

A B S T R A C T

On May 5-6, 1997, Administrator Carol M. Browner hosted the Environment Leaders' Summit of the G7 countries plus Russia, known as "the Eight," in Miami, Florida. Children's Environmental Health was the centerpiece topic for discussion at the Summit, which resulted in the *1997 Declaration of the Environment Leaders of the Eight on Children's Environmental Health* and its annexed *Implementation Actions on Protecting Children's Health and Environment Which the Environment Leaders of the Eight Have Agreed to Promote Within Their Governments and Countries*. These documents provide a framework for domestic, bilateral and international efforts to improve the protection of children's health from environmental threats and specify concrete actions that the Eight will undertake to begin the process of incorporating characteristics of infants and children into environmental science, risk assessments and protection regimes.

1997 Declaration of the Environment Leaders of the Eight on Children's Environmental Health

May 6, 1997
Miami, Florida

OVERVIEW

In May 1997, the environment ministers of the G8 met in Miami. One of the central themes of their meeting was the implications for children's health of exposure to environmental contaminants.

At that meeting, the ministers agreed to a declaration on children's health that set out several principles. These are outlined below, along with a brief description of some actions currently underway in Canada which contribute to addressing them:

- First, when standards are set, or risks are assessed for environmental protection programs, the special sensitivities of children should be taken into account. Canada considers the unique exposure patterns of children in doing risk assessments under several federal statutes and policies. For example, under the *Canadian Environmental Protection Act*, chemical assessments consider the lower burdens for children in determining acceptable daily intakes;
- Second, the use of lead in gasoline and other products must be phased out. We have already phased out lead in automotive gasoline and have significantly reduced lead exposure from other sources, but the problem continues in many parts of the world;
- Third, clean water is essential to children's health, and developed countries should provide technological and financial help to other countries to make this a reality. In fact, a substantial part of Canada's international development assistance, through agencies such as the Canadian International Development Agency, is geared toward providing clean water in less developed countries;
- Fourth, air pollution must be reduced, particularly pollutants that exacerbate asthma and other respiratory ailments. Ministers identified the need to focus on both indoor and outdoor air quality. In an effort to address the impacts of air pollution, Canada and the United States agreed in January 1998 to work towards a new Annex on transboundary ozone (a major component of smog) under the Canada-US Air Quality Agreement;
- Fifth, ministers especially identified the indoor threat posed by tobacco smoke to infants and children. The federal government, under the leadership of Health Canada, works with the provinces, territories and the health community to reduce tobacco use among Canadians. Key components of the Tobacco Control Initiative include: legislative initiatives to reduce youth access to tobacco products and tobacco advertising; enforcement of legislation restricting sales to minors; and public education activities directed at Canadians and youth in particular to remain smoke free and to promote non-smoking indoor environments;
- Sixth, an inventory of international research on endocrine-disrupting chemicals—which are linked to cancer, reproductive disorders, changes in behaviour, and problems with the immune system—should be established. Canada is developing an inventory of its environmental and human health research on endocrine-disrupting chemicals and is contributing that information to the inventories being developed by the United States and Europe. This inventory will be available through the Internet at www.cciw.ca/nwri/endocrine;
- Finally, global climate change negotiations should take into account the spe-

cial vulnerability of children. The signing of a global climate change protocol (the Kyoto Protocol) in December 1997 demonstrates an emerging consensus among industrialized nations on the need to mitigate the potentially disastrous effects of climate change and preserve the natural climate for our children. Canada is a signatory to the Kyoto Protocol and is committed to reducing greenhouse gas emissions which cause global climate change.

Following is a full text of the Miami Declaration on Children's Health. A review of the member countries' progress in implementing the Declaration is expected to take place at a future meeting of the G8 environment ministers.

1997 Declaration of the Environment Leaders of the Eight on Children's Environmental Health

We acknowledge that, throughout the world, children face significant threats to health from an array of environmental hazards. The protection of human health remains a fundamental objective of environmental policies to achieve sustainable development. We increasingly understand that the health and well-being of our families depend upon a clean and healthy environment. Nowhere is this more true than in the case of children, who are particularly vulnerable to pollution. Evidence is growing that pollution at levels or concentrations below existing alert thresholds can cause or contribute to human health problems and our countries' present levels of protection may not, in some cases, provide children with adequate protection.

Among the most important environmental health threats to children worldwide are microbiological and chemical contaminants in drinking water, air pollution that exacerbates illness and death from respiratory problems, polluted waters, toxic substances, pesticides, and ultra-violet radiation. Most of these threats are aggravated for children living in poverty. While not a comprehensive list, we have chosen items for action, enumerated below, because they can benefit most from collective effort by the Eight.

We affirm that prevention of exposure is the single most effective means of protect-

ing children against environmental threats. We seek to improve levels of protection for children, and we reaffirm the priority of children's environmental health in our own countries, as well as in bilateral and multilateral agendas. We agree to cooperate on environmental research, risk assessment, and standard-setting within the jurisdictions of each ministry. We agree to raise public awareness that would enable families to better protect their children's health. We urge our Leaders to make the protection of children's environmental health a high environmental priority and call for international financial institutions, the World Health Organization, the United Nations Environment Programme (UNEP) and other international bodies to continue ongoing activities, and give further attention to children's environmental health, in particular the environmental, economic and social dimensions of children's health.

Environmental Risk Assessments & Standard Setting

Historically, due to a lack of comprehensive science, environmental protection programs, standards and testing protocols, often have not adequately taken into account nor fully protected infants and children from environmental threats. While our countries have incorporated the precautionary principle or precautionary approaches and safety factors into environmental standard setting, it is important to employ more explicit scientific consideration of children's characteristics and behaviour in this process.

We pledge to establish national policies that take into account the specific exposure pathways and dose-response characteristics of children when conducting environmental risk assessments and setting protective standards. We agree there is a need to upgrade testing guidelines to improve our ability to detect risks to children and to assess and evaluate the effects of both single and multiple exposures for children. We urge cooperation through the Organisation for Economic Co-operation and Development (OECD) on adopting revised, harmonized testing guidelines. We will promote research to understand the particular exposures and sensitivities of

infants and children to environmental hazards, and exchange research results and information on regulatory decisions. Where there is insufficient information, we agree to pursue the precautionary principle or precautionary approaches to protecting children's health. We call for the consideration of children's environmental health, based on sound science, in the negotiation and implementation of future bilateral, regional and global agreements, such as the negotiations on persistent organic pollutants, long range transboundary air pollution, and trade in particularly dangerous pesticides, chemicals and hazardous wastes.

Children's Exposure to Lead

Lead poisoning is a major environmental hazard to children and our countries have taken many successful actions to reduce children's exposure to lead. Our countries continue to support the reduction in risks from exposure to lead.

We call for further actions that will result in reducing blood lead levels in children to below 10 micrograms per decilitre. Where this blood lead level is exceeded, further action is required. We acknowledge the importance to child health of maternal exposure to lead and agree to reduce maternal exposure.

We commit to fulfill and promote internationally the OECD Declaration on Lead Risk Reduction. We commit to a phase-out of the use of lead in gasoline, the elimination of exposure to lead in products intended for use by children, the phase-out of the use of lead in paint and rustproofing agents, the restriction of lead in products that may result in ingestion in food and drinking water, and to set schedules and develop strategies for elimination or reduction of lead from these sources. In addition, we agree to conduct public awareness campaigns on the risks to children from lead exposure and to develop scientific protocols and programs to monitor blood lead levels in children to track our progress in this important effort.

Microbiologically Safe Drinking Water

Worldwide, the greatest threat to childhood survival is lack of access to clean water, with more than four million children dying annually from diarrheal disease

Annex A

Implementation Actions on Protecting Children's Health and Environment Which the Environment Leaders of the Eight Have Agreed to Promote Within Their Governments and Countries

Risk Assessment and Standard Setting:

- Urge the OECD to expedite completion of the process of updating and harmonizing developmental and reproductive toxicity testing guidelines.
- Designate officials to work towards enhanced international harmonization of risk assessment approaches that explicitly address environmental risks to children.

Lead:

- Each country agrees to develop and share individual country actions to accomplish the goals of the OECD Declaration on lead.
- The Eight will establish principal points of contact and a mechanism for sharing timely information regarding lead hazards in toys and other products to which children might be exposed, including imported products, and will consider other joint actions as appropriate.
- Provide access, on a timely basis, to new technological developments on blood lead level testing.

Microbiologically Safe Drinking Water:

- Recommend that foreign assistance programs of the Eight, international organizations and international financial institutions focus increased attention on drinking water disinfection and source water protection for nations worldwide.
- Designate contact points to exchange monitoring data on microbiological drinking water contaminants and waterborne disease outbreaks.
- Designate contact points to collaborate on research to support the development of technologies and methods, focused on small drinking water systems, to control disease outbreaks.

Endocrine-disrupting Chemicals:

- Request that the International Organization on the Management of Chemicals and U.S. EPA complete an international inventory of ongoing research activities.
- Work with UNEP and other appropriate international organizations to complete an international scientific assessment.
- Develop an international research strategy after completion of the inventory and scientific assessment.
- Support an OECD initiative to develop a battery of screening and testing guidelines for endocrine-disrupting chemicals that considers the special susceptibilities and exposures to children.

Environmental Tobacco Smoke:

- Convene a scientific conference, through WHO or another appropriate scientific organization, to synthesize and share the latest scientific information on risks to infants and children from environmental tobacco smoke and compile information on the most effective educational strategies concerning exposures to children.

Air Quality:

- Carry out regional commitments to address transboundary impacts of air pollution.
- Cooperate through existing scientific organizations to enhance the exchange of information on health threats and effective remedial approaches for addressing indoor air quality problems.

associated with contaminated water. In recent years, a number of countries have experienced serious waterborne disease outbreaks associated with microbial contaminants, such as cryptosporidium and bacterial and viral pathogens. All countries and relevant international organizations should better incorporate the existing knowledge bases into protecting children from microbiological contaminants in drinking water.

We agree to focus increased attention on drinking water disinfection, and source water protection and sanitation, as major instruments of good drinking water quality in our national and regional programs, as well as through existing bilateral foreign assistance programs, international organizations and financial institutions. We will facilitate technology transfer to, and capac-

ity building in, developing countries where microbiologically safe drinking water is a primary child survival concern.

We strongly support the initiative on sustainable use of freshwater for social and economic purposes, including, *inter alia*, safe drinking water and sanitation, proposed in the context of the preparations for UNGASS and consider that this initiative should make a major contribution to children's health.

We agree to share information and policies among our countries to improve our drinking water standards, and will designate officials from our ministries to exchange monitoring data on microbiological drinking water contaminants and waterborne disease outbreaks on a regular basis. We agree to collaborate on research to support the development of technolo-

gies and methods to control disease outbreaks and will give special emphasis to appropriate technologies for small drinking water treatment systems.

Air Quality

Air quality is of particular importance to infants and children, both indoors and outdoors. Childhood asthma and other pediatric respiratory ailments are increasing dramatically in our countries and are substantially exacerbated by environmental pollutants in the air, including emissions from fossil fuel combustion and other sources. While research on children's exposure to some specific air pollutants has been conducted by some of our countries, further research is needed.

We undertake to reduce air pollution in our respective countries, which will alleviate both domestic and transboundary impacts of air quality and, particularly, children's health. Recognizing that indoor air pollution has been identified as a critical problem affecting children's health worldwide, we agree to exchange information on indoor air health threats and remedial measures.

Environmental Tobacco Smoke

Children exposed to environmental tobacco smoke are more likely to suffer from reduced lung function, lower respiratory tract infections and respiratory irritations. Asthmatic children are especially at risk. Many of these symptoms lead to increased hospitalizations of children.

We affirm that environmental tobacco smoke is a significant public health risk to young children and that parents need to know about the risks of smoking in the home around their young children. We agree to cooperate on education and public awareness efforts aimed at reducing children's exposure to environmental tobacco smoke.

Emerging Threats to Children's Health from Endocrine-disrupting Chemicals

There is growing scientific evidence that a variety of environmental contaminants can exert adverse health effects by their ability to alter the functions of hormones within the body. These effects, which include cancer, reproductive disorders,

changes in behaviour and immune dysfunction, have been observed in laboratory animals exposed to specific chemicals, wildlife populations in several broadly contaminated ecosystems such as the Great Lakes, and to a more limited extent in humans exposed to some organochlorine compounds. Some of these chemicals also are capable of causing long-term neurological damage. Infants and children may be at particular risk to the potential effects of these contaminants. Children may be exposed to endocrine-disrupting chemicals *in utero*, through breast milk and in the environment.

We encourage continuing efforts to compile an international inventory of research activities, develop an international assessment of the state of the science, identify and prioritize research needs and data gaps, and develop a mechanism for coordinating and cooperating on filling the research needs. These activities should complement initiatives that are being pursued in international fora such as the Intergovernmental Forum on Chemical Safety (IFCS) and through the work of agencies such as the United Nations Environment Programme. We pledge to develop cooperatively risk management or

pollution prevention strategies, as major sources and environmental fates of endocrine-disrupting chemicals are identified and will continue to inform the public as knowledge is gained.

Impacts of Global Climate Change to Children's Health

Decisive international action must be taken to confront the problem of global warming, including at Kyoto. Our children and future generations face serious threats to their health and welfare from changes in the Earth's climate due the build-up of greenhouse gases in the atmosphere. Overwhelming scientific evidence links human actions to anticipated changes in the global climate system that are likely to result in unacceptable impacts to all nations. In the words of the Intergovernmental Panel on Climate Change: "Climate change is likely to have wide-ranging and mostly adverse impacts on human health, with significant loss of life." Children will be among the most susceptible to more severe heat waves, more intense air pollution, and the spread of infectious diseases, and we are only beginning to understand the interactions between these issues and other global

trends, such as ozone depletion. Future generations will face many potential impacts of climate change with serious health, environmental and economic consequences.

We must address environmental health threats with a specific focus on children which, for many countries, will require increased coordination between environment, health and other ministries. Countries must increase institutional and other scientific capacities to work on the specific problems of environmental threats to children. We will make the steps agreed upon in this declaration a priority in domestic action plans, report on our progress in carrying out those steps in appropriate international fora, and broaden our cooperative efforts on children's environmental health with other countries.

We recognize that environmental threats to children's health must be set in a larger context of poverty alleviation and economic and social development and we urge Leaders to commit to specific results-oriented actions that will accelerate a global transition to sustainable development at the UNGASS and other international fora.



Pollution Probe has worked to protect Canada's environment for almost 30 years.

Visit our website for more information on our current programmes and activities at:

<http://www.pollutionprobe.org>