HEALTH IMPACT ASSESSMENT AS A TOOL FOR POPULATION HEALTH PROMOTION AND PUBLIC POLICY

A Report Submitted to the Health Promotion Development Division of Health Canada

by

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May 1996

EXECUTIVE SUMMARY

The criteria for evaluation of health, social, environmental and economic policies and programs are changing. This is particularly true within the health sector where many governments are adopting an understanding of health that includes a focus on the social and environmental determinants of health. They recognize that societal structures, attitudes and behaviours influence health profoundly, that prevention is better (or at least more timely) than cure, and that prevention is a way to reduce disability and social dependence. Consequently, how social, environmental and economic policies influence health and the prevention or production of illness, disability or death needs systematic monitoring at all levels of government.

With increasing official commitment to decentralization and community participation in decision making and growing consideration of the social determinants of health, some ambiguity, and perhaps controversy, remains about what impact on health this new perspective will have, what strategies will work to achieve beneficial outcomes, what criteria should be applied to judging health impact, how health impact assessment can work to produce better decisions, and what its ultimate influence on policies and program decisions may be. Most calls for evidence-based decision making offer little indication as to how the use of health impact assessments can lead to "better" health decisions. Without tools and methods that can be used to assess the health impact of policies and programs, these questions cannot be answered. Without the implementation of such tools and methods, health impact cannot be known.

The purpose of this project is to report on the status of the use of health impact assessment as a tool for public policy and a strategy for population health promotion.

The report presents and describes:

- approaches developed for health impact assessment;
- approaches developed for similar purposes such as environmental impact assessment;
- specific tools and models used to link proposed programs and policies to their health impact;
- a description of health impact assessment as a means to develop public policy and to facilitate choices among program options;

- a situational analysis of the use of health impact assessment in the provinces and territories of Canada;
- selected national level experiences and examples from other countries;
- selected municipal examples;
- selected federal level experiences and examples of impact assessment;
- common themes and observations; and
- recommendations and suggestions for future development.

The **methods** for this project included: (a) a comprehensive literature search, (b) an extensive call for information and case reports examples pertaining to, or related to, health impact assessment, and (c) establishment of an advisory committee to provide information sources and to review the draft report.

The literature search included the collection of directly relevant materials by means of an international call for information via telephone, facsimile, mail, e-mail, and the Internet, with subsequent follow-up. An advisory committee was assembled and polled to identify key contact people. These potential resource persons were then contacted for information and case examples of the applications of health impact assessment. The methods and search efforts were necessarily limited by the two-month time period available for this study.

The **background** information section highlights the social, political, and environmental contexts within which health impact assessment is evolving. It reviews some conceptual issues, particularly in relation to health, and several pitfalls associated with broadened definitions.

The **results** section provides a report of past, current, and planned health impact assessment initiatives and comments on the potential value of each in the further development of the field. The analysis primarily covers provincial and territorial initiatives but also includes examples from municipal, federal, and international settings to a more limited extent. Impact assessments in other areas such as the environment are presented and discussed in terms of possible contributions to health impact assessment development. A summary of the application of health impact assessment in the provinces and territories is provided at the end of the results section.

The **recommendations** section arises from the results to suggest action steps based on common themes emerging from the literature. The recommendations embody the principle that tools such as health impact assessment, with wide-ranging implications, should be developed through a multi-sectorial approach with common goals and objectives developed through a consensus process that can transcend changes in government. The core recommendations are:

1. The federal government should undertake, in collaboration with other major national organizations having a stake or a role in the determinants of population health, a systematic national goal setting process that would combine the evidence and experience already compiled and developed as goals and objectives in the provinces and territories.

2. Develop objectives and targets in all areas regardless of the availability of data to confirm the estimates of baseline levels for the Canadian population at large or specific populations.
3. Develop monitoring and surveillance systems to track progress toward the objectives, and to provide a source of trend baseline and follow-up data for assessment of health impact.

Among the appendices are a compilation of application abstracts, a listing of contact persons who provided information or further contact recommendations, and a listing of the advisory committee members.

ACKNOWLEDGEMENTS

This report was written by a team of researchers from the Institute of Health Promotion Research at the University of British Columbia. Lawrence Green and James Frankish are the Director and Associate Director of the Institute. Pamela Ratner is a Medical Research Council of Canada and Izaak Walton Killam Postdoctoral Research Fellow at the Institute. Treena Chomik is an inter-disciplinary doctoral student in Health Promotion. Craig Larsen served as the Project Coordinator.

We wish to acknowledge the support of our colleagues at the Institute of Health Promotion Research and the British Columbia Consortium for Health Promotion Research. We also consulted with colleagues from the other health promotion research centres across Canada, and additional members of the established Advisory Committee.

This report was funded by the Health Promotion Development Division of Health Canada. We want to thank Dr. Tariq Bhatti and Ms. Nancy Hamilton of Health Canada for their guidance and generous support of this project.

We view this report as a resource for policy makers and planners who are interested in advancing the area of health impact assessment. We hope it will contribute to the development of new knowledge, the building of skills, and meaningful change in the health and quality of life of Canadians.

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HEALTH IMPACT ASSESSMENT AS A TOOL FOR POPULATION HEALTH PROMOTION AND PUBLIC POLICY

Rationale

The activities, policies, and programs of government are designed to attempt to solve public problems and to serve the public good. With an intractable debt and budgetary deficits, Canadians, perhaps more than ever, demand accountability--they want to know that policies and programs fulfil their objectives. Yet, how can we know that particular policies are beneficial when an effect may have multiple causes and a cause may have a vast array of effects? It may be demonstrated that a desired objective is met, but how do we know that unintended, adverse consequences do not also arise?

Pal (1992) identified four concepts of policy impact that may be included in a policy evaluation: direct impact, economic impact, social impact, and political impact. A policy can be examined in relation to its intended target, the balance between its costs and benefits, its effect on the texture of social life, and the government's political interests (re-election chances). These four concepts have been the underpinnings of most policy analysis debates.

It has been only in recent years that health advocates have recognized that the impact of governmental policies on the population's health has been overlooked or neglected in traditional approaches to policy analysis and evaluation. The Ottawa Charter for Health Promotion (First International Conference on Health Promotion, 1986) identified that health considerations should be relevant to all policy makers in all sectors; they should be aware of the health consequences of their decisions. Stating the "shoulds", however, is the easy part. Stating the "how" and implementing the ideal constitute the challenges. What procedures or methods must be in place to judge a policy or program in relation to the effect(s) it may have on the population's health status?

There was a time when public health could easily track the health impact of its programs or its neglect of programs. The communicable disease reporting systems and the monitoring of outbreaks provided a sentinel warning alarm whenever a controlled disease threatened to become uncontrolled. The short incubation period between infection and symptoms meant that the discovery of symptomatic individuals could be traced quickly back to the probable source of their infections, and that source could then be controlled.

Today's focus on population health is complicated by the facts of multicausality and long latency periods (decades for some) between the causes, sources, or determinants of health. Health impact today becomes

a matter of tracing single diseases, disabilities or death back to genetics, living conditions, or environmental exposures. It is further complicated by the fact that most of the leading causes of disease, disability, and death are no longer discretely detected at a point in time. The chronic and degenerative diseases creep up on individuals and populations over their lifetimes. They are not detectable or isolatable as incidences or outbreaks. Population health data are comprised of prevalence rates rather than incidence rates.

The criteria for evaluation of health, social, environmental and economic policies and programs are changing. This is particularly true within the health sector where many governments are adopting an understanding of health that includes a focus on the social and environmental determinants of health. They recognize that societal structures, attitudes and behaviours influence health profoundly, that prevention is better (at least more timely) than cure, and that prevention is a way to reduce disability and social dependence. Consequently, how social, environmental and economic policies influence health and the prevention or production of illness, disability or death needs systematic monitoring at all levels of government.

With increasing official commitment to decentralization and community participation in decision making and growing consideration of the social determinants of health, some ambiguity, and perhaps controversy, remains about what impact on health this new perspective will have, what strategies will work to achieve beneficial outcomes, what criteria should be applied to judging health impact, how health impact assessment can work to produce better decisions, and what its ultimate influence on policies and program decisions may be. Most calls for evidence-based decision making offer little indication as to how the use of health impact assessments can lead to "better" health decisions. Without tools and methods that can be used to assess the health impact of policies and programs, these questions cannot be answered. Without the implementation of such tools and methods, health impact cannot be known.

Purpose

The Health Promotion Development Division of Health Canada (1995) recently recognized the above stated concerns and acknowledged that developing "healthy" public policy will require concrete activities, particularly those that address the development of health impact assessment tools. To this end, the Division solicited a situational analysis of health impact assessment strategies for public policy development and for population health promotion. The overall objective of this project was to report on the status of health impact assessment, as it currently occurs internationally, nationally, provincially and locally.

Methods

To complete the situational analysis we undertook: (a) a comprehensive literature search, (b) an extensive call for case reports pertaining to, or related to, health impact assessment, and (c) assembly of an advisory committee to recommend additional information sources and to review the draft report.

The literature search employed key phrases such as health impact assessment, environmental impact assessment, health risk assessment, health hazard appraisal, and health policy impact assessment, and was conducted within the Medline database for the years 1980 to early 1996. Little material of direct relevance was obtained from the published literature.

Our call for information about applications of health impact assessment and further contacts was initially directed at individuals and organizations who we knew to be, or suspected might be, acquainted with the topic. This initial contact list included people from across Canada and from several other countries. For both the initial contacts and following up on all leads, the broadcast was conducted via mail, e-mail, facsimile or telephone, as appropriate. In the interest of expedience, leads were contacted by mail only when other modes of communication were not available.

Feedback from the initial and subsequent contacts rapidly led to an extensive network of leads in many countries, regions, and sectors. Some information was obtained for every province and territory of Canada. A full list of respondents is provided in Appendix B. It should be noted that this list does not the reflect the full scope of our call for information.

An advisory committee was assembled of willing individuals who had expressed particular interest or familiarity with health impact assessment. The committee members are listed in Appendix C. The two roles of the advisory committee members were to recommend any further contacts beyond our existing roster and to review our draft report and to provide feedback.

The short time line for the study shaped the employed method in several ways: first, follow-up memos to the initial group were issued within the first week; second, communication by e-mail, facsimile, or telephone, rather than mail, was used and encouraged wherever possible; third, some later leads could not be explored; and fourth, some mailed materials of possible relevance to the report were not received in time for us to consider.

We received a significant amount of material in response to our call for information. Those materials or examples that best illustrate the application of health impact assessment have been formulated into Health

Impact Assessment (HIA) Application Abstracts. Seventeen HIA Application Abstracts are included in Appendix A of this report. Each Abstract summarizes the key points of the case study, including the following: abstract number and title, contact person or agency, major approach to HIA, defining features, HIA application considerations, and reference(s). These abstracts are referred to by abstract number throughout the main body of the report.

BACKGROUND

Key Concepts and Terms

Teachers and professors unceasingly admonish their students to define their terms to secure a common understanding of what is being addressed. Before we can engage in a debate, or claim to disagree, we must agree that we are referring to the same subject. That definitional issues are important can be no truer than for the conceptual domains of health, health promotion, healthy public policy, and health impact assessment. The very crux of the problem of what constitutes challenges to human health and what solutions ought to be sought turns on how we define or conceptualize the relevant terms, and how we limit their scope or domain.

Collins (1995) noted that the mood of reform has enveloped the health sector in Canada. Coupled with such reform is considerable interest in refocusing the emphasis from health care onto disease prevention and health promotion to address the determinants of health and illness (Green, 1994). Collins argued that health reform, in the absence of an explicit conceptual model of health, has the potential to focus only on parts of the problem, with little overall benefit. He further argues that models of health, without an "explicit" supporting text detailing their policy-intended implications, have the potential to be misunderstood and misused. In today's climate of fiscal restraint, they may be used as vehicles for justifying cost cutting.

Health

Consistent with the work of Rootman and Raeburn (1994), we define health from a health promotion perspective. That is, health is a multidimensional concept that goes far beyond the mere absence of disease or that which is confined to matters of lifestyle and behaviour. It involves subjective, as well as objective components, environmental and policy components, as well as those that are related to the individual, and must be assessed in qualitative as well as quantitative terms. We note the definition of health offered by Rootman and Raeburn:

> Health...has to do with the bodily, mental, and social quality of life of people as determined in particular by psychological, societal, cultural, and policy dimensions. Health is...to be enhanced by sensible lifestyles and the equitable use of public and private resources to permit people to use their initiative individually and collectively to maintain and improve their own well-being, however they

may define it. (p. 69)

More succinctly and specifically, we define *health* for purposes here as being the capacity of people to adapt to, respond to, or control life's challenges and changes.

Our definition may be seen as considerably narrower than definitions advocated by some health promotion documents, official and unofficial. For example, many rely on the World Health Organization's definition: "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or injury," or tautological definitions similar to that used by the *American Journal of Health Promotion*: "Optimal health...[is] a balance of physical, emotional, social, spiritual and intellectual health" (O'Donnell, 1986, 1989, p. 5)

Such definitions have been criticized as hopelessly utopian and infeasible, and which blur distinctions between health and social development, in that they identify virtually all human activity as health-related and equate all human and social values as health (Berlin, 1990; Crawford, 1977; Strong, 1986). The problem with such wide-sweeping definitions is that no limits are placed on what is encompassed by health. Other sectors view this as a form of professional imperialism or, at best, expansionist on the part of the health field. With no parameters for health planning, policy, expenditure, practice, or science, the scope of the health field, and therefore its expenditures, are unbounded (Labonté, 1994; Rootman & Raeburn, 1994).

Definitions of health that encompass the determinants of health mix cause and effect, making it difficult to use that concept of health as a dependent or outcome variable in health impact assessment. Such breadth of definition makes health indistinguishable from its determinants and therefore unmeasurable as the consequence of those determinants or the programs and policies designed to modify the determinants. Jurisdictions that choose to use a broader or narrower definition of health than the one we have chosen for this report will need to adjust the approach to health impact assessment accordingly.

Quality of Life

We make important distinctions between *quality of life* and *health.* Whereas discussions of wellness, well-being, and the multidimensionality of health, inclusive of intellectual, spiritual, and social pursuits, are more closely related to matters of quality of life, we view health as one of many determinants of quality of life. That is, health is an instrumental value rather than an end in itself (Green & Kreuter, 1991). Or, as stated in the Ottawa Charter for Health Promotion (First International Conference, 1986): "Health is seen as a resource for everyday life, not the objective of living." We agree that health is a resource to achieving

an acceptable quality of life.

Health Impacts versus Health Outcomes

A distinction must be made between *impact* and *outcome*. The methods (and indicators) one would employ in a health impact assessment depend on whether one is truly interested in impacts, rather than outcomes. The Oxford Dictionary (Allen, 1990) defines the term *impact* as "an effect or influence, especially when strong" (p. 590) and *outcome* as "a result" (p. 843). These definitions make the two terms indistinguishable. As Green and Kreuter (1991) pointed out, however, usage varies among disciplines and professions; those in the health field tend to use these terms in diametric opposition to those concerned with the evaluation of nonhealth matters. The term *impact*, then, refers in the health field to the *immediate* effect of a health program, process, or policy, while the term *outcome* refers to the *distant* or *ultimate* effect. This issue becomes important when we realize that those who have coined the term, *health impact assessment* have borrowed from the field of *environmental impact assessment* without acknowledging that the definition of an impact in the environmental field is different from that usually adopted in the health field. We will conform to current practice by using the term *health impact assessment* with the understanding that the impacts to which we refer are usually thought of as health outcomes.

Healthy Public Policy

Evans and Stoddart (1994) criticized the World Health Organization's definition of health, stated above, on the grounds that it is "difficult to use as the basis for health policy, because implicitly it includes *all* policy as health policy" (p. 28). For many proponents of health promotion, however, including *all* policy as health policy seems to be precisely the point. The term *healthy public policy*, coined by Trevor Hancock (1982, 1985a, 1985b), a well known Canadian public health physician, has been defined as "policy enacted by the various levels of government that is characterized by explicit concern for health and equity, and by accountability for health impact" ("The Adelaide Recommendations," 1988; Office of Health Promotion, B.C. Ministry of Health, 1991a, 1991b, p. 7).

A Definition of Health Impact Assessment

We define health impact assessment as "any combination of procedures or methods by which a proposed

policy or program may be judged as to the effect(s) it may have on the health of a population."

We propose that policies or programs, of any nature (health-related or nonhealth-related), may directly affect the health of a population, or may indirectly affect their health by altering, influencing, or affecting the determinants of health, *inter alia*, and consequently will affect quality of life. These relationships are set out in Figure 1 (see end of document). We acknowledge that the health impacts of such policies or programs are only one kind of the many consequent impacts. Such policies or programs may also be found to have economic, social, or environmental impacts (see Figure 2). We limit our approach to health impact assessment to the study of those outcomes that can be shown to be of a health nature, as defined above. In recognizing the complexity and potentially far-reaching effects of many policies and programs, however, we note that where such activities may potentially have impacts beyond the health field (i.e. economic, social, and environmental fields), desirable assessments would involve intersectoral cooperation and collaboration.

We also limit our treatment of health impact assessment to considerations of population health. Many policies and programs potentially affect the delivery of health care. Assessments of these impacts may require such indicators as medical, surgical, and nursing outcome indicators, quality assurance indicators, utilization indicators, and so forth. We have not included such considerations in our discussion of health impact assessment.

Historical Context

Healthy Public Policy

In its earliest manifestations, the term *healthy public policy* served as the heading for Target 13 of the 1984 Health for All policy targets of the World Health Organization's Regional Office for Europe (Kickbusch, 1994; Pederson, O'Neill, & Rootman, 1994). The concept was also identified as the first of five key elements of health promotion delineated in the *Ottawa Charter for Health Promotion* (First International Conference, 1986). The coordination of healthy public policy was conceived as an implementation strategy to operationalize health promotion mechanisms. The notion is intended to imply that all public policies, regardless of their intended audience, should be examined for their impact on health; "policies which have a major impact on health are not limited to the delivery of health care services or even public health services" (O'Neill cited in "The Argument for Healthy Public Policy," 1991, p. 1). Rachlis and Kushner (1989) defined healthy public policy as "any policy that creates and encourages a context for health" (p.

257).

The World Health Organization, and other health promotion agencies, use the concept of healthy public policy to emphasize the need for governments to acknowledge and address the connections between health and the social, physical, and economic environments ("The Argument for Healthy Public Policy," 1991). In the Epp (1986) report *Achieving Health For All: A Framework for Health Promotion* it is stated that all policies that have a bearing on the population's health, including income security, employment, education, housing, business, agriculture, transportation, justice, and technology, must be coordinated.

Healthy public policy, as conceived by its proponents, however, implies more than the consideration of public policies' impacts on health. It also implies a special type of decision-making, one that involves public participation and broad community consultation. Mike Corbeil, of the B.C. Office of Health Promotion, suggested that "the process and the structures we have for developing and implementing policies are just as important as the policies themselves" ("Public Policies Have Impact on Health," 1991). To ensure public support of effective policies designed to enhance the environment for healthful living, champions of healthy public policy believe that the public must be involved at the outset. A "healthy public process" is said to ensure that the process is fair for everyone.

The concept of healthy public policy, although widely accepted as a key component of health promotion, has not been operationalized in any appreciable way. Hancock (1992, 1994) decried recently that virtually no progress had been made in developing healthy public policy at the national level. At the provincial level, he found some evidence that healthy public policy is valued and that the need for evaluation is recognized, yet the extent to which the idea has been operationalized remains unclear. He noted that, in Manitoba, a supportive structure is in place and a commitment was articulated in the document *Quality Health for Manitobans*: "Every major action and policy of government will be evaluated in terms of its implications for the health of Manitobans" (Manitoba Health, 1992).

Hancock also noted a commitment to healthy public policy in British Columbia. In B.C., the Royal Commission on Health Care and Costs (1991) recommended that a set of measurable indicators be established that would be suitable for the planning and evaluation of public policies related to health as well as for the evaluation of possible health effects of all proposed provincial programs and legislation. The intent is to ensure that decision makers consider health and well-being in policy making based upon the broad determinants of health including economic, social and physical influences. In 1993, a new format for Cabinet Submissions was released that requires ministries to discuss the health impacts of policy and program options as a part of the submission process. A health impact assessment tool was developed to

assist governmental ministries with this function. Currently, health impact assessment tools and processes in the province of B.C. are being revised to better align with recently developed population health goals for the province. British Columbia's approach to healthy public policy and health impact assessment are presented in Appendix A, Abstract #5 of this report.
Hancock (1992) suggested that the most likely place to witness healthy public policy is at the municipal level. This may be the case, he believed, for several reasons: (a) the social networks and scale of operations, within communities, are such that the ties between policy makers and those affected are stronger, (b) policy makers live where they work; they are identifiable as well as affected by their own policy, and (c) the bureaucracies of communities are relatively small and there is a greater chance of intersectoral cooperation.

Healthy public policy may also be more suited to regional application and implementation where multiple communities share geographic and population characteristics and a history of working together exists. A notable example comes from the region of Catalonia (a European region situated in the north-east corner of the Iberian Peninsula.) The *Health Plan for Catalonia* serves as the instrument for healthy public policy in the region. The Health Plan sets forth regional goals, objectives and indicators for health and proposes strategies to meet them. The use of objectives and targets to monitor health in Catalonia has demonstrated improvements in a number of the priority areas outlined in the Health Plan including maternal and infant mortality rates, chronic disease, cervical and breast cancer screening, and accident prevention. The *Health Plan for Catalonia* is described in greater detail in Appendix A, Abstract #9.

Why, then, has there been such limited progress in the operationalization of healthy public policy? Many factors may hinder its development. These fall broadly under two categories: political challenges and technical challenges. Political challenges include a lack of political will, a long tradition of minimal public participation, and underdeveloped mechanisms and incentives, lack of cooperation among departments and jurisdictions, and competing interests. Technical challenges include insufficient knowledge and expertise, underdeveloped science, underdeveloped measurement of health-related phenomena, uncertainties about the relative influence of some determinants of health, and insufficient structures for managing relevant information and systems. These political and technical challenges are perpetuated by political timelines and cycles.

Given the definitional problems associated with recent conceptualizations of health, many policies currently in place may not be recognized, by all, as falling within the domain of health. A publication produced by the Office of Health Promotion of the B.C. Ministry of Health included speed limits, seat belt legislation, penalties for drinking and driving, no-smoking by-laws, bans on cigarette and liquor advertising, and rules

requiring labelling of dangerous products as healthy public policies ("The Argument for Healthy Public Policy," 1991). These are perhaps the most obvious policies, but the B.C. document also included such policies as building codes that enhance accessibility for the disabled, federal child tax credits that provide support to poor children, literacy programs, land-banking for affordable housing, and economic policies that promote full employment and equal opportunity. These policies may not be conceived as "health" policies. Indeed, rather than simply fail to recognize such policies as pertinent to health, there may be active resistance or passive aggression in some sectors against what they perceive as encroachment by the health sector.

Health Field Concept

In addition to the experience of the national, provincial, and local jurisdictions that have applied various forms of health impact assessment, we can point to a few theory- and research-derived models of planning that have given emphasis to health impact as part of their frameworks and procedures. Such models have provided guidance to local, provincial, and sometimes national health planners in developing programs and policies, or in suggesting guidelines for others within their jurisdictions to set priorities and to develop proposals for grant funding. The essential feature of such models is that they suggest a particular order and direction of cause-effect relationships from programs, policies and regulatory activities to processes of change and from there to health outcomes. Without denying the circularity and feedback loops of cause-effect chains, they lay their emphasis on the order of cause-and-effect relationships that leads most directly from input to health outcomes. The degree of detail they offer in the intermediate steps between the program input to the health outcome determines the types of users who apply these models and the extent of the actual application in planning.

Notable among such models was one presented in 1973 by H. L. Laframboise, then Director-General of the Long Range Health Planning Branch of Health and Welfare Canada. This simple model that sought only to break health policy "down into more manageable segments" (Laframboise, 1973), led in the following year to the landmark policy paper referred to now as the Lalonde Report (Lalonde, 1974). Laframboise laid out four "primary divisions" of influence on health: lifestyle, environment, health care organization, and basic human biology. He went on in his 1973 paper to conclude that:

> The challenge, in the health *field* in Canada, is to maintain the present high level of health care and medical research, while bringing our efforts up to a similar level in the areas of lifestyle and environment, where our principal problems now appear to lie. If the conceptual approach proposed

> in this paper takes anyone even one step further along the path to a balanced view of the health *field* it will have served its purpose. (p. 393)

This simple delineation of the four main categories of factors influencing health outcomes had a momentous impact on Canadian, American, European and Australian health planning in the years that followed its popularization in the Lalonde Report. On all three continents, the interest and focus of new thinking turned increasingly to the neglected dimensions of lifestyle and environment, although the relative expenditures remained predominantly (over 90%) in the health care organization category. Events in the U.S. led over the next five years to the publication of the first Surgeon General's Report on Health Promotion and Disease Prevention, *Healthy People 2000,* which was the first major volley in the Healthy People objectives initiative described below.

The elegant simplicity of the Health Field Concept was lost in the Canadian debate that followed the issuing of the Lalonde Report. No significant shift with respect to the lifestyle and environmental determinants was cast in policy, no major shift in federal health resources followed the Report, and little change in program support for health promotion from the federal level was sustained beyond the development of the Health Promotion Directorate. Lavada Pinder (1994) attributes this largely to the failure of both the Lalonde Report and its successor, the Epp Framework (see below), to engage the Department of Health and other sectors of the federal government in a substantial consultation or goal-setting process similar to the one used in the United States with the development of the objectives for the nation in disease prevention and health promotion (U.S. Department of Health, Education, and Welfare, 1979). The discontinuities of governments and ministers left the internationally acclaimed concepts of both reports largely unsupported by policy or sustained program funding. In short, the Health Field Concept set in motion a train of subsequent policy documents and conceptual frameworks for planning or coordinating health programs and public policy, but most of these have been without continuous funding.

Health Promotion, Population Health, and Population Health Promotion

Downplaying lifestyle as the pivotal point of the causal chain between programs or policies and health impact, the Epp Framework added the words "for all" to the word health to lay the emphasis of his direction on attaining "equity in health" (Pinder, 1994). The causal links to health were then arrayed in three tiers, one of "health challenges" (reducing inequities, increasing prevention, enhancing coping), one of "health promotion mechanisms", (self-care, mutual aid, healthy environments), and one of implementation strategies

(fostering public participation, strengthening community health services, and coordinating healthy public policy).

The Ottawa Charter on Health Promotion (First International Conference on Health Promotion, 1986) promulgated the most widely adopted definition of health promotion as essentially a statement of its goal of enabling people to gain control over and to improve their health. Its emphasis on empowering people to have greater control over their health shifted the spotlight away from health care services and toward other determinants of health in the environment and in living conditions and lifestyles. The Charter also helped position health in this implicit causal chain not as an end unto itself but as "a resource for living" (WHO, 1986) by which it referred to other qualities of life for which health was to be seen as a determinant itself.

As efforts to give the Ottawa Charter greater practicability, the Canadian *Achieving Health for All: A Framework for Health Promotion* (Epp, 1986), and subsequent definitions placed more emphasis on the strategies and methods by which the goal articulated by the charter might be achieved in policy and practice from national to local levels. One methodologically and procedurally oriented definition that fits with the causal chain implied by the Ottawa Charter and the Epp Framework is "Health promotion is the combination of educational and environmental supports for actions and conditions of living conducive to health" (Green & Kreuter, 1991). The actions implied here are detailed by the Epp Framework and by subsequent formulations of health promotion, and in the Ottawa Charter itself, as both individual coping and contributing actions by people themselves and a range of organizational, community, and societal actions related to policy, environment, and health services.

The health promotion perspectives described above have been combined with the population health perspective adopted by the Federal, Provincial, and Territorial Health Ministers (Advisory Committee on Population Health, 1994) to outline strategies for action on the full range of health determinants at all levels of populations from individual to societal. Hamilton and Bhatti (1996) recently formulated *An Integrated Model of Population Health and Health Promotion* in which they combined the foregoing formulations to suggest a framework that could guide actions to improve health. They present a three-dimensional policy and practice cube that suggests an intersection for each of the determinants of health named above with each of the levels of population from individual to society, and each of those intersections with the five strategies of the Ottawa Charter and Epp Framework for health promotion. This model makes more explicit the ecological perspective that has been a foundation of public health and health promotion from their earliest articulations (Green, Richard, & Potvin, 1996; World Health Organization Monica Project, 1994), but has been operationalized only partially in most health promotion projects funded by federal and

provincial agencies in Canada (Richard, Potvin, Kishchuk, Prlic, & Green, 1996). This three-dimensional model is expressed in the cubic representation shown in Figure 3. The three dimensions address, respectively, the questions of "Who?" "What?" and "How?" The intersections of each set of three questions or levels of population, determinants and strategies lend themselves ideally to the formulation of goals, objectives, and quantitative objectives.

Determinants of Health

Emphasis on "population health" has given further attention to the delineation and documentation of evidence concerning the determinants of health (Drummond & Stoddart, 1995; Evans & Stoddart, 1990; Evans, Barer, & Marmor, 1994). The Federal, Provincial, and Territorial Advisory Committee on Population Health (1994) has adopted these determinants as the targets for the refocused national and provincial strategies for population health:

Income and social status: not the amount of wealth but its relative distribution, together with the control it gives people over their life circumstances and their capacity to take action.

Social support networks: the help and encouragement people get (or know they can tap if needed) to cope with difficult situations and to maintain their sense of efficacy in dealing with life circumstances.

Education: the combination of relevant and meaningful information and skills that equip people to cope with daily challenges and enable them to participate in their community through opportunities for employment and voluntary activities.

Employment and working conditions: the conditions of meaningful employment, economic stability, and a work environment conducive to health.

Physical environment: air, water, soil, housing, and food protection combined with other conditions for safe living in communities.

Biology and genetic endowment: physiological, anatomical and mental capacities with which people are born and which naturally develop and decline over the life cycle.

Personal health practices and coping skills: those actions by which individuals can prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health.

Healthy child development: positive prenatal and early childhood experiences.

Health services: the linking of accessible preventive and primary care services including well baby, immunization and health education programs.

RESULTS

Current Approaches to Impact Assessment

Environmental Impact Assessment

Environmental impact assessment (EIA) is a tool to examine the environmental and social implications of proposed development projects and is a legislated requirement in most of the provinces. EIAs that address health issues are a special case of health impact assessment in that they are a tool used in the evaluation of the health impacts of planned developments. In 1992, Australia developed the *National Framework for Health Impact Assessment in Environmental Impact Assessment*. The national framework designates policy areas and types of development projects that are subject to health impact assessment. In the Australian model, health impact assessment and environmental health impact assessment are twin elements of a single process. In many cases, consultation with health authorities is mandatory for planned development projects. The HIA process parallels the standard environmental impact assessment process which includes screening for relevance, scoping for range, profiling for baseline data, risk assessment and management, implementation and decision-making, and monitoring and evaluation. Public participation, workforce training and accreditation for the implementation of health impact assessment are key components of the Australian approach. The *National Framework of Health Impact Assessment in Environmental Impact Assessment* in Australia is summarized in Appendix A, Abstract #13.

It is generally recommended that when potentially significant health impacts may be caused by a proposed project, the EIA should include an assessment of the risks to human health as part of the assessment of the potential environmental risks. In a report completed for the Canadian Environmental Assessment Research Council, Simon (1988) acknowledged that EIA had the potential to assess the health impacts of proposed projects, and that, to some extent, such assessments were already being conducted in several countries, including Canada. Based on her analysis, Simon concluded that most Canadian provincial governments and federal ministries addressed health issues in EIAs on a sporadic basis and that they lacked sufficient procedures and mechanisms to ensure that health issues were considered on a consistent and adequate basis. Simon further concluded that most statutes and policies, which formed the basis of the EIA mandates, failed to require health impacts to be considered in EIAs. She also noted that the links between environment and health ministries were weak, and, as a result, there were insufficient resources to enable health professionals to participate in EIAs. Finally, Simon noted that, while some EIAs addressed human health risks, the proportion of EIAs with health studies was low, with the majority being limited to a qualitative analysis.

The health components usually addressed in the EIAs that have been conducted in Canada range from impacts of the proposed project on critical subpopulations, future generations, residents and workers during construction and plant operation, positive health impacts, cumulative health exposures, impacts to health care facilities, waste disposal methods, and so forth. Simon (1988) noted marked variations among the provinces and the Federal Government. Whereas Quebec was highlighted for its formalized mechanism wherein a cooperative mechanism between the Ministries of Environment, Health, and Social Services exists to ensure consultation, Nova Scotia and Prince Edward Island were noted to be less formalized. In these latter two provinces, environmental assessments were conducted on an *ad hoc* basis as part of permitting or licensing procedures, and health was rarely identified as a concern. It is in this area, however, that we see that Simon's definition of health impact is narrower than the one we suggested earlier in this report wherein we included the determinants of health. She noted that Nova Scotia and PEI paid greater attention to issues such as unemployment and the welfare of the fishing industry, factors that could be viewed as important determinants of health.

At the Federal level, Simon was critical of the lack of formal linkages between Environment Canada, Health and Welfare Canada, and Labour Canada and pointed to a lack of political will, and personnel and financial resources, to formalize and ensure communication between these ministries. Additionally, the Canadian public, unlike the American public, can not take governmental departments to court if it claims that the department has not addressed certain issues adequately. Simon suggested that public oversight ensures that U.S. EIAs are comprehensive; we cannot know the extent to which the lack of public accountability in Canada has limited the likelihood of health being considered in EIAs.

The Simon (1988) report made a number of recommendations to the Canadian Environmental Assessment Research Council to improve the extent to which health impacts were assessed in EIA processes. These recommendations included, among others:

- the development of a policy agreement between health and environment ministries requiring the consideration of health issues in EIAs when relevant,
- conducting a federal-provincial workshop to develop definitions of “human health,” “human health impacts,” and “human health impact assessment,”
- establishing a task group or sponsoring research projects to develop guidelines on screening, methodologies, health impact assessment, industry-specific health issues, standards and objectives, and
- conducting research to identify agency procedures other than EIA (regulatory, licensing, and

permitting procedures) in which health components are already addressed.

Davies (1991), also of the Canadian Environmental Assessment Research Council, conducted a study to identify the factors that determined whether health was considered as a part of an EIA, and what typically comprised a health impact assessment. She concluded that, although health impact assessments are usually conducted when there is a health concern, such assessments are rarely required by EIA legislation and, consequently, there are no guidelines to assist governmental reviewers in their decision-making. Neither are there guidelines to determine the factors or indicators that should be included in health impact assessments, or the methods by which they should be carried out. Apart from these limitations, Davies noted some common themes:

- health impact assessments are most likely to be done when the proposed development is near human settlements; southern urban centres are more likely to have HIAs completed than are northern rural areas;
- developments with longer estimated lifetimes are more likely to have HIAs completed than are those with relatively short estimated lifetimes (e.g., oil and gas explorations planned for 100 to 150 days are not likely to be assessed);
- the nature of the project is likely the strongest determinant of whether an HIA will be completed; if perceived or actual health impacts are likely, then an HIA is likely.

Several barriers to the consideration of health in EIA were noted including:

- a shortage of knowledgeable health professionals who are familiar with EIA;
- inadequate communication between governmental departments and different levels of government, and
- insufficient or conflicting scientific literature.

Despite the limitations of the EIA approach to health impact assessment, much of the current expertise, in Canada, rests within this sector.

Health Risk Assessment

Risk is a reality of everyday life. Determining how risk(s) affect the health and quality of life of Canadians is a central mandate of government (Aldrich & Griffith, 1993; Bailar, Needleman, Berney, & McGinnis,

1993; U.S. Department of Health and Human Services, Task Force on Health Risk Assessment, 1986). In this vein, health risk science research, with a focus on disease prevention is important for the development of rational and cost-effective health and regulatory policies (Marinker, 1994; Olden & Klein, 1995).

Health risk assessment has been defined as "the qualitative or quantitative estimation of the likelihood of adverse effects from exposure to specified health hazards or from the absence of beneficial influences" (U.S. Department of Health and Human Services, Task Force on Health Risk Assessment, 1986). Typically, health risk assessment involves four main steps: hazard identification, hazard characterization, exposure assessment, and risk characterization.

In recent years, considerable progress has been made in integrating risk-related concerns into mainstream governmental policies and planning (Wigle, 1995). Progress has been much more rapid in the area of environmental impact assessment than in the case of health impact assessment, even though the rationale for environmental improvement is often ultimately related to human health and well being (Warford, 1995).

Despite such progress, there remains considerable debate regarding risk assessment practices for estimating the impact of policies or programs, rather than proposed projects (Iezzoni, 1994). Implicit in all risk assessment schemes is the need to extrapolate from high-exposure studies to low-exposure situations and from known to probable risks. Many risk assessment schemes accommodate such uncertainty by incorporating arbitrary "safety factors" or other default approaches. Such factors are most often not experimentally derived. As such, they may overestimate or underestimate actual risks. Analogous procedures for estimation of health impact have not been developed.

Health impact assessment can be distinguished from risk-related assessment in a number of ways. First, risk-related assessments are most often concerned with minimizing the negative or deleterious impact of specific activities on health, either directly or indirectly, as through environmental protection efforts. At best, many risk control efforts adopt a "do-no-harm" approach. In contrast, health impact assessment is more concerned with maximizing the potential benefit(s) to be accrued from a given policy or program.

Risk-related assessment is often tied to discrete projects, developments, or activities (Aldrich & Griffith, 1993; Bailar et al., 1993), whereas health impact assessment may be associated with broader governmental initiatives. The scope of such policies or programs makes it difficult to calculate the risk or benefit that can be directly linked to specific interventions (Schmid, Pratt & Howze, 1995). Finally, risk reduction or control efforts are often driven by efforts to improve the fairness of reimbursement or to provide risk-related

adjustments for monitoring the outcomes of care. Given its focus on population health, rather than on health care, health impact assessment cannot be driven by a "bottom-line" mentality that seeks first (only) to reduce health care costs.

Local environmental health programs in North America and Europe are currently facing several related challenges. Among these is the need to demonstrate their effectiveness in improving the health status of the community they serve (Kotchian, 1995; Saunders, Wanke, Guidotti, & Hrudey, 1996). There are serious limitations to the use of traditional health status measures to evaluate the impact of local environmental health programs, including the long lag period between many hazardous environmental exposures and ill-health, and the sometimes unresponsive nature of many environmentally-related diseases to local program interventions (Bailar et al., 1993).

In the face of these challenges, many Canadian jurisdictions are attempting to develop models and delivery systems for meeting environmental health objectives. In Alberta, a systematic framework for developing objectives for use by local environmental health programs has been constructed (Saunders et al., 1996). The Alberta framework involves sequential development of health status and risk reduction process and structure objectives. The intent is that a comprehensive "provincial" package of objectives will be adapted by local environmental health programs to their own circumstances and used for directing program activities and for monitoring their effectiveness.

There is also growing recognition that accurate and reliable exposure-related information is essential for informed decisions about protecting and promoting public health (Sexton, Callahan, Bryan, Saint, & Wood, 1995). Approaches for undertaking exposure surveillance such as the National Human Exposure Assessment Survey (NHEXAS) have been suggested. This U.S. survey is intended to establish a core set of approaches, methods, and data, develop a strong and direct connection between science and policy decisions about assessment, management, and communication of health risks, and create a connected group of researchers and regulators.

Recently, an information manager for the Assessment Protocol for Excellence in Public Health has been presented (Vaughn, Richards, Christenson, Taylor, & Eyster, 1994). This software package (CDC-AIM) is potentially an extremely helpful tool to assist provincial and local health departments in working with communities to establish health programs based on mortality, morbidity, and risk factor data. McDonald, Treser, and Hatlen (1995) discussed the process used to develop an environmental health addendum to the Assessment Protocol for Public Health. This environmental health addendum includes environmental exposure indicators as well as health status indicators. Similarly, strategies such as Oregon's Public Health

Improvement Plan (Berkowitz, 1995) define specific risk reduction standards and outcomes for improved health and performance measures for assuring accountability.

Status of Health Impact Assessment in Canada

In Canada, the application of health impact assessment is highly variable across provinces. No single process or model exists. Most of the provinces have developed their own unique approach to health impact assessment, with little or no attention paid to initiatives in other provinces. Some provinces link health impact assessment to cabinet submissions and the policy development process; other provinces couple HIA with provincial health goals, and several provinces consider health impact assessment within the context of environmental impact assessment. It is important to note that a province-to-province review of health impact assessment was not conducted for this report. Rather, a broad appeal for materials was made to contacts and sources across the country. From the materials reviewed, the following summary statements regarding the application of health impact assessment within Canadian provinces can be made:

- In **British Columbia**, a health impact assessment is required by government ministries as part of the Cabinet Submission process. All proposed policies, regardless of the ministry of origin, must be reviewed for potential impact upon the health of British Columbians. HIA tools and guidelines have been developed for policy makers and program developers. HIA tools are currently being adjusted to converge with recently developed Health Goals for British Columbia. Refer to Appendix A, Abstract #5.

- **Alberta** links health impact assessment to healthy public policy, sustainable development, and provincial health goals. The *Rainbow Report: Our Vision For Health* (1989) re-commends reviewing policies and introducing legislation, regulations, and procedures to ensure that the health of Albertans is given full and equal consideration in matters of economic development, diversification and job creation; and that the impact of environmental policies on the health of Albertans be fully considered. *Health Goals for Alberta: Progress Report* (1993) outlines nine broad health goals and related objectives and strategies toward improving the health status of Albertans. Goals support decision making for resource investment in health.

- *Working Together Toward Wellness: A Saskatchewan Vision for Health* (1992) proposes a strategy for health reform that includes a wellness vision, principles and wellness goals for the province of **Saskatchewan**. Population health goals and measurable objectives have been

established. The Provincial Health Council is recommending the adoption of a Population Health Impact Assessment process and tool to assist policy makers in health care decision making Applying HIA to proposed policies ensures that government policies and programs contribute to the ideals captured within Health Goals for Saskatchewan. Refer to Appendix A, Abstract #4.

- *Quality Health For Manitobans: The Action Plan* (1992) outlines a strategy for health for **Manitoba** that includes a comprehensive health measurement system within a healthy public policy framework. A set of shared goals and objectives to track the health status of Manitobans has been developed. All government programs are being reviewed for their contribution to health and every major action and policy of government is evaluated in terms of its implications for the health of the people of Manitoba.

- In **Ontario**, the goal setting process began in 1987 with *Health for All Ontario* which led to the definition of five broad health goals in *A Vision of Health: Health Goals for Ontario* in 1989. Working groups of invited experts developed objectives and targets for each of the health goals from 1991 to 1993 (available in a series of published materials, Ontario Ministry of Health). The objectives and targets have been used to evaluate provincial health reform initiatives. In terms of health impact assessment, the goals and targets have influenced policy direction and the policy development process in the province of Ontario.

- In **Quebec**, *The Policy on Health and Well-Being* (1992) outlines five general health improvement goals and ten specific health improvement objectives related to four life cycle stages. The goal development process was supported by the 1979 U.S. report, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*. The regions of Quebec are expected to translate provincial goals into regional plans, with an emphasis on health needs of citizens versus health services and resources. Refer to Appendix A, Abstract #7.

- The **New Brunswick** health strategy, presented in *Health 2000: Toward a Comprehensive Health Strategy* (1990), defines health goals for the province and encourages government ministries, health care providers, community groups and consumers to transfer the goals into objectives, targets and action strategies. A parallel initiative presented in *Public Health Service: Vision, Mission, Goals and Objectives* (1993) establishes goals by health priority area as a means to track and monitor the health status of the people of New Brunswick.

- As part of the Comprehensive Health Policy of **Nova Scotia**, provincial health goals have been

developed. In *Developing Health Goals and A Comprehensive Health Strategy for Nova Scotia: A Discussion Paper* (1992), health goals are presented as a means to guide planning and policy decisions for improved health of Nova Scotians. As recommended in the Royal Commission on Health Care (1989), the impact of policies on the health of Nova Scotians is considered in all initiatives proposed by government. Refer to Appendix A, Abstract #6

- **Newfoundland** integrates health impact assessment with community health. Communities assess the potential impact of government policies against defining community characteristics including: population groups, employment, economic conditions, social supports, health services, basic services (water, waste disposal, transportation, housing), and community resources (such as consumer organizations, voluntary organizations and service clubs). Newfoundland has also developed health goals as part of their provincial strategy for health, as outlined in *Newfoundland Department of Health: Provincial Health Goals* (1994).

- **Prince Edward Island** has recently completed its goal development process. A Health Policy Council, comprised of community and professional representatives, is responsible for the development and monitoring of measurable health goals and objectives in Prince Edward Island. A set of five broad goals have been developed to track and monitor the health status of the people of Prince Edward Island.

- The goal setting process is also underway in the Canadian territories. The **Northwest Territories** document, *Mandate and Goals: Department of Health* (1993), outlines priority areas for health and supports the development of goals and objectives for the region. Two earlier initiatives in the **Yukon Territory**, the *Health Status Report* (1992) and the *Yukon Health Promotion Survey* (1993) serve as the basis for the Yukon goal development process.

DISCUSSION AND ANALYSIS

Measuring the Impact of Public Policy—What Do We Need?

Health Indicators

In their review of healthy public policy, Pederson, Edwards, Kelner, Marshall, and Allison (1988) called for the establishment of health indicators that could be used to elucidate the relationship between healthy public policy and health status. They highlighted the importance of obvious indicators such as morbidity rates and disease-specific mortality rates, as well as positive measures of health and well-being (which are more difficult to quantify). Most importantly, Pederson et al. suggested that indicators of phenomena not always recognized as health-related, but which are causally linked to health, must be developed for evaluation efforts. To this end, the recommendations developed at the second international conference on health promotion, in Adelaide, South Australia ("The Adelaide Recommendations," 1988), called for the development of health information systems.

Relating this recommendation to Health Impact Assessment, we would see the use of such a health information system as providing performance measures to be associated with health impact measures available from existing vital statistics systems, discharge and other medical care record or billing systems, pharmacy record systems, tumour registries, and other registry systems, and periodic population surveys. The indicators of causally important determinants of health can and should be used as benchmarks of progress toward improving health, but they cannot be taken as equivalent to health impact without stretching the definition of health beyond the credibility and tolerance of other sectors.

In 1984, an international conference, the "Beyond Health Care Conference," was held in Toronto on healthy public policy. Following the conference, a one-day workshop, "Healthy Toronto 2000" was held to examine how the broad themes of healthy public policy could be applied at the municipal level. So began the "Healthy Cities" movement (Manson-Singer, 1994; Rachlis & Kushner, 1989). In Canada, the project, named "the Canadian Healthy Communities Project, (CHCP)" aimed to ensure that health was a "primary factor in political, social and economic decision-making" at the municipal level (CHCP cited in Manson-Singer, 1994, p. 111).

The CHCP started out with great promise but had a short life. Manson-Singer (1994) explicated many reasons for its failure, including inexperience, lack of resources, definitional problems, competition with other

social movements, and poor relationships with funders. The problem most relevant to our current discussion was the difficulty associated with arriving at a suitable definition of "healthy communities." This problem parallels our caveats of defining health too broadly. In defining the concept broadly, the steering committee of CHCP believed that they were being inclusive, but those at the municipal level were concerned that the Federal government was passing on its responsibility to the municipalities. Meanwhile, those in federal health funding positions had difficulty justifying or defending the broad definitions as having sufficient focus on health.

Rootman (1990) examined whether indicators were required within the healthy communities context. His observations seem relevant to the broader notion of health impact assessments of all public policy and the search for appropriate indicators. First, he asked, how do we know what indicators mean in the absence of a conceptual framework or theory to locate and explain them? Second, Rootman pointed to some methodological issues related to the identification and development of appropriate indicators including:

- indicators are not currently available for the positive dimensions of health (i.e., other than reductions in morbidity and mortality);
- it is difficult to develop "holistic" measures that combine objective and subjective dimensions of health;
- it is unclear how one would capture the contextual factors related to health status, and
- there are no indicators targeted at the community level; only indicators based on the aggregation of individual measures.

The Healthy Communities strategy is being played out in many communities in the province of British Columbia. Within the Healthy Communities context, B. C. communities create their own vision of a healthy community, develop community profiles that highlight both community needs and strengths, and forge coalitions and partnerships committed to improving the health of citizens. The B.C. Ministry of Health has encouraged communities to define healthy community measurement indicators as a means to define and track progress toward improved health status of people and communities. Using indicators to measure the health of communities is considered a means by which communities can influence decision makers and participate in program planning and policy development processes that ultimately impact them. Further description of the Healthy Communities Project in British Columbia is offered in Appendix A, Abstract 12.

Discussion related to the identification of appropriate indicators has occurred, most often, within the context of the Healthy Cities movement. However, even there, committed individuals seem to have failed to establish an agreed upon set of indicators. The World Health Organization Healthy Cities Project of the

WHO Regional Office for Europe sponsored a meeting in March, 1987, in Barcelona, to achieve consensus on what could and should be measured (O'Neill, 1990). Criteria agreed upon for the selection of indicators included that they must be:

- relatively simple to collect and use;
- sensitive to short-term change;
- capable of analysis at the small-area level;
- related to health, "Health for All," health promotion, and the Healthy Cities Project;
- able to carry social and political "punch";
- limited to approximately 30 in number;
- concerned with all aspects of city life; and be
- both subjective and objective (WHO Healthy Cities Project, 1988).

In response to the Barcelona Workshop, *A Guide to Assessing Healthy Cities* (WHO Healthy Cities Project, 1988) was developed. However, as O'Neill (1990) pointed out, the plan could not be operationalized because of its massive size; it included everything from knowing the geography of the city, including its topography, climate, natural resources, biological eco-system, and "urban form," to its history, demography, political structure (including its jurisdiction and governance), economy, social issues, influence of religion and the churches, and a "general sense" of the city. This appears to be one more instance of mixing performance indicators and background data with the need for health impact indicators. At a subsequent invitational conference on Evaluation of Healthy Cities in Maastricht, The Netherlands, none of the reports presented offered concrete indicators for health impact assessment (de Leeuw & O'Neill, 1992).

The *Healthy Cities and Shires Project* in Australia is exemplar of the WHO's Healthy Cities Project as a means to achieve "Health For All By The Year 2000." Under the *Healthy Cities and Shires Project*, municipal governments develop a vision for their city, identify needs, set priorities, define measurable health goals and targets, and monitor and evaluate progress toward stated goals. In 1993, the *Healthy Cities and Shires Project* was piloted in three cities in the state of Queensland. With only a few years of operation, it is difficult to assess the Australian experience at this time. Further description of the *Healthy Cities and Shires Project* in Australia is presented in Appendix A, Abstract #11.

It now appears that the WHO European Healthy Cities Project has modified its approach to indicators, admitting the difficulty associated with a standardized approach. Work conducted in other parts of the world, and reviewed by O'Neill and Cardinal (1992) and Cardinal and O'Neill (1992), seems to have

resulted in the same conclusion. There is no simple and uniform way to assess healthy cities.

Recently, the mayors of Canada's fourteen largest municipalities recommended that a quality-of-life index be developed to assess the effects of federal and provincial spending cuts on the "livability" of cities. The proposed index would consider such factors as the proportion of people living under the poverty line, food bank usage, the numbers on welfare, and the types of community services offered (Munro, 1996). This mix of impact indicators does not include morbidity, disability, or mortality indicators, but it would amount to a combination of determinants and consequences of changes in health

Determinants of Health

As described earlier, the Lalonde (1974) report introduced the Health Field Concept of Laframboise (1973) in the first major policy document seeking to reorient the emphasis of government health policy from medical care to three other major determinants of health. These were identified then as lifestyle, environment, and human biology. The Canadian Institute for Advanced Research (CIAR, 1991; Evans & Stoddart, 1990, 1994), building on the work of others who provided evidence for the importance of the other determinants of health relative to medical care (e.g., Dutton, 1986; Levine & Lillienfeld, 1987; Marmot, 1986; McKeown, 1979; McKinlay, McKinlay, & Beagehole, 1989; Townshend & Davidson, 1982), separated environment into social environment and physical environment. It also separated human biology into genetic endowment as a primary determinant and biological response to the environmental and genetic determinants as part of individual response along with behavioural response as a secondary or more proximal determinant of health. They further separated health into health and function, disease as immediate effects of these determinants, and "well-being" as a longer-term or secondary effect.

The significance of this formulation has been substantial in the reorganization and reorientation of Canadian health bureaucracies and priorities in health policy and program development. It has resulted, among other effects, in a renaming of federal and provincial units in health ministries, and a refocussing of the Ministers of Health on population health issues associated with these determinants (Federal, Provincial and Territorial Advisory Committee on Population Health, 1994).

Another significance of the CIAR formulation of population health determinants with more direct relevance to health impact assessment is that the model and its documentation clearly disaggregates the concept of health. In search of more practical alternatives to "the all-encompassing definition of the WHO, almost a Platonic ideal of 'the good' " (Evans & Stoddard, 1990, p. 3), they separate biological responses, which

could be equated with physiological "risk factors", from functional limitations and health as capacity, from illness or disease, and from well-being. They conclude that:

> There are no sharply drawn boundaries between the various concepts of health in such a continuum; but that does not prevent us from recognizing their differences. Different concepts are neither right nor wrong, they simply have different purposes and fields of application. Whatever the level of definition of health being employed, however, it is important to distinguish this from the question of the determinants of (that definition of) health. (Evans & Stoddard, 1990, p. 4)

These important distinctions by the progenitors of the population health model driving the current interest in health impact assessment lead us to conclude that health impact must be assessed on the basis of measurable outcomes on this continuum of health and cannot be equated with impact on the determinants of health, or the presumed consequences of health (e.g., well-being, medical care).

Assessing the Policy Environment

In addition to the development of indicators to assess the health impact of policies, Pederson et al. (1988) called for the development of specific indicators to measure the very presence of healthy public policy. In this way, researchers could track the various phases of policy-making including:

- the identification of social organizations and institutions engaged in policy-making;
- the identification of policy-making processes and outcomes;
- a description of policy directions; and
- an analysis of past, present, and future trends.

The suggestion of Pederson et al. (1988) is consistent with the report prepared by Kickbusch, Macdonald, and King (1988) for the Adelaide Conference on Healthy Public Policy wherein it is recommended that, to facilitate healthy public policy, analyses of physical, social, and economic factors, political priorities and political commitment are necessary.

Again, we must agree with the importance of these other analyses as indicators of determinants and performance, but they cannot stand alone as health impact assessment.

Health Objectives, Goals and Targets as a Strategy for Health Impact Assessment

One approach that may stave off the pitfalls associated with the adoption of expanded definitions of health and the confusion of determinants and outcomes, described above, is to articulate a health strategy, or more specifically, to specify health goals and objectives for the nation and/or provinces. In so doing, a framework is provided by which relevant indicators or outcomes can be identified for the health impact assessment process. While general policy directions are important, the setting of measurable objectives, with deadlines, is an important motivator for action. Such objectives obviate the need to assess the effectiveness of previous actions and the feasibility of future proposals (Asvall, 1988). In the absence of achievable objectives and targets for health agreed upon as policy, the relative merits of other proposed policies as to their impact on health can be argued endlessly. Goals and objectives provide the essential yardstick for assessment.

Although individual provinces have developed, or are in the process of developing, health goals, the development of national goals has been elusive. Pinder (1994) provided evidence that, on several occasions, and from different stakeholders, calls have been made for national goal setting; goal setting was advocated in the Lalonde Report (Lalonde, 1974), by the Ad Hoc Committee on National Health Strategies (Canada, 1982), the Canadian Public Health Association (1984, 1987, 1992), and Deputy Minister of Health, Dr. Maureen Law (1989a, 1989b).

At the national level, objective setting has been limited to select priority areas such as tobacco demand reduction, the drug use strategy, child health, and injury control. For example, those concerned with injury control held a symposium in May 1991 to establish a national strategy and to attempt to establish national objectives focusing on injury prevention, based on the U.S. framework outlined in *Healthy People: Health Objectives for the Nation* (i.e., Year 2000 Injury Control Objectives for Canada Symposium, May 20-22, 1991, Edmonton, Alberta). The symposium brought together representatives of government, public interest groups, professional associations, academia, standard setting organizations, workers, employers, injury survivors, and the general public who developed injury control objectives for Canada in four settings: home and community, occupational health and safety, sport and recreation, and transportation. A fifth group was convened to examine the feasibility of setting objectives related to violent and abusive behaviour (Saunders & Stewart, 1991). Setting injury control objectives is one of the few examples of a Canadian approach to setting targets by health priority area. This initiative, referred to as *A Safer Canada: Year 2000 Injury Control Objectives For Canada*, is described in greater detail in Appendix A, Abstract #15.

Another notable example of national goal setting in Canada is the *National Strategy to Reduce Tobacco Use*. The goals of the national strategy are to assist non-smokers to remain smoke-free (prevention), to help those who want to quit to do so (cessation), and to protect the health and rights of non-smokers (protection). Seven strategic directions are outlined to meet these goals including legislation, access to information, availability of services and programs, support for citizen action, message promotion, research and intersectoral policy coordination. The tobacco reduction strategy is a collaborative initiative between the federal and provincial/territorial governments and various national health organizations including the Canadian Council on Smoking and Health, the Lung Association, the Heart and Stroke Foundation and the Canadian Public Health Association. Please refer to Appendix A, Abstract # 14 of this report for further description of the *National Strategy to Reduce Tobacco Use.*

Similarly, national goals have been developed for cardiovascular disease in Canada. The *Canadian Heart Health Initiative* (CHHI) links the federal health authority with all ten provincial/territorial health ministries and with communities where demonstration projects are conducted. Today, a national network of heart health initiatives exists and is characterized by shared responsibility among government jurisdictions. The national jurisdiction is responsible for technical support, the establishment of a national heart health risk factor database, and the provision of matching research funds for surveys and demonstration projects. Provincial governments are responsible for conducting baseline surveys of risk factors, developing action plans, and implementing and evaluating community-based demonstration projects. Further description of the *Canadian Heart Health Initiative* is provided in Appendix A, Abstract #16.

The management-by-objectives approach to planning has been practiced with increasing regularity across nations and through World Health Organization auspices and encouragement. The essential logic of this approach is that goals, objectives and targets can be specified with the levels of achievement and the dates they are to be attained projected from a current or recent starting point. Such goals, objectives, and targets provide a clear road map of where the policies and programs should be pointed, what pace they should be progressing in their impact, and what health outcomes they can be expected to achieve. A health objective takes the form of a single sentence that states (1) who, usually stated as a population group, (2) will achieve how much, usually stated as a morbidity or mortality rate or percentage target, (3) of what change, expressed as the health problem or need, (4) by when, usually expressed as a year within a ten-year time frame.

The process of developing health goals, objectives and targets will account for the extent of their support from various levels of government, various sectors and various organizations. The wider the participation in developing and ratifying the objectives, the greater can be the acceptance and active dedication of

resources to their achievement by potential organizational partners at all levels in all relevant sectors.

U.S. Healthy People Initiative

The most systematic and sustained process of health impact assessment by a government in guiding health promotion and disease prevention policy has been the planning-by-objectives process that the U.S. Public Health Service has led for the past sixteen years. As a contribution to American national and state health policy and programs, the documentation of the sixteen years of effort is monumental among federal government efforts. Its contribution to the changes in health status of Americans can be debated because so much else has happened in these sixteen years, but progress is measurable and undeniable in the recently issued *Healthy People 2000: Midcourse Review and 95 Revisions* (U.S. Department of Health and Human Services, 1996). Setting goals, objectives, and targets as a strategy for health impact assessment is the cornerstone of the Healthy People 2000 initiative.

How much the planning, policy-making and program and data development efforts can take credit for much of the progress in reduced morbidity, disability and mortality, how much of the progress can be attributed to improved planning, and policies at the national level, how much to the secondary influence on improved planning and policy at the state and local levels remain equivocal. These questions will be debated for decades to come. At the very least, the debates will have the history documented by the midcourse reviews of 1985 and 1995, as touchstones. They are unsurpassed in rich detail on the historical linkages between health promotion and disease prevention policies, goals, objectives, programs, and services, and their consequent reductions in population risk, environmental improvements, and population health outcomes.

The U. S. health promotion and disease prevention initiative influenced directly or provided a model for state and local levels, and to other countries. The diffusion effect from national to state (Centers for Disease Control, 1990) and local (American Public Health Association, 1991) levels in the United States stands out in some of the volumes documenting the Healthy People initiative. One of the objectives for the year 2000, for example, is "to increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health." The bottom-up influence from local and state constituencies in formulating the Healthy People 2000 objectives was impressive. The ripple effect outward to other countries counts as an additional international contribution.

One historical turning point in the management-by-objectives process was the point at which the objectives gained teeth as a force driving the planning by agencies of the Public Health Service. After a two-year start

in the final stages of the Carter Administration, Dr. Edward Brandt, the Assistant Secretary who arrived with the Reagan Administration in 1981 to replace Dr. Julius Richmond as Assistant Secretary of Health, saw fit to retain the objectives as policy in the Republican administration that inherited them. Dr. Brandt added the powerful policy inducement of requiring the agencies of the Public Health Service to justify their next fiscal year budgets based on their contributions to achieving the objectives. We note this historical event with particular emphasis because it was clearly a decision that resulted in far greater influence of the outcomes-oriented, objectives-based planning in federal government agencies than they had initially. Agencies could no longer pay lip service to the objectives and then continue to pursue their former priorities and conventions. Now they had to show clearly how each of the activities or programs for which they were requesting budgetary support would contribute to accomplishing one or more of the objectives in disease prevention or health promotion (Green, 1996).

The success of the U. S. Healthy People initiative suggests some lessons for the content of the documents that accompany a federal initiative in health impact assessment and policy. It suggests even more for the process of their development. Central to the whole experience in the U.S. have been the consensus building effort, the wide-ranging consultation procedures, the coalition-building activities, and following each of these, a willingness to revise and improve the objectives. The subtitle of the latest volume, *Midcourse Review and 1995 Revisions*, expresses the spirit and the substantive essence of the ongoing needs-assessment and planning-by-objectives process: it is self-correcting and constantly improving in its targeting of efforts where they are needed most, and in demonstrating health impact. The *U.S. Healthy People Initiative* is summarized in Appendix A, Abstract #1.

Other Countries and World Health Organization Initiatives in Goals and Targets for Health

The World Health Organization adopted a policy of "Health for All by the Year 2000" in 1981 including the setting of goals and targets (World Health Organization, 1980), two years following the first U. S. Surgeon General's Report on Health Promotion and Disease Prevention. WHO's European Regional Office published its first set of *Targets for Health for All* in 1985, updated in 1991 based on broad consultation among European member states (World Health Organization Regional Office for Europe, 1985, 1991).

National goal setting for health has become a feature of the United Kingdom. The *Health of the Nation* initiative in England selects five health priority areas for action, sets national objectives and targets in the priority areas, outlines the actions needed to achieve the targets, proposes implementation strategies, and

offers a framework for ongoing monitoring and review. In setting health targets an estimate of future trends is made and then combined with an assessment of the potential impact of interventions, programs or policies on the health of the population. Consequences for health are integrated into the policy formulation process. National goals and targets in England have been translated into regional and local goals, targets and action plans. Similar goal setting initiatives have been completed or are underway in Scotland, Northern Ireland and Wales. Additional information on the *Health of the Nation* strategy in England is provided in Appendix A, Abstract #2.

Australia published its first national goals and targets for population health in 1988 (Health Targets and Implementation Committee, 1988). Similar to the U.S. experience, goal setting at a national level in Australia influenced the development of health promotion goals and objectives at the state level. *Healthy Victorians 2000* is an outgrowth of the Australian national strategy for health. *Healthy Victorians 2000* is a joint initiative between the Victorian Health Promotion Foundation and the Victorian Department of Health and Community Services. The central aim of the initiative is to develop health promotion goals and targets for the population of the state of Victoria. Formulating health goals and targets is expected to increase health system accountability and to improve the ability of decision makers to assess the impact of programs upon the health of its people. To date, four of seven Australian States and Territories have instituted health promotion foundations whose central function is to set state goals and targets to monitor and assess the impact of programs on health. The *Healthy Victorians 2000* initiative is presented in greater detail in Appendix A, Abstract #8.

The history and development of further goals and targets for the year 2000 and beyond in Australia is outlined by Nutbeam and his colleagues at the University of Sydney, giving due credit to the model provided by the U. S. objectives (Nutbeam, Wise, Bauman, Harris, & Leeder, 1993).

Reflecting on the Australian experience in setting "National Health Goals and Targets" (NHGT), Harris and Wise (1996), note the significant impact it has had on health policy by:

- focusing the attention of the health system on the outcomes which it achieves, rather than the services it provides;
- providing an information base against which it is possible to measure progress;
- highlighting the difference between the health outcome of different groups within the community; and
- providing a way of thinking about what may need to be done if the health of Australians is to be improved and health inequality reduced, including the integral importance of health literacy and skills and health promotion environments.

The *National Goal and Target Setting* strategy in Australia defines goals and targets for four national priority areas including heart disease, cancer, mental health and injury. Strategies to achieve targets have been developed at the state and territorial level and encompass all aspects of care including health promotion and prevention, early intervention, treatment, rehabilitation and extended care, and research. States and territories establish best practice and performance monitoring standards and systems which facilitates regular reporting to the national government. The goals and targets framework has been incorporated into the 1992 Medicare Agreement, which determines the health funding arrangements between the Commonwealth of Australia and the States and Territories and requires all states to participate in the goal setting process. Further description of the *National Goal and Target Setting* initiative in Australia is presented in Appendix A, Abstract #3.

The New Zealand experience presents a contrasting history in terms of the staying power of health policy and objectives promulgated at the national level (New Zealand Department of Health, 1989). The New Zealand Health Charter and model contract made Area Health Boards accountable to the national government for achievement of objectives to justify their budgets. The U. S. and Australian approaches have not been so directive to states and communities, giving them complete autonomy in deciding whether to adopt or adapt the national objectives in their own policies and plans. With the change in Government in 1990, New Zealand abandoned the goals and targets, whereas the process and the objectives themselves have survived several changes of government in the U. S. Four Presidents and six Secretaries of Health and Human Services have seen the U.S. health promotion and disease prevention objectives through their respective transitions without changing course. Although the White House made some notable modifications of the draft Healthy People 2000 objectives before they went to press (Green, 1992), the succession of governments has honoured the process and the goals and targets.

CONCLUSION

In Canada, health reform is occurring at an unprecedented rate. This reform is occurring within an evolving context shaped by macro social trends that include greater demand for community involvement, diminishing resources, an aging population, and recognition that health care delivery, alone, does not bring about health. We believe that such reform should not proceed in the absence of a conceptual or organizing framework that provides the requisite guideposts--population health goals. Such goals ought to be operationalized in concrete, measurable objectives.

Health impact assessment offers an innovative approach to ensuring that governments' program and policy initiatives align or are congruent with the agreed upon health goals. It suggests that policies and programs, regardless of the sectors from which they originate, should be assessed as to their influence on the health and quality of life of Canadians. Setting national health objectives and targets, and conducting health impact assessments in relation to these goals and targets, will need to involve all sectors of government. The ideal role of the health sector is not only to act, but also to influence, enable, and mediate partnerships for intersectoral collaboration.

RECOMMENDATIONS

We offer the following recommendations for consideration in the development of health impact assessment as a tool for population health promotion and public policy:

1. **The federal government should undertake, in collaboration with other major national organizations having a stake or a role in the determinants of population health, a systematic national goal setting process that would combine the evidence and experience already compiled and developed as goals and objectives in the provinces and territories.**

   This single line of action on the part of the federal government would provide the major missing ingredients for an ongoing structure and process that would support continuous health impact assessment as a tool of population health promotion and health policy. It would also encompass most of the more specific recommendations that arise from the foregoing review. Thirdly, it would acknowledge and give national expression and support to the work that has been accomplished in virtually all of the provinces. Finally, it would put Canada on a par with the other OECD and Australasian countries that have adopted the WHO "Health for All" strategy of developing and following a public health management-by-objectives approach to the long-range planning and evaluation of population health programs and policies.

   We recognize that the Ministers of Health did not adopt the 1994 report of the Federal/Provincial/Territorial Task Group on National Health Goals/Priorities (1994) prepared under the direction of the Federal/Provincial/Territorial Advisory Committee on Population Health. Much has happened in the two years since that report was presented in May 1994. The reorganization of the population health and health promotion units within Health Canada has given the federal government a greater capacity and organizational focus to provide the national coordination of the provincial efforts already completed. The provinces and territories that had only begun their goal-setting or their objectives and targets in 1994 have now completed them or have them well underway toward ratification. The three recommendations of the Advisory Committee on Population Health Report adopted at the Meeting of the Ministers of Health in September 1994 have been largely accomplished as a foundation for the deferred recommendations on goals, objectives and targets. We reproduce below those three recommendations for strategic directions as first steps to be completed and summarized in undertaking the goals, objectives and targets exercise:

1.1 **Strengthen public understanding about the broad determinants of health, and public support for, and involvement in, actions to improve the health of the overall population and reduce health status disparities experienced by some groups of Canadians.**

Since the September 1994 adoption of this recommendation, the public has become increasingly imbued with the understanding that there is more to health than health care. The public recognizes even more today than in 1994 the influences of lifestyle, stress, and the quality of their work and family life on their health, and the influence of employment, income, and educational disparities in determining these more proximal determinants of health. Public participation in formulating community health priorities and program or service allocations has been increasingly facilitated with the establishment of decentralized health boards, councils, and committees with lay representation if not control.

1.2 **Build understanding about the determinants of health and support for the population health approach among government partners in sectors outside health.**

Progress on this recommendation in the provinces and territories needs to be reviewed systematically for the lessons it holds and the implications for action needed at the federal and national level. Coordination among sectors at the local level will be impeded by inadequate coordination at provincial, territorial, or national levels. Coordination within federal government and between government and national organizations must be accomplished before health impact assessment and actions to address the determinants of health that lie so largely outside the health sector can be expected.

1.3 **Develop comprehensive intersectoral population health initiatives for a few key priorities that have the potential to significantly impact population health.**

The federal government has facilitated the unfolding of major national initiatives in tobacco control, "Brighter Futures" for children, family violence prevention, the Green Plan for environmental reform, the Seniors Independence Program, the National Breast Cancer Initiative, and other notable intersectoral efforts. The lessons from these efforts, including the successes as well as barriers and failures, need to be reviewed as a set of intersectoral intentions that may or may not have had the impact on determinants of population health, much less the health impact, that might have been expected of them. Their experience, however, can hold the keys to building toward the next steps in setting national goals, objectives and targets for population health and ultimately health impact assessment.

With the foregoing three analyses in hand, along with an update of the 1994 report of the Federal/Provincial/Territorial Task Group on National Health Goals/Priorities, an additional series of steps can be pursued to set in motion the development of national goals, objectives and targets for population health:

1.4 **Return the Federal/Provincial/Territorial Advisory Committee on Population Health's (revised) recommendations on Health Goals for Canada to the Ministers of Health meeting for ratification in 1997, aiming for the formulation of national goals, objectives and possibly year 2010 targets by year 2000.**

This recommendation assumes that the review and analysis of the first set of "strategic directions for national action" (1.1-1.3 above) have yielded the indications of feasibility needed to overcome the reservations the Ministers of Health had about national goals and objectives in 1994.

With the approval of the Ministers of Health to proceed with national goals and objectives, the next steps will be to select among the options for action offered by the May 1994 report of the Federal/Provincial/Territorial Task Group on National Health Goals/Priorities. We recommend:

1.5 **Develop and expand the nonpartisan political commitment to the setting of comprehensive quantified national goals and objectives through consensus building and clarification of the long-term national benefits of doing so.**

We base our choice of the more ambitious option 3 over the more focused option 2 recommended by the FPT Task Group in 1994 on the experience in other countries that a less comprehensive approach in which only "high priority" objectives are singled out for concentrated attention tends to undermine the broad base of support needed for the overall effort. When the federal government chooses a minimum set of priority objectives, it necessarily turns its back on other objectives that are high priority for some significant groups, often the very under represented groups whose needs are frequently missed in a political priority-setting process. The more comprehensive the approach, the greater will be the political "buy-in" by the multiple sectors and populations whose support and involvement will be needed to implement programs and pass policies in support of the overall health objectives program.

2. **Develop objectives and targets in all areas regardless of the availability of data to confirm the estimates of baseline levels for the Canadian population at large or specific populations.**

   One of the most contentious issues debated in other countries in their national objectives process, especially among the health science and professional communities, has been whether to develop objectives only in those areas where adequate data exist to estimate the baseline levels and to project the trend lines to some targeted endpoints a decade or so later. We recommend from experience elsewhere that best estimates be used in the absence of data because setting objectives only on those things already measured means neglecting further those things that have been inadequately measured. These will be many of the most important determinants of health.

3. **Develop monitoring and surveillance systems to track progress toward the objectives, and to provide a source of trend baseline and follow-up data for assessment of health impact.**

   Established objectives with targets and comprehensive monitoring capabilities or systems will provide the built-in health impact assessment tools needed to make health impact assessment a routine part of policy and program decisions.

Finally, we have the following suggestions in the areas of research, funding and implementation of health impact assessment. The suggested actions provide possible steps for advancing the development and use of health impact assessment in Canada.

1. Health Canada should provide mechanisms to enable knowledge development relevant to health impact assessment (e.g. national conferences, research funding, needs assessment/survey of stakeholders at the federal, provincial and municipal levels).

2. Health Canada should involve various jurisdictions in achieving clarity and consensus regarding the purpose(s) of health impact assessments and mechanisms for public accountability.

3. Health Canada should recognize the existence of varying priorities for health impact assessments in different jurisdictions or areas of Canada.

4. Health Canada should foster environments that make involvement in health impact assessments available and accessible to a diversity of Canadians; particularly among high-risk or marginalized populations.

5. Health Canada should support research on validation/use of health impact assessments with specific groups, the theoretical bases for health impact assessments, and the cost-effectiveness, cost-benefits and opportunity costs of health impact assessment strategies.

6. Health Canada should build on emerging technology to create a communication network with persons and groups working on similar health impact assessments in various communities and jurisdictions.

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Appendix A: Application Abstracts of Health Impact Assessment

- **National Applications**
  - Abstract #1: The U.S. *Healthy People 2000* Initiative
  - Abstract #2: The *Health Of The Nation Initiative* In England
  - Abstract #3: National Targets and Health Goals for Australia

- **Provincial and State Applications**
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  - Abstract #5: Health Impact Assessment in British Columbia
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  - Abstract #7: Impact Evaluation of the Health Care Reconfiguration on the Health and Well-Being of Montrealers
  - Abstract #8: Healthy Victorians 2000 - Towards Victorian Health Promotion Goals and Targets (Australia)

- **Regional Applications**
  - Abstract #9: Health Plan For Catalonia
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- **Municipal Applications**
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- **Applications Related to Environmental Impact Assessment**
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- **Applications Related to Health Priority Area**
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Abstract #1: **The U.S. *Healthy People 2000* Initiative**

Contact: U.S. Department of Health and Human Services Public Health Service - Disease Prevention and Health Promotion Division
Washington, D.C.
Phone: (301) 436-8500

Major Approach to HIA: National goal setting to track and assess policy effectiveness

Defining Features:

The *Healthy People 2000* initiative is a planning-by-objectives process undertaken by the U.S. Public Health Service to define health goals, objectives and targets in twenty-two priority areas to the year 2000. Formulation of the national objectives was a bottom-up process characterized by broad consultation and consensus building and ongoing needs-assessment. An outstanding feature of the *Healthy People 2000* initiative is the diffusion of the planning-by- objectives process from the national to state and local levels of government. A mid-decade review, *Healthy People 2000: Midcourse Review and 1995 Revisions*, reports on the progress of the national objectives in terms of reduction in population risk, environmental improvements and population health outcomes. Throughout four U.S. national administrations, the *Healthy People 2000* initiative remains a driving force in guiding health promotion and disease prevention policy.

Application Considerations:

The mid-decade review of the *Healthy People 2000* initiative demonstrates the following:

- 41 States and 2 Territories have developed statewide plans that translate the national *Healthy People* 2000 objectives to meet State priorities
- 70% of the local health departments are using *Healthy People 2000* as a framework for health promotion and disease prevention programs and policies
- New coalitions and partnerships have developed between federal, state, and local governments, national membership organizations and private and voluntary organizations to improve the health status of Americans
- Using objectives to monitor and report on the health status of Americans has allowed improvements to be noted in longevity, infant mortality, childhood immunizations, tobacco use, and mammogram utilization, among others.
- Using objectives to monitor the health of Americans promotes identification and subsequent actions to eliminate policies and programs that allow for discrimination in health and well being among population groups in the U.S.
- Parallel goal-setting procedures for localities are suggested in the companion document, *Healthy Communities 2000:* American Public Health Association & Federal Public Health Service.

Reference: U.S. Department of Health and Human Services, Public Health Service. *Healthy People 2000: Midcourse Review and 1995 Revisions.* Boston, London, Singapore: Jones and Bartlett, 1996.

Abstract #2: **The *Health of the Nation Initiative* in England**

Contact: Department of Health
Health Strategy Unit
Room 06, Wellington House
133-155 Waterloo Road
London, England SE1 8UG

Major Approach: National Goal Setting and HIA as a method of policy appraisal

Defining Features:

A new strategy for health in England was launched with the release of *The Health of the Nation* in 1992. *The Health of the Nation* selects five key areas for action, sets national objectives and targets in the key areas, outlines the actions needed to achieve the targets, proposes implementation strategies, and offers a framework for ongoing monitoring, development and review. The impact of policy on health is acknowledged in the English initiative by ensuring that, "the Government will produce guidance on policy appraisal and health" (p. 22). In setting health targets an estimate of future trends is made and then combined with an assessment of the potential impact of interventions, programs or policies on the health of the population. Consequences for health are integrated into the policy formulation process. The new strategy for health in England marks a profound change in the National Health Service (NHS) where *measurable improvements in health* are now ascribed equal significance to the *delivery of health care.* Further, health promotion and disease prevention are prioritized, interdepartmental cooperation is advocated, and partnership between government, business, and volunteer associations is championed under the new strategic framework.

Application Considerations:

- The Health of the Nation strategy is based upon extensive public debate and a commitment from the public, government, business and the voluntary sectors to work together to address broad determinants of health and improve the health of people.
- The Health of the Nation initiative parallels the World Health Organization's "Health For All" strategy.
- Similar initiatives are underway in Scotland and Northern Ireland and completed in Wales.
- National goals and targets have been translated into regional (Regional Health Authorities) and local (District Health Authorities and Family Health Services Authorities) goals, targets and action plans

Reference: Department of Health. The Health of the Nation. London. 1992.
May be purchased from HMSO Publications Centre, PO Box 276,
London, SW8 5DT. Telephone: 071-873 9090. Fax: 071-873 8200.

Abstract #3: **National Health Goals and Targets for Australia**

Contact: National Centre for Health Promotion
School of Public Health and Community Medicine
University of Sydney, Australia

Major Approach: National Goal Setting to Assess Policy Effectiveness for

Defining Features:

As part of the National Health Policy, *Goals and Targets for Australia's Health in the Year 2000 and Beyond* was released in 1993 to set directions for the funding and organization of health services and for improving the health of the Australian population. The report presents goals and targets for four national priority areas including heart disease, cancer, mental health and injury. The Australian initiative recognizes the interrelationships between mortality and morbidity, lifestyle and behaviour, health skills, and social and physical environments. Strategies to achieve targets have been developed at the state and territorial level and encompass all aspects of care including health promotion and prevention, early intervention, treatment, rehabilitation and extended care, and research. States and Territories establish best practice and performance monitoring standards and systems which facilitate regular progress reports to the Commonwealth government. The goals and target framework has been incorporated into the 1992 Medicare Agreement, which determines the health funding arrangements between the Commonwealth of Australia and the States and Territories and requires all states to participate in the goal setting process.

Application Considerations:

- Similar to the U.S. *Healthy People 2000* initiative, National Health Goals and Targets in Australia is characterized by an ongoing review and revision of the goals and targets.
- National goal setting has had an impact on health policy in Australia in the following ways: shifting the focus of the health system from health service provision to improved health outcomes, the development of information databases to measure progress toward goals over time, and the ability to uncover differences in health status among different population groups.
- Setting targets and establishing strategies to meet them has been a collaborative process characterized by multiple actions between national and state jurisdictions, health and other sectors, communities and individuals.
- The challenge of the Australian strategy is to develop policies and programs that have a significant impact on the health of the population; the national goal setting exercise is a means of assessing impact, promoting health and ensuring effective public policy

Reference: Commonwealth Department of Human Services and Health. *Goals and Targets for Australia's Health in the Year 2000 and Beyond*. Australian Government Publishing Service, Canberra. 1993.

Abstract #4: **Health Impact Assessment As a Strategy for Healthy Public Policy in Saskatchewan**

Contact: Saskatchewan Provincial Health Council
#209 - 3988 Albert Street
Regina, Saskatchewan S4S 3R1
Phone: (306)787-7230; Fax (306) 787-7241

Major Approach: HIA as a tool for use by government departments, corporations, and legislative and regulatory review committees to evaluate policies, programs and grant proposals and to ensure the consideration of the broader determinants of health

Defining Features:

The Saskatchewan Provincial Health Council published *Population Health Goals for Saskatchewan* (1994) that outlines a framework for improving the health status of people and communities in Saskatchewan. The Population Health Goals recognize a broad range of factors which determine or influence health and include employment, environment, education, income, childhood development, support networks and health services. A Population Health Impact Assessment (PHIA) process and tool has been recommended to the Ministry of Health for use by government departments in the development of policies and programs and for the evaluation of grant and funding proposals. The PHIA is linked directly to the Saskatchewan Population Health Goals and strives to encourage deliberation among policy makers with regard to equity and health determinants. HIA is also expected to increase accountability among decision makers for the potential impact of public policies on the health of the people of Saskatchewan.

Application Considerations:

- The Saskatchewan approach directly links HIA to Population Health Goals. This varies from other approaches that apply HIA as a stand-alone function with limited reference to the impact of policies/programs upon population health indicators.
- The Population Health Goals are statements of an ideal to strive toward; HIA is a strategy or tool by which health enhancing public policies will be judged as to their contribution to this ideal.
- Shared responsibility for health is a theme in the Saskatchewan PHIA approach.
- Ongoing public consultation is an integral part of the process as is collaboration among numerous governmental departments, non-government organizations, agencies and the Provincial Health Council.
- A mechanism for periodic evaluation and continuous monitoring of the use and results of PHIA is being developed.

Reference: Saskatchewan Provincial Health Council. *Population Health Goals For Saskatchewan*. 1994.

Abstract #5: **Health Impact Assessment in British Columbia**

Contact: Ministry of Health and Ministry Responsible for Seniors
Population Health Resource Branch
Main Floor - 1520 Blanshard Street
Victoria, B.C. V8W 3C8
Phone: (604) 952-1780; Fax (604) 952-1731

Major Approach: Health Impact Assessment as a Tool for Appraising Government Policy and an Instrument to Support Program Planning and Evaluation

Defining Features:

New Directions for A Healthy British Columbia (1993), the report of the Royal Commission on Health Care and Costs, states that: "Health Impact Assessment will become a part of the approval process for new government policy, programs and legislation." The intent of HIA is to ensure that decision makers consider health and well-being in policy setting, based upon the broad determinants of health including economic, social and physical influences. Consideration is extended beyond the impact of the *health care system* to the impact of the full range of government policies and programs on the *health status of the population*. In 1993, a new format for Cabinet Submissions was released that requires ministries to discuss the health impacts of policy and program options as a part of the submission process. A HIA tool has been developed to assist governmental ministries with this function. HIA guidelines have also been developed to assist Regional Health Boards, Community Health Councils and service providers in health care planning, evaluation and resource allocation. Health Impact Assessment in the province of B.C. continues to evolve in form and process. A province-wide process of setting health goals, objectives, and targets is now underway to give direction to HIA.

Application Considerations:

- The B.C. approach to HIA is collaborative and multidisciplinary; the development process included representatives from sixteen provincial ministries.
- Proposed revisions to the HIA process include linking HIA to (recently developed) population health goals for the province of B.C.
- Examples within B.C. include: the use of HIA Guidelines by the Ministry of Small Business, Tourism and Culture to evaluate a pilot project of the Community Investment Program; and inclusion of HIA guidelines into the evaluation strategy of the Burnaby Alcohol and Drug Clinic's strategic action plan for 1995

References: B.C. Ministry of Health, Population Health Resource Branch. *Health Impact Assessment Guidelines.* 1995. B.C. Ministry of Health, Population Health Resource Branch. *Health Impact Assessment Tool Kit*. 1994

Abstract #6: **Working Toward Health Impact Assessment in Nova Scotia**

Contact: Nova Scotia Department of Health
P.O. Box 488
Halifax, Nova Scotia B3J 2K8

Major Approach: Establishment of Population Health Goals For Tracking Policy And Program Effectiveness

Defining Features:

The *Report of the Nova Scotia Royal Commission on Health Care* (1989) sets forth a strategy for health care in the province of Nova Scotia that proposes new planning processes, restructures the health policy development process, and redefines relationships among Government, health care providers and consumers. The Provincial Health Council was established to assist the Government of Nova Scotia in the development of a Comprehensive Health Policy and Health Goals for the province. For the past few years, the Department of Health has undergone a strategic planning process to operationalize the Comprehensive Health Policy and Health Goals. The Strategic Plan outlines the Department of Health's policies and priorities, provides an analysis of operational activities, and proposes resources allocation and financial targets by program area. The focus of the strategic planning process has shifted over the years. Whereas early initiatives centred upon health services and service provision, more recent planning initiatives prioritize health outcomes, and greater attention is paid to the impact of programs upon the health of Nova Scotians. This coincides with the recommendations of the Royal Commission in their stipulation that "all policy initiatives undertaken by the government include an assessment of their impact on the health of the population." Measurement of impact is guided by the Health Goals and progress toward their achievement is presented regularly in an annual report from the Department of Health.

Application Considerations:

- The Health Goals articulated by the government of Nova Scotia are as follows: increased emphasis on health promotion, ensuring healthy environments, encouraging healthy living and social supports, commitment to effective management of health system, community participation, and social justice.
- Instituting a province-wide planning process with health goals and measurable objectives serves as the basis for regional accountability for managing limited provincial resources in Nova Scotia.
- The Nova Scotia experience highlights the variability of the planning processes and supports the movement from a service-provision orientation to a health-outcomes orientation which fits more closely with the principles of population health.

Reference: *The Report of the Nova Scotia Royal Commission on Health Care*. 1989. Copies available from the Nova Scotia Government Book Store. Halifax, Nova Scotia.

Abstract #7: **Impact Evaluation of the Health Care Reconfiguration on the Health and Well-Being of Montrealers**

Contact: Pierre Tousignant, Direction de la santé publique
4835 rue Christophe-Colomb, Rez-de-chaussee
Montreal, Quebec H2J 3G8

Major Approach: HIA as a tool to evaluate the impact of health care reform on health and to develop research studies and a system of surveillance to track the distribution and impact of funds allocated to various health activities and programs.

Defining Features:

Impact evaluation of provincial health care reform is occurring in the city of Montreal. To ensure the accountability for funding and the adequate continuance of programs necessary for the health of the population, changes in funding and programs under health reform and cost-cutting initiatives will be monitored for their impact on health. Change to the health care system and services in the region are linked to improved health status of the population. The closing of hospitals and hospital beds may be necessary, but they cannot be without some impact on meeting the health needs of the population, especially if other determinants of health (e.g., economic conditions, environment and other conditions of living) are not improved. Health impact assessment in this example is linked not only to policy and health status but to health resource investment, as well.

Application Considerations:

- This approach gives priority in the analysis of health impact to effects of transformation in policy or programs on the population, rather than individuals served.
- Consideration is given to indicators of health and well-being in their broadest sense.
- Those indicators of access and utilization that focus on services of known efficacy are given highest priority.
- Attention is concentrated on key groups such as users of ambulatory services, workers, and users of mental health services.

Reference: Tousignant, Pierre. *Impact de la reconfiguration du réseau sur la santé et le bien-être de la population*. Montreal: Direction de la Sante publique, 15 novembre 1995.

Abstract #8: **Healthy Victorians 2000 - Towards Victorian Health Promotion Goals and Targets**

Contact: Victorian Health Promotion Foundation
Suite 2, First Floor, 333 Drummond Street, Carlton, Victoria 3053
PO Box 154 Carlton South 3053, Australia
Telephone: (03) 347-3777 Fax: (03) 347 6917

Major Approach: Goal Setting at the State Level To Improve the Monitoring, Measurement and Impact of Health Promotion Initiatives in Australia

Defining Features:

Healthy Victorians 2000 is a joint initiative between the Victorian Health Promotion Foundation (VicHealth) and the Victorian Department of Health and Community Services. The central aim of the initiative is to develop health promotion goals and targets for the population of the state of Victoria. A document entitled, *Healthy Victorians 2000 - Towards Victorian Health Promotion Goals and Targets* (1995), has been developed and will undergo a public consultation later this year. Concurrently, a full scale health status survey is planned to establish baseline data upon which health impacts of programs can be assessed over time. This project coincides with the formulation of health promotion goals and targets at the national level by the National Health and Medical Research Council of Australia. Formulating health promotion goals and targets is one strategy embraced by the State of Victoria to increase health system accountability and to improve the ability of decision makers to assess the impact of programs upon the health of its people.

Application Considerations:

- Four of seven Australian States and Territories have instituted health promotion foundations whose objectives are largely to increase health promotion awareness, to fund health promotion research and development activities, and to encourage healthful lifestyles. Most foundations are setting state goals to monitor and assess the impact of programs on the health status of populations.
- Collaboration between the health promotion foundation and State government departments is key to HIA in the Victorian approach.
- The Victorian approach varies from other HIA applications whereby the responsibility for HIA is shared between the foundation (nongovernmental entity) and governmental sectors, and HIA strategies and activities are conducted at the level of the Foundation.

Reference: Victorian Health Promotion Foundation. *Healthy Victorians 2000 - Towards Victorian Health Promotion Goals and Targets*. 1995.

Abstract #9: **Health Plan For Catalonia**

Contact: Department of Health and Social Security
Autonomous Government of Catalonia
Travessera de les Corts, 131-159
Pavello Ave Maria, 08028 Barcelona
Phone: (93) 227 29 00; Fax: (93) 227 29 90

Major Approach to HIA: Regional Goal Setting to Assess Policy Effectiveness

Defining Features:

In 1989 the government of Catalonia (a European region situated in the north-east of the Iberian Peninsula) undertook a health planning exercise to formulate regional goals, objectives and indicators for three areas in health care: general health objectives, risk reduction objectives and operational objectives. The *Health Plan for Catalonia* (1993-95), based upon the WHO's "Health for All by the Year 2000" strategy, is the fundamental instrument for health policy in the region. The Plan sets targets, guidelines, strategies and action plans for the Catalan Health Service (CHS) to promote health and prevent disease among Catalonia's citizens to the year 2000. Development and implementation of the *Health Plan for Catalonia* was based upon the following: a focus on health targets (outcomes) versus service targets (utilization); an emphasis on quality of life; priority setting of health problems and primary interventions; broad based public participation; a reorientation of health services to primary health care and preventive services; increased health services research and evaluation; and intersectoral and international cooperation and collaboration on health matters. An evaluation of the first Health Plan (1993-1995) is now underway and the second *Health Plan for Catalonia* is being developed for the 1996-1998 period.

Application Considerations:

- The use of objectives to monitor health in Catalonia, as set out in the *Health Plan for Catalonia,* indicates improvements in a number of priority areas including maternal and infant mortality rates, chronic disease, cervical and breast cancer screening, and accident prevention. The Catalonian approach does not consider the broad determinants of health to the extent that other jurisdictions do, as presented in this report.
- A focus on evaluation and the use of regional objectives to monitor the health of the people of Catalonia remains a firm commitment among the Catalan Health Service and the Autonomous Government of Catalonia. Regional goal setting is viewed as the instrument of choice to link policies and programs to health outcome measures - today and into the future.

Reference: Department of Health and Social Security, Autonomous Government of Catalonia. *Working Together For Health Gain at a Regional Level: The Experience of Catalonia*. European Health Policy Conference, "Opportunities for the Future." Copenhagen. December 5-9, 1994

Abstract #10: **Greater Vancouver Regional District's Air Quality Management Plan**

Contact: Greater Vancouver Regional District
4330 Kingsway, Burnaby, B.C., Canada V5H 4G8
Phone: (604) 432-6200 Fax: (604) 432-6251

Major Approach: A Regional Approach to HIA Within Economic and Environmental Assessment of Priority Area

Defining Features:

With a projected increase in population from 1.3 million in 1985 to two million in the year 2000, air quality improvement is a major concern to the Greater Vancouver Regional District (GVRD), a regional planning body in the province of British Columbia. In December 1994, the GVRD developed an *Air Quality Management Plan* that recommends actions for all levels of government to reduce harmful air emissions in the region. Development of the Plan included a six month study to determine the potential health and economic impacts of implementing the policies and programs proposed in the *Air Quality Management Plan*. The health impacts of the *Air Quality Management Plan* can be summarized as follows:

> Implementation of the Air Quality Management Plan in the GVRD would reduce projected annual air emissions by 224,000 tonnes by the year 2020. This would prevent an estimated 2,800 premature deaths, 33,000 hospital emergency room visits, 13 million person-days of restricted activity, and 5 million symptom reports related to respiratory problems. The value of benefits (including the value of lives saved) is an estimated $5.4 billion to the year 2020.

Application Considerations:

- The Greater Vancouver Regional District approach considers health impact assessment within a larger planning framework; HIA is not a stand-alone function but a component part of economic & environmental assessment.
- HIA is a collaborative process and includes input and participation from federal, provincial and regional governments, community representatives and business interests.
- HIA is a proactive strategy that is linked directly to the planning process around a given priority area

Reference: *Overview: GVRD Air Quality Management Plan*. Greater Vancouver Regional District. December, 1994.

Abstract #11: **Healthy Cities and Shires in Australia**

Contact: Queensland University of Technology
School of Public Health (Kelvin Grove)
Locked Bag No. 2
Redhill, Brisbane, Qld 4059 Australia
Phone: (07) 3864 5883 Fax: (07) 3864 3369

Major Approach: Municipal Public Health Planning for Local Governments

Defining Features:

The *Healthy Cities and Shires Project* in Australia is an exemplar of the WHO's Healthy Cities Project as a means to achieve "Health For All by the Year 2000." In the state of Queensland in Australia, Healthy Cities is operationalized through Municipal Public Health Plans (MPHPs). In 1993, Queensland Health, through the Health Advancement Branch, supported three pilot projects in the development of Municipal Public Health Plans (MPHPs) at the Local Government and community level. The aim of MPHPs is to facilitate partnership between local governments, service providers and the public in creating and developing a vision for a healthy community. MPHPs focus on health needs and health outcomes, are flexible and allow for change, and ensure coordinated interagency responses to health issues and needs. Within the MPHP model, a *goal directed* administration of public health is expected to complement and enhance the more traditional *regulation driven* administrative approach to public health. A key characteristic of the *Healthy Cities and Shires Project* is that local governments take the lead and assume responsibility for the entire health planning process from identifying needs, setting priorities, defining measurable health goals and targets, ensuring evaluation and monitoring processes, and encouraging community participation.

Application Considerations:

- The *Healthy Cities and Shires Project* embraces an ecological perspective of public health that is multisectoral in scope and collaborative in nature.
- Key strategies for action parallel those outlined in the Ottawa Charter for Health Promotion (1986) including healthy public policy, supportive environments, community action and a focus on health promotion and disease prevention.
- Developing a municipal plan consists of seven steps: 1) awareness raising and gaining commitment, 2) managing the project, 3) needs assessment, 4) prioritizing issues, 5) developing action strategies, 6) writing the plan, 7) monitoring, review and evaluation of the plan.
- The three pilot sites of the *Healthy Cities and Shires Project* in Queensland were the local governments of Cairns City Council, Banana Shire, and Brisbane City Council.

Reference: Queensland Health, Health Advancement Branch. *Municipal Public Health Planning: Resource Guide*. September, 1995.

Abstract #12: **Indicators for Healthy Communities in Canada**

Contact: Population Health Resource Branch
B.C. Ministry of Health and
Ministry Responsible for Seniors
Main Floor, 1520 Blanshard Street
Victoria, B.C. V8W 3C8
Phone: (604) 952-1798

Major Approach: Identifying Health Indicators at the Community Level

Defining Features:

The B.C. Ministry of Health released *The Health Indicator Workbook: A Tool For Healthy Communities* in 1995 to encourage communities across B.C. to adopt a "healthy communities" strategy to identify and address health needs and issues. Communities use surveys, neighbourhood discussions, public meetings and interviews to gather health needs data and to monitor their progress toward improved community health. The *Health Indicator Workbook* assists communities with the identification of community health measures referred to as "health indicators." Indicators are linked to the social, economic and physical/environmental determinants of health. Through the *Healthy Communities* process, communities create their own vision of a healthy community, develop a community profile that highlights both community needs and strengths, and forge coalitions and partnerships committed to improving the health of citizens and communities. The *Healthy Communities* movement in British Columbia has been active also at the municipal level. Cities are beginning to adopt a similar framework and process to identify and address local health concerns. The aim is the same: to set in place measurement indicators that allow a jurisdiction (community or municipality) to define and track its progress toward improved health status of the population.

Application Considerations:

- The *Healthy Communities* strategy is a collaborative grass-roots process.
- It is based upon an empowerment philosophy whereby individuals are encouraged to develop a vision and to work together to achieve community betterment.
- Flexibility and adaptability are key characteristics of the *Healthy Communities* initiative. Citizens are encouraged to articulate indicators that are relevant and reflective of the nature of their own (unique) communities. *The Health Indicator Workbook* provides various examples of indicators as a base upon which communities may add or modify.
- Using indicators to measure the health of communities offers communities the opportunity to influence decision makers and participate in program planning and policy development that ultimately affects them.

Reference: B.C. Ministry of Health. Population Health Resource Branch. *Health Indicator Workbook: A Tool For Healthy Communities.* January, 1995.

Abstract #13: **A National Framework for Health Impact Assessment in Environmental Impact Assessment in Australia**

Contact: University of Wollongong
Wollongong, Australia
Phone: 61-42-213-555, Fax: 61-42-213-477

Major Approach: Health Impact Assessment as a Component of Environmental Impact Assessment

Defining Features:

A national consultation process was undertaken in Australia in the early 1990's to devise a protocol to incorporate health impact assessment into environmental health assessment (EIA). The aim was to develop a framework for HIA (within EIA) to assess health implications of proposed programs, development projects and polices; and to articulate the place of HIA in the overall planning process. HIA is perceived as a tool or strategy for protecting the environment and public health that deserves high priority in policy making across governmental sectors and at all levels of government. In 1992, *A National Framework of Health Impact Assessment in Environmental Impact Assessment* was produced and features the following highlights:

- Designated policy areas and types of development projects (public & private) must be subject to HIA uniformly across states and territories in Australia.
- Policies and legislation should require mandatory consultation with health authorities for designated development projects; public participation must be an integral part of HIA.
- Parameters of health must be broadened beyond the physical environmental aspects of health to include social, psychological, and economic health assessment and to identify and assess explicit indicators in each of these domains.
- Workforce training and accreditation for the implementation of HIA should be considered an integral and urgent part of the national goal setting process (referred to as National Health Goals and Targets).
- HIA is considered within the context of sustainable development and social justice.

Application Considerations:

- Within the Australian context, HIA and EIA are considered as twin elements within the same process. The HIA process parallels a standard EIA process that includes screening for relevance, scoping for range, profiling for baseline data, risk assessment and management, implementation and decision-making, and monitoring and evaluation.
- Coupling HIA with EIA may demonstrate cost-efficiencies but some reservations may arise with respect to linking health impact to environmental health directly versus having it as a stand alone process where more attention can be paid to the universe of determinants of health.

Reference: *National Framework for Health Impact Assessment in Environmental Impact Assessment*. University of Wollongong, Australia. 1992.

Abstract #14: **The *National Strategy to Reduce Tobacco Use* in Canada**

Contact: Health Canada
Office of Tobacco Control
11 Holland Avenue, Tower A, Suite 513
Ottawa, Ontario K1A 0K9

Major Approach: National Goal Setting By Health Priority Area

Defining Features:

In May 1995, the *National Strategy to Reduce Tobacco Use* was launched to reduce tobacco use in Canada. Tobacco use is the single most preventable cause of disability, disease and death in Canada. More than 38,000 Canadians die each year from smoking related diseases. The *National Strategy to Reduce Tobacco Use* is based upon the belief that "the impact of efforts to reduce tobacco use will be greater if all levels of government and non-government agencies work together." The initiative is a collaborative effort between the federal, provincial and territorial governments of Canada and various national health organizations including the Canadian Council on Smoking and Health, the Canadian Cancer Society, the Lung Association, the Heart and Stroke Foundation, and the Canadian Public Health Association. The goals of the national strategy are to assist non-smokers to remain smoke-free (prevention), to help those who want to quit to do so (cessation), and to protect the health and rights of non-smokers (protection). Seven strategic directions are outlined to meet these goals including legislation, access to information, availability of services/programs, support for citizen action, message promotion, research, and intersectoral policy coordination.

Application Considerations:

- The *National Strategy to Reduce Tobacco Use* is one of the few examples in Canada of goal and target setting at the national level. Two additional examples are: *A Safer Canada: Year 2000 Injury Control Objectives for Canada* and the *Canadian Heart Health initiative*, also included in this report.
- Recent initiatives of the coalition include: the National Clearinghouse on Tobacco and Health, the *Tobacco Sales To Young Persons Act*, tax increases at federal and provincial levels, advertising and promotion campaigns, and smoke free transportation and workplaces.
- Adopting a national strategy with goals and objectives facilitates the impact assessment of the coalitions programs and policies over time.

Reference: *The National Strategy to Reduce Tobacco Use in Canada*. Health Canada. 1995.

Abstract #15: **A Safer Canada: Year 2000 Injury Control Objectives for Canada**

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Major Approach to HIA: National Goal Setting By Health Priority Area

Defining Features:

Many industrialized countries have developed or are currently developing national strategic health plans that incorporate health goals, objectives and targets. In Canada, this has not occurred at a national level, although many of the provinces have developed or are currently developing goals and targets as part of their health plans. Goal setting has also occurred around health priority issues. One example is the establishment of injury control objectives for Canada. *A Safer Canada: Year 2000 Injury Control Objectives For Canada*, the report on the proceedings of a national symposium on injury control, outlines goals, objectives and target levels for five categories of injuries that include: Home and Community; Occupational Health and Safety; Sport and Recreation; Transportation, and, albeit less resolutely, violence and abuse. The report recommended that the national government of Canada adopt a framework for a national strategy on injury prevention and control that includes the following central goals: the reduction of injury death and disability across Canada, strengthened public policy relating to injury prevention, improved awareness and education, safer environments, and improved trauma care and rehabilitation. The injury control initiative represents one example of national goal setting in Canada; others include the *National Strategy to Reduce Tobacco Use in Canada* (included in this report) and *Brighter Futures*.

Application Considerations:

- Motivation for the *Safer Canada* initiative was prompted by two issues: the lack of coordination of injury control activities at the national level, and the fact that injury is the leading cause of death among Canadians between the ages of 1 and 44 years.
- The development of the *Safer Canada* framework is characterized by collaborative, intersectoral working relationships among federal and provincial agencies, nonprofit organizations, academic institutions and interested individuals.
- Setting injury control objectives was perceived as a means to assess injury intervention strategies, judge injury control policies and programs, and promote resource allocation decisions, all in relation to injury incidence rates (health impact).
- To date, the injury control objectives for Canada have not been "officially" adopted as a national framework for injury prevention and control.

Reference: *A Safer Canada: Injury Control Objectives For Canada.* Proceedings of a National Symposium. Edmonton, Alberta. May 21-22, 1991

Abstract #16: **The Canadian Heart Health Initiative**

Contact: Health Canada, Population Health Branch
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Major Approach: National Framework Developed For Health Priority Area

Defining Features:

In 1987 a Federal Working Group consulted with groups across Canada to develop a national strategy for the prevention of cardiovascular disease. The *Canadian Heart Health Initiative* (CHHI) established national goals for cardiovascular disease in Canada. The Heart Health strategy recognized cardiovascular disease as a major public health issue and recommended attention to the issue by provincial health ministries. The CHHI links the federal health authority with all twelve provincial/territorial health ministries and with communities where demonstration projects are conducted. Today, a national network of heart health initiatives has been created. At the provincial level baseline surveys of risk factors are conducted, action plans are developed, and community-based demonstration programs are implemented and evaluated. The national jurisdiction is responsible for technical support, the establishment of a national heart health risk factor database, and the provision of matching research funds for surveys and demonstration projects. The shared management of the CHHI among federal, provincial and community jurisdictions patterns the principles of the *Victoria Declaration on Heart Health* (1992) which encourages a participatory approach to heart health issues and action strategies.

Application Considerations:

- The *Victoria Declaration on Heart Health* is an outgrowth of the First International Heart Health Conference, which took place in Victoria, B.C. in 1992. The declaration highlights five actions for heart health including public education, more timely application of science, increased political, effective partnerships for resource generation, and greater coordination of efforts within countries and worldwide.
- CHHI represents a "top-down" policy initiative. The organizing force and the allocation of financial resources came from the national health ministry to create province wide demonstration projects that were then carried through by mobilized communities and local interest. Coalition and partnership between federal, provincial and local communities characterizes the *Canadian Heart Health Initiative*
- The United Kingdom's *Health of the Nation* initiative represents a similar process, whereby programs to prevent cardiovascular disease and other major health problems were initiated by the national government and then supported by public health groups and private foundations.

Reference: *The Canadian Heart Health Initiative: A Policy in Action*. Health Canada. Population Health Directorate. Ottawa. 1992

Abstract #17: **The Rural Policy Research Initiative and Health Care Reform**

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Major Approach: Health Impact Assessment as an Instrument To Appraise Health Care Reform Initiatives on Segments of a Population

Defining Features:

The Rural Policy Research Institute (RUPRI), a multi-state (Iowa State University, University of Missouri, and University of Nebraska) interdisciplinary research consortium, has earned the reputation of a leader in rural policy research in the Untied States. RUPRI conducts research and facilitates public discussion to assist policy makers in understanding the impact of public policy choices upon the rural communities in America. The Rural Policy Research Institute has provided impact assessments for both Houses in the United States Congress relating to the implications of alternative health care reform proposals to rural communities. Recently, an appraisal of the Congressional Medicare Policy Reform proposals resulted in increased Medicare reimbursements for rural areas translating into billions of additional dollars for rural health care providers and rural beneficiaries. To date, the focus of the Rural Policy Research Institute has been the effects of policy change upon health care organization, delivery and financing. Little attention has been paid to the impact of policy change upon the health status of rural populations.

Application Considerations:

- In most cases, HIA is a function of national, regional or local governments. The RUPRI example is unique in illustrating the application of HIA by an entity outside of government.
- This example illustrates the potential of HIA as a instrument to promote equity in policies and programs and to ensure groups at risk and vulnerable populations are being fairly addressed in government programs and policies.
- HIA may serve as a valuable tool for health care reform by allowing the prospective analysis and comparison of impact among alternative reform policies and approaches.

Reference: The Rural Policy Research Institute. *The Rural Perspective on Medicare Policy Reform*. Hearing Testimony Presented to The Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives. July 20, 1995

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