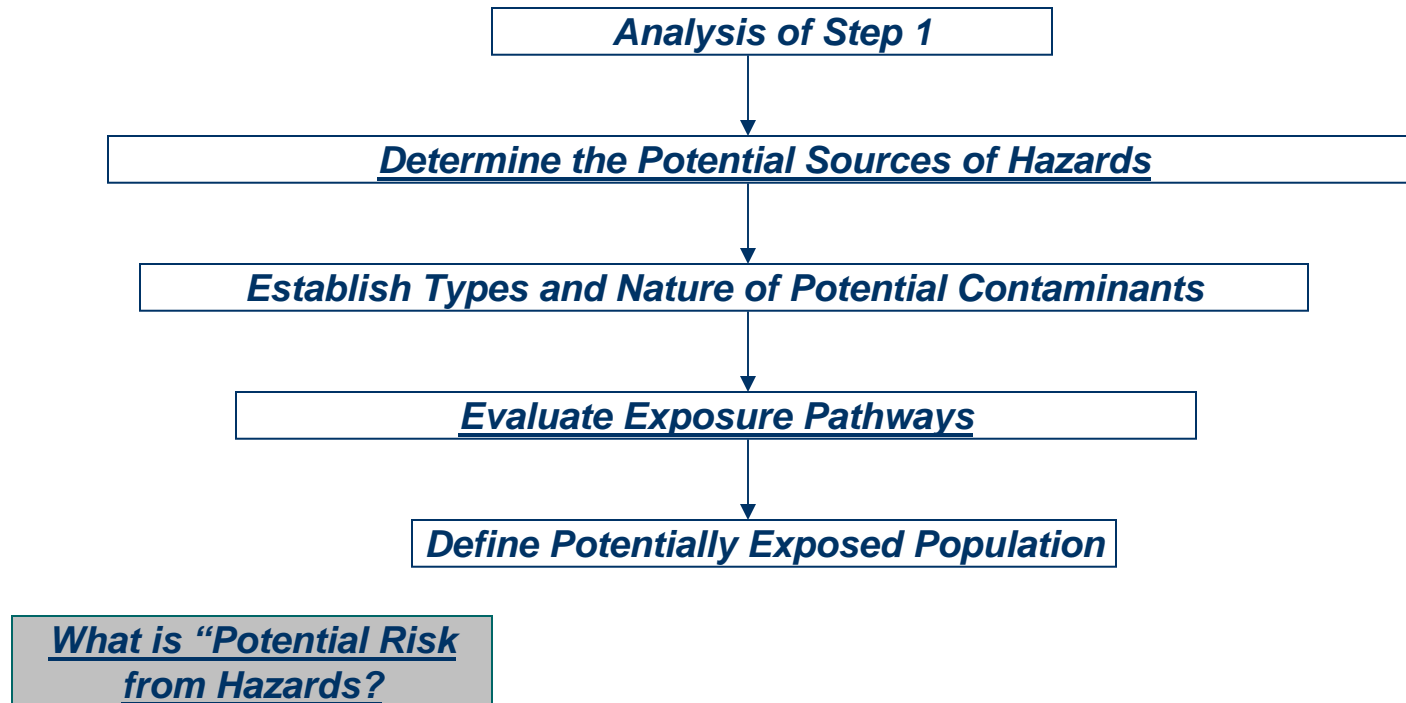


Step 2 (Health)

Preparing a Community Health Profile

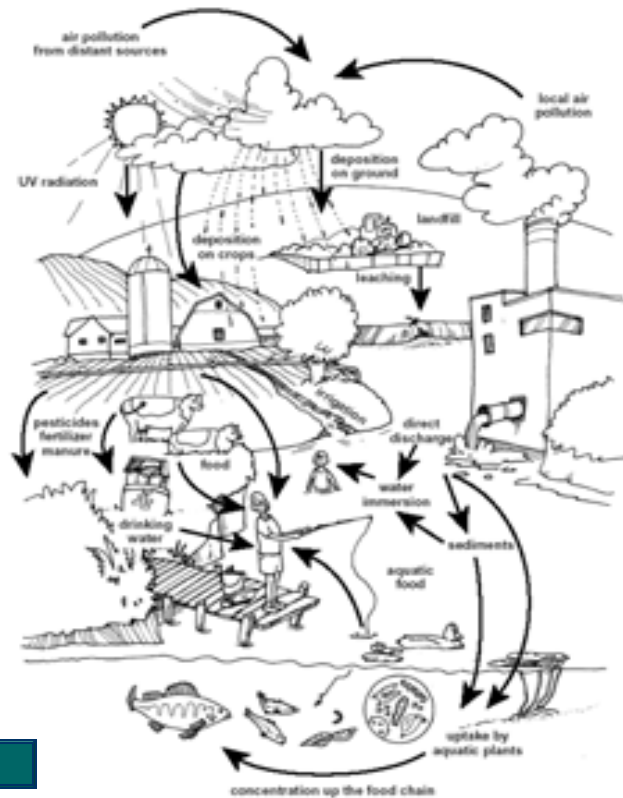


Step 2: Hazard Exposure Determining Potential Risk



Exposure Assessment

Exposure Pathways



Once you have identified the types and nature of contaminants involved, you should evaluate how each one moves in the environment and how people could be exposed. Is the substance likely to be found in water and enter the municipal drinking water system? Does it evaporate easily into the air and as a result, is likely to be inhaled? Does it concentrate in local fish or in food grown by community residents? Does it remain in the environment for a long time or does it break down quickly? When living organisms absorb the contaminant, do they store it in their tissues, break it down or eliminate it quickly? If it is broken down, are any of the resulting new substances of concern?

What is a “Community WWW site?”

A Community WWW site is generated by interaction with the Mother WWW site. The site provides a real time profile and documentation of environmental health risks existing within a defined community. Over time, multiple community sites will be generated



On-Line References of Environmental Standards and Laws

- EPA
- Environmental Defense Fund
- Communicable Disease Center
- Health and Environment Departments
- Universities



Back to Mother Site



Guides to Pollution Sources

- [National Library of Medicine \(Tox Town\)](#)



Green Industries

- Brewery



Environmental Professionals

There may be environmental professionals living in or nearby to your community. These include environmental consultants, ecologists, and environmental engineers. Many companies have occupational health and safety staff. Some local community health centres and public health units have expertise in occupational health and safety and environmental health. Many are willing to volunteer their time and expertise. Ask people in your community if they know of anyone with relevant knowledge and experience and then make an appointment to see them.



Libraries and Archives

A wide range of reference materials are available to help you with your investigation. Libraries often have (or have access to) reference books on the environment as well as on environmental contaminants. Local archives will have maps and aerial photographs that you can use, as well as historical information on your community.



Community and Environmental Organizations and Associations

Many community and environmental organizations are actively working on issues related to waste management, toxic and hazardous materials, community health etc. The Environmental Defense Fund and other organizations also maintain WWW sites that can provide information specific to your community. These groups will often be very helpful in providing you with advice, information and contacts. For a list of local groups in your area contact one of the larger environmental organizations, such as Environmental Defense Fund, Greenpeace, Sierra Club, The Conservation Fund, Try also health organizations which work on issues related to community health.



Owners/Operators of Industries or Municipal Facilities

Owners or operators of industries (such as manufacturing plants) or municipal facilities (such as waste disposal sites and sewage treatment plants) have information that could be useful to you. Establish who is in charge of the day-to-day operations of the site or facility or for its maintenance if it is no longer in operation. Some companies have a manager or an office responsible for the environmental management of the facilities operation. Try to make an appointment to meet with them and explain your concerns, using whatever information you have collected already. Ask for specific additional information, explaining what you intend to do with it. It may or may not be easy to get the information you want from these facilities. Follow-up on your meeting with a written request for specific information and thank them for information already received.



Universities and Research Centres

Many universities and research centres have faculty members who are knowledgeable about the environment.). These resource people may be able to offer you suggestions and guidance. If you can interest faculty members in your study they may encourage students to become involved and to help you, as part of their course work. Many students value opportunities to investigate real-life problems and to apply some of the theoretical ideas that they are learning. Some universities and research centres may have facilities, such as laboratories, libraries or resources centres, that you could use in your study.



Other Community Residents

People living or working near the potential sources of environmental contaminants are an important source of first-hand information based on observation and experience. They can be particularly helpful in identifying general patterns and the sequence of events at a particular factory or site. Former residents can also provide useful information about what happened in the past.

Remember that factual descriptions of what happened or of how the environment changed are more useful than unfounded claims or accusations. Check the information you get from individual community residents, by talking to as many different people as possible. With their permission, keep notes of all conversations.



Government Agencies

There are several government agencies that are responsible for different aspects of the environment and health. **Municipal, county and state governments** are usually responsible for land use planning, as well as sewage treatment and the collection and disposal of household garbage. However, most municipalities should be able to provide you with information on zoning and the locations of various possible point sources of contaminants, including industries and old and active waste disposal sites. An important point of contact may be the office responsible for planning.

For the **State** begin by examining their WWW site or contacting the state environmental office and the offices responsible for the state public health .

The offices of environment will most likely have information on the environment in your area. This may include data on water and air quality, soil contamination and on the health of the fish and wildlife.. Ask for a copy of the any publication that documents where fish are safe to eat. This will give you a general idea whether contaminants are a problem in freshwater fish in nearby lakes or rivers.

The public health unit in your region may also have information on water quality at beaches used for swimming and other recreational activities. Public health units may also have prepared health status and environmental assessment reports for your community.

There are a number of **federal government** that also have information on the environment in your area. Begin by examining the on-line databases of the Environmental Protection Agency (EPA), The Communicable Disease Center (CDC), the National Library of Medicine (NLM) The EPA has information on Industrial emissions and toxic spills by zip code.. The EPA can also provide information and advice on regulations and guidelines.

The EPA is a source of information, particularly with regard to approaches and methods used to evaluate the exposure to and the risk from environmental contaminants. They can provide guidelines for contaminants in air, water and dumpsites, and advice for health protection and promotion, drinking water safety, radiation and other issues. The CDC has access to large health databases and has expertise in methods of conducting human health studies and interpretation of health data.



Pollution/Hazard Source Assessment Tool

The community undertakes an interactive questionnaire to determine what potential sources of pollution or hazards exist in the community. The Mother WWW site provides a complete listing of sources known to be a potential problem. These include:

- Industries
- Agriculture
- Utilities
- Mines
- Radiation
- Waste Disposal
- Non-Point
- Sewage

"Point" and "Non-Point" Sources

Environmental contaminants can come from two different types of sources. Point sources are single, easily identified sources of pollution. Examples are large smokestacks or the waste water discharge pipe of a sewage treatment plant. When small amounts of environmental contaminants from many sources combine to create a large problem, the sources is considered to be "non-point". Examples of non-point sources are pesticide and fertilizer runoff from farms or the air pollution from cars.

Based on a yes or no determination for each , a community specific profile of potential community sources is generated.



[Click: USEFUL GUIDES TO SOURCES](#)

Technical “Green” Solutions

- Green Industries
- Green Farms
- Clean Utilities
- Non Point Clean-Up
- Clean Mines
- Sewage

