

FIRST NATIONS

Environmental Public Health Program















Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. We assess the safety of drugs and many consumer products, help improve the safety of food, and provide information to Canadians to help them make healthy decisions. We provide health services to First Nations people and to Inuit communities. We work with the provinces to ensure our health care system serves the needs of Canadians.

The **First Nations and Inuit Health Branch** of Health Canada supports the delivery of public health and health promotion services on-reserve and in Inuit communities. The mandate of the Branch is to:

- 1. Ensure the availability of, or access to, health services for First Nations and Inuit communities;
- 2. Assist First Nations and Inuit communities address health barriers, disease threats, and attain health levels comparable to other Canadians living in similar locations; and,
- 3. Build strong partnerships with First Nations and Inuit to improve the health system.

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This publication can be made available on request on diskette, large print, audio-cassette and braille.

For further information or to obtain additional copies, please contact:

- Your Environmental Health Officer;
- A Regional Office:

Atlantic Region: 902-426-9931 Quebec Region: 514-283-0112 Ontario Region: 519-751-6516 Manitoba Region: 204-984-0158 Saskatchewan Region: 306-780-5434 Alberta Region: 780-495-2712 Pacific Region: 604-666-9766; or,

• 1-800-0 CANADA.

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Commitment to First Nations

Collaboration with First Nations to formulate Environmental Public Health Program activities;

Timely response to the environmental public health needs of communities;

Advocacy and expertise in environmental public health;

Support for the development of First Nations capacity in environmental public health;

Use of culturally appropriate education and promotion techniques;

Recognition that environmental public health is part of the holistic approach to wellness; and,

Respect of First Nations cultures and their special relationships with the environment.



Objective

This booklet provides information about Health Canada's environmental public health activities in First Nations communities.

Environmental Public Health Overview

Conditions in the environment, both natural and human-built, can affect a person's ability to achieve and maintain good health. A healthy environment includes safe water and food supplies, properly designed, constructed and maintained housing and community facilities, as well as suitable treatment and disposal of wastewater and solid waste. To maintain a healthy environment, it is also necessary to plan for and respond to emergencies and work to prevent and control communicable diseases.

Environmental Public Health in First Nations Communities

The Environmental Public Health Program in First Nations communities works to identify and prevent environmental public health risks that could impact the health of community residents. The program also includes recommending corrective action to reduce these risks. In support of Health Canada's mission to help the people of Canada maintain and improve their health, the Environmental Public Health Program provides services to First Nations communities south of 60 degrees. North of 60 degrees, responsibility for environmental public health programming has been transferred to territorial governments or First Nations and Inuit control as part of land-claims settlements.

Role of Environmental Health Officers

Environmental Health Officers (EHOs) provide advice, guidance, education, public health inspections and recommendations to First Nations and their leadership to help them manage public health risks associated with the environment. They gather data required to analyze what steps can be taken to promote public health in First Nations communities. Some EHOs are employed by Health Canada and some by First Nations or Tribal Councils. All EHOs working in First Nations communities must have a Certificate in Public Health Inspection (Canada).

EHOs visit First Nations to do inspections, investigations and provide education and training sessions. Routine activities are provided as per community workplans that are agreed upon by Environmental Health Officers and Chiefs and Councils. Other activities are completed as required, upon request of Chiefs and Councils.

EHOs identify potential public health risks in First Nations communities and provide recommendations on how to correct them. Chiefs and Councils are responsible for addressing the recommendations provided.

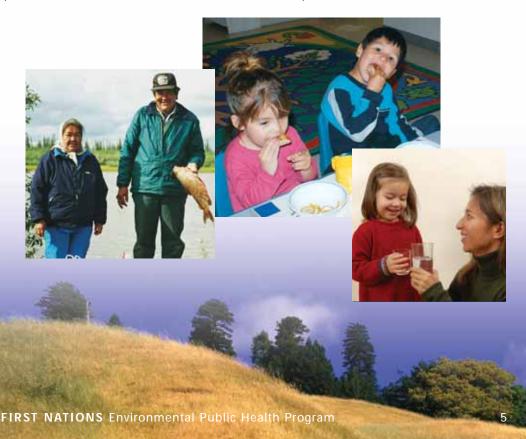
Public health has been defined as the science and art of promoting health, preventing disease, prolonging life and improving the quality of life through the organized efforts of society.

(Last J, editor. A dictionary of epidemiology: 4th edition. Toronto: Oxford University Press, 2001)



Environmental Public Health Programming

The following pages describe activities that may be undertaken through the Environmental Public Health Program. Program activities are delivered according to the needs of communities. As such, some of the activities described in this booklet may not be delivered in every community and additional activities not mentioned here may be undertaken through the Environmental Public Health Program. Activities such as inspections, training sessions and public education are provided routinely according to the frequencies agreed upon by Environmental Health Officers and Chiefs and Councils in community workplans, or as required, at the request of Chiefs and Councils. If you have any questions or comments about environmental public health or programming delivered in First Nations communities south of 60°, please do not hesitate to contact your Environmental Health Officer or the Health Canada Regional Office nearest you (see the inside-back cover for contact information).



DRINKING WATER

Access to safe and reliable drinking water is essential. The Environmental Public Health Program undertakes activities related to drinking water safety in First Nations communities.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Monitor to verify the quality of drinking water:
 - Sampling and testing of community distribution systems, cisterns and public-access wells is conducted by EHOs and Community Based Water Monitors, which may include Water Quality Technicians and Community Health Representatives.
- Review and interpret drinking water quality results according to the latest version of the Guidelines for Canadian Drinking Water Quality including bacteriological, chemical, physical and radiological parameters.
- Provide advice, guidance and recommendations to First Nations communities about drinking water safety issues.
- Review plans for new or upgraded community water systems from a public health perspective.
- Investigate suspected problems with community drinking water supplies as required.

2) PUBLIC EDUCATION

• Provide public education to Chiefs, Councils, and community residents about safe drinking water and risk prevention.

3) TRAINING

• Provide training, orientation and regular refreshers to Community Based Water Quality Monitors.



FOOD SAFETY

Food safety includes the proper supply, storage, preparation and distribution of food. The Environmental Public Health Program works with Chiefs, Councils, food service operators, community meal programs and residents to prevent foodborne illness in First Nations communities. The Environmental Public Health Program addresses public health issues related to both traditional and conventional foods.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Provide public health inspections of public food service facilities and community gatherings such as pow-wows, Treaty Days and sports competitions.
- Review of plans for new or upgraded food service facilities from a public health perspective.
- Provide advice, guidance and recommendations to Chiefs, Councils, owners, operators, and First Nations residents about public health issues related to food safety.
- Notify community of food recalls and alerts.



- 2) PUBLIC EDUCATION
 - Provide public education to community residents about food safety including sources, storage, preparation and distribution of both traditional and conventional foods in food service establishments and at home.

3) TRAINING

 Deliver food handler training to food service personnel and volunteers at community gatherings.



HEALTH AND HOUSING

A healthy home means that residents have the physical and social conditions necessary for health, safety, hygiene and comfort. The Environmental Public Health Program works with First Nations communities and other agencies to help address public health issues in housing.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Provide public health inspections of on-reserve public/social housing upon request. Inspections may include evaluation of indoor air quality, contaminants, pest control, water supply, solid and liquid waste disposal, general safety, structural defects and overcrowding.
- Review plans from a public health perspective for new housing developments and renovations.
- Provide advice, guidance and recommendations to Chiefs, Councils, community workers and occupants related to all stages of housing: site and design, construction, occupancy and demolition.

2) PUBLIC EDUCATION

 Provide public education to Chiefs, Councils, community workers and occupants about how to maintain a safe and healthy home.

3) TRAINING

• Provide training sessions upon request on public health issues related to housing.



WASTEWATER

Wastewater, also known as sewage, can be harmful to humans as it is capable of spreading diseases and polluting surface and groundwater sources. The Environmental Public Health Program identifies existing and potential hazards associated with wastewater disposal in order to reduce and prevent public health risks. Program activities focus on community wastewater treatment plants as well as on-site sewage disposal systems.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Provide site and installation inspections for new and expanded on-site sewage (wastewater) disposal systems.
- Respond to complaints by providing public health inspections of existing on-site sewage disposal systems when appropriate.
- Review plans for new and upgraded on-site sewage disposal systems from a public health perspective.
- Provide advice, guidance and recommendations related to on-site sewage disposal systems, including information on appropriate decommissioning of sites.
- Inspect wastewater treatment plants if there is a public health concern.



- Provide advice, guidance and recommendations related to wastewater treatment plants.
- Review plans for new and upgraded wastewater treatment plants from a public health perspective.

2) PUBLIC EDUCATION

• Provide public education to home occupants and owners about how to properly maintain an on-site sewage disposal system and reduce risks related to sewage discharge.



SOLID WASTE DISPOSAL

Solid waste, or garbage, can be a public health hazard if it is not managed properly. For example, tires, appliances, furniture and abandoned cars may pose health and safety risks. Waste disposal sites can attract disease-spreading pests and can leach pollutants that contaminate the air, soil and water, including drinking water supplies. The Environmental Public Health Program works with the community and other agencies to help limit public health risks posed by solid waste disposal.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Provide public health inspections of disposal sites and transfer stations. Inspections evaluate the method of solid waste collection, site operation, containment of waste, types of waste being disposed, pest control, soil conditions, groundwater conditions and leachate analysis.
- Review plans for new or upgraded solid waste disposal sites or practices (e.g., transfer stations) from a public health perspective.
- Provide advice, guidance and recommendations to Chiefs, Councils, builders, owners, site operators and First Nations residents about public health issues related to solid waste disposal.
- Review plans and provide recommendations to Chiefs, Councils and site operators for safe decommissioning of disposal sites.

2) PUBLIC EDUCATION

- Provide public education with respect to public health aspects of solid waste disposal.
- Provide information/referrals related to recycling programs, disposal of hazardous waste (e.g., batteries, paints), and safe collection and storage of waste, upon request.



FACILITIES INSPECTIONS

Environmental Public Health Program staff work with First Nations communities, owners, operators, employees and users of facilities to help prevent the spread of communicable disease, minimize public health risks and reduce safety hazards. Facilities include health, community care, recreational and general facilities accessible to the public.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

 Provide routine inspections of facilities and additional inspections upon request. The scope of inspections includes general sanitation, general structure, safety conditions, food safety practices, water quality, sewage and solid waste disposal, pest control, crowding and air quality.

TYPES OF FACILITIES:

- **HEALTH FACILITIES:** Health centres/clinics, nursing stations, hospitals and long-term care facilities;
- **COMMUNITY CARE FACILITIES:** Day-cares, group homes, Head Starts, nursing homes, schools, youth drop in centres, retirement homes, treatment centres and wellness centres;
- **RECREATIONAL FACILITIES:** Arenas, beaches, billiard halls, bingo halls, bowling alleys, campgrounds, casinos, community centres, curling rinks, golf courses, parks, playgrounds and swimming facilities. In addition, seasonal monitoring of recreational water may be provided.

- **GENERAL FACILITIES:** Administration offices, animal shelters, barber shops, bed and breakfasts, fire stations, funeral homes, gas stations, hair salons, hotels, industrial sites, lodges, marinas, motels, pet stores, police stations, prison/holding cells, rooming houses and tattoo parlours;
- **TEMPORARY SPECIAL EVENT FACILITY:** Community gatherings such as pow-wows, Treaty Days and sports competitions.
- Review plans for new or renovated facilities from a public health perspective, on request.
- Provide information on decommission/renovation hazards that could adversely impact the health of community members or workers, on request.
- Provide advice, guidance and recommendations to Chiefs, Councils, owners, operators, employees and users of facilities pertaining to public health.

2) PUBLIC EDUCATION

 Deliver public education and awareness sessions for Chiefs, Councils, facility operators and community members related to public health and safety within facilities.



COMMUNICABLE DISEASE CONTROL

The Environmental Public Health Program is responsible for the environmental public health component of communicable disease control. All regular Program activities (e.g., public health inspections, water monitoring, food handler training) aim to prevent illness and the spread of communicable diseases. Specific surveillance, investigation and educational activities are also undertaken to address environmental health communicable diseases (i.e., those that are foodborne or waterborne (e.g., *E. coli*) or vectorborne (e.g., West Nile virus).

Activities



1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Undertake surveillance activities as required to prevent and address cases of communicable diseases.
- Work with Chiefs, Councils, and other public health staff (e.g., Community Health Nurses, the Regional Medical Officer, provincial authorities as required) to address suspected or confirmed cases of environmental health communicable diseases. EHOs may aid in investigation, source identification, sampling and monitoring, upon request.
- Provide advice, guidance and recommendations to Chiefs, Councils, facility owners, staff and First Nations residents about environmental public health issues related to communicable disease control.

2) PUBLIC EDUCATION

• Provide public education to Chiefs, Councils and community residents to raise awareness about environmental health communicable diseases.



3) TRAINING

• Provide training to health and First Nations workers about the environmental public health component of communicable disease control.

EMERGENCY PREPAREDNESS AND RESPONSE

First Nations communities need to prepare for and respond to emergencies such as floods, forest fires, chemical spills, storms, contamination of food or water supplies and disease outbreaks. The Environmental Public Health Program works with partners to ensure environmental public health considerations are included in emergency planning and response activities.

Activities

1) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Provide advice, guidance and recommendations to Chiefs, Councils and First Nations residents about environmental public health issues related to emergency preparedness and response.
- Participate in the development of First Nations' Emergency Preparedness and Response Plans.



In the event of an emergency:

- Assess emergency locations and advise the Emergency Response Team of how to reduce associated environmental public health risks.
- Provide public health inspections of temporary accommodations, residential and public buildings, drinking water, food services, solid waste and wastewater disposal systems, as required.
- Provide food handler training, drinking water sampling, and other emergency environmental public health services as required.

2) PUBLIC EDUCATION

• Provide communities with information on environmental public health as it relates to emergency preparedness and response.



ENVIRONMENTAL CONTAMINANTS, RESEARCH AND RISK ASSESSMENT

People may be exposed to many sources of naturally occurring and man-made environmental contaminants. At certain levels, exposure to contaminants in air, water, food and soil can cause or contribute to a variety of adverse health effects, such as cancer, gastrointestinal illnesses, respiratory diseases and birth defects. The Environmental Public Health Program undertakes activities related to environmental contaminants and supports research to identify, measure and prevent associated risks.

Activities

1) RESEARCH

- Assist Chiefs and Councils or community groups to formulate research questions in response to concerns expressed by the community.
- Assist communities to develop linkages with academic and research institutions that can be partners in developing research project proposals.
- Encourage communities to submit proposals for funding to the National or Regional First Nations Environmental Contaminants Programs.
- Provide advice concerning research projects.

2) ENVIRONMENTAL PUBLIC HEALTH ASSESSMENT

- Work with Chiefs, Councils, other public health staff and residents to address suspected or confirmed public health risks associated with environmental contaminants.
- Assist communities in interpreting research results.

3) PUBLIC EDUCATION

• Provide public education about environmental contaminants to Chiefs, Councils and community residents.



Protection of Personal Information

The Environmental Public Health Program may be required to collect, use, and disclose personal information for the administration, delivery and management of the program. The federal Privacy Act protects the privacy of personal information, that is, any information about an identifiable individual recorded in any form, and provides an individual with a right to access their own personal information.

EHOs are responsible for the public health inspection activities of the Environmental Health Program, gathering the data required for both immediate action and for analysis in order to understand what steps can be taken to promote public health in First Nations communities. The information collected by the Environmental Public Health Program is used only to support the provision of environmental public health programming and is protected as required by law. This means that only those persons authorized by Health Canada to review personal information for the purpose of programming needs will be able to access records. Examples of the kind of information that EHOs may require include the name, address and contact details of a First Nations resident, information about the public health conditions in a First Nations residence or the name, address and contact details of people attending Environmental Public Health Program events such as food handler training. Informed consent will be sought from individuals involved should there be a need to disclose this information outside of Health Canada.

For more information about privacy and consent, please contact your Environmental Health Officer, Regional Office or the Privacy Commissioner of Canada at 1-800-282-1376 or www.privcom.gc.ca.

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Contacts

1-800-O CANADA www.healthcanada.ca

REGIONAL OFFICES:

Atlantic Region: 902-426-9931 Quebec Region: 514-283-0112 Ontario Region: 519-751-6516 Manitoba Region: 204-984-0158 Saskatchewan Region: 306-780-5434 Alberta Region: 780-495-2712 Pacific Region: 604-666-9766

ADDITIONAL WEBSITES:

Indian and Northern Affairs Canada: www.inac.ca Public Health Agency of Canada: www.phac.gc.ca Canada Mortgage and Housing Corporation: www.cmhc.gc.ca Assembly of First Nations: www.afn.ca



