

HEALTH RISK MANAGEMENT IN THE GREAT LAKES BASIN: THE CANADIAN APPROACH

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The Great Lakes Health Effects Program was designed "to protect human health from the effects of exposure to environmental contaminants in the Great Lakes basin". This mission statement is based on a binational accord between Canada and the USA: the 1987 protocol to the Great Lakes Water Quality Agreement.

Mixtures of contaminants in the Great Lakes basin pose a risk to human health. Exposures of most concern are those from consumption of contaminated food, especially sport fish. Air and water contribute far less to daily intake. Contaminant levels of most persistent chlorinated organics have declined dramatically since the early 1970s, however their rate of decline has now slowed or halted. Highly exposed or highly sensitive individuals or populations are at greatest risk

The Great Lakes Health Effects Program was initiated in 1989. Health Risk Management strategies are built on three features:

- acquisition and evaluation of data on the levels and effects of environmental contaminants (chemical, radiological, microbiological) with respect to human populations;
- health-risk assessment of current and potential impacts on populations within the basin; and
- protection of public health from concurrent exposures to mixtures of chemicals from all sources.

In building risk management strategies the Program employs three guiding principles (all developed through a public participation process):

- support the philosophies of prohibition of discharge of substances in toxic amounts (zero discharge) and the virtual elimination of persistent toxic substances;
- achieve public participation through developing working partnerships; and
- ensure effective inter- and intra- agency program coordination and co-operation.

Risk Management approaches in use within the program involved:

- public education, videos and written material prepared in partnership with non-governmental and other governmental groups;
- advice on remedial measures and provision of health data to public and governmental review teams in areas of concern;

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- strategies for health promotion, health protection, citizen action and problem ownership in communities;
- direct working relationships with front line health professionals in the communities;
- health based regulations, voluntary controls and basin wide objectives; and
- constant public consultation and communication.