



Towards a New Perspective on Health Policy

Background Paper

The Health Field Concept Then and Now: Snapshots of Canada

**A Document of the Health Network,
Canadian Policy Research Networks**

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Table of Contents

Table of Contents	2
Foreword	3
Preface	4
Introduction	6
The Health Field Concept	6
<i>Lifestyle</i>	7
<i>Health Care Organisation</i>	7
<i>Human Biology</i>	8
<i>Environment</i>	8
Health Status	8
Beyond the Boxes	8
The Explosion of Information	9
The Current Report	10
References	12
Demographics	13
References	16
Lifestyle	17
References	19
Health Care Organisation	21
References	23
Human Biology	24
References	26
Environment: Physical	28
References	30
Environment: Social	32
References	34
Health Status	35
References	37

Foreword

Time has changed Canadians' perception of what constitutes health. At the turn of the last century, the main concern was sanitation and public health. By mid-century, the preoccupation became access to quality hospital and medical services. In the 1970s, attention began to shift to the importance of life style and the environments in which citizens live. In addition, more recently, both researchers and policy advisors have come to recognize that inequalities in social and economic conditions have an important bearing on the health of different population groups.

In 1998, the Health Network of Canadian Policy Research Networks launched a major study entitled *Towards a New Perspective on Health Policy*. Our objectives were to explore the different streams of thought which have shaped our understanding of health and to assess the way in which new ideas about health come to shape health policy and the delivery of health-related programs and services. Sholom Glouberman, the Director of the project, has traced the thinking about health back to Aristotle, and has done extensive investigation of the ways in which the four perceptions of health described above interact and support each other. These results will be reported in a number of publications in 2000.

One of the key markers of a change in the perception of health in the 1970s was the Lalonde Report, *A New Perspective on the Health of Canadians*, mandated by the then federal Minister of Health, Marc Lalonde. The report marked the shift from a medical focus to an examination of determinants in four, health "fields:" lifestyle, health care organization, human biology and the environment.

As part of the analysis of how new ideas about health come to shape health policy, Phil Groff and his colleagues were asked to create some snapshots of Canada in the early 1970s and in the mid 1990s. The purpose was to compare and contrast health data today with the data that existed the time the Lalonde Report was being prepared. A separate study by Terry Albert provides a chronicle of how the Lalonde Report was written and how its recommendations came to shape federal and provincial thinking about health policy.

As Phil Groff chronicles in this Background Paper, the team roamed widely in its search for data, and then found that many of the "facts" extracted from the literature were highly contentious. Clearly, no definitive report card on the Lalonde Report is possible using this approach. Nonetheless, the snapshots presented here provide an interesting insight into how much some things have changed and how others have not. Work on the Background Paper also generated a large set of Appendices, which are available on our Website at www.cprn.org.

I thank the authors for the immense amount of data they have reviewed for these snapshots, and the reviewers who provided valuable advice about both the strengths and the weaknesses of this approach.

Judith Maxwell
January, 2000

Preface

The Lalonde Report, *A New Perspective on the Health of Canadians (1974)* was arguably one of the most successful and influential health policy documents produced in Canada. It marked a change in thinking about health, from one predominantly focussed on medicine and hospitals to an examination of determinants in each of four health fields: lifestyle, health care organization, human biology and the environment. 1999 marks the 25th anniversary of the publication of the Lalonde report. This anniversary offers an excellent opportunity to review and assess the evolution of Canadian health policy and to prepare for its future orientation. A project is underway to examine the process of policy formation in Canada, using the Lalonde report as an important case study. The ultimate goal of this project is the articulation of the newly emerging framework for health policy. As an initial step in this larger project, it was considered useful to compare and contrast some of the health data available at the time of the Lalonde report with comparable data from 25 years later.

Initially, this work began as a short pilot study, looking for data in the area of lifestyle. We consulted a variety of sources, as we were initially concerned about whether there were sufficient data available to even structure a paper in this way. Having met with some success, we wrote up the data we had found about lifestyle. During a brainstorming session, at which these results were reported, it was recommended that we expand the project to report on data in all four of the health fields outlined in the Lalonde report.

We collected data in each of these four health fields and examined them for changes between the Canada that fostered the report, and the Canada of twenty-five years later. In doing so, it was hoped that we would identify both the strengths and weaknesses of the health policy platform that was emerging in the early seventies and more importantly begin to articulate the platform emerging twenty-five years later. We did not collect data according to any formal search criteria, nor did we wish to restrict ourselves to any traditional domain boundaries, or methodologies. Our aim was to be neither exhaustive in our search nor comprehensive in our coverage but rather to simply sample from the available data in each quadrant, using health indicators, and more general ones. The goal of this exercise was to provoke thought and generate discussion regarding changes in Canada and the evolution of health policy. In an earlier draft of this document, a Lalonde Report Card was presented to give the reader a subjective evaluation of the changes that had occurred in each of the health fields.

During the development of this work several facts became apparent. First, and not surprisingly, was the realization that there were no neutral data. Many “facts” we included became a point of contention for at least one or another of the readers of the earlier drafts. We concluded, that our goal of providing some subjective evaluation of the trends we were reporting was a mistake. The more deeply we dug into the data of each health field, and the more widely we consulted with reviewers, the more it became apparent that a simple Report Card was unworkable. It seemed that it would not be possible to make any strong judgements of either facts or values without engendering far more acrimony than seemed warranted for what had initially been intended as a quite modest exercise.

It became obvious that different audiences were reading this paper quite differently. People tended to approach subsets of the data we were presenting from different perspectives, that often yielded quite different interpretations, and perhaps more importantly called into question the completeness or utility of other subsets of our data. What became increasingly evident was that our initial desire to produce a broad survey of data with little regard for such traditional frames was not going to be well received by specialist audiences with some stake in particular approaches. Boundaries and methodologies were simply too firmly established. Our inattention to these territorial distinctions, and our occasional crossing of these borders have ultimately lead to the failure of this paper to meets its initial, humble goals.

In light of this failure, a decision has been made to put an end to this phase of the overall project. The authors of this background paper hope that the reader may find something of interest in the data presented, and we hope that a dialogue about their nature and interpretation will continue. We do, however, feel that there are three general lessons that have emerged from this project. The first and we believe most important of these is that, there is clear consensus that changes have taken place. The Canada of 1999 is not the Canada of 1974, in many varied and complex ways. There have been changes in all the health fields, some positive and some negative. It is certain that any policy framework that is currently arising will in part reflect and be shaped by a very different environment than the environment that produced that last framework. Second, it is apparent that the extent and nature of the changes in the four health fields, are very much matters for debate. Different analysts working within different frames select different data to serve as indicators. Further, they apply different interpretations even when common data is examined. It is unlikely that widespread consensus can be reached on exactly what has changed in the past 25 years of health in Canada. Finally, it is unclear whether the changes that have taken place in Canada over the past 25 years can be attributed to the Lalonde report. While one can certainly view the publication of *A New Perspective on the Health of Canadians* as a watershed moment in Canadian health policy, it remains in dispute to what extent the report acted as a cause for change or merely served as a marker for change. In the end, policy analysts and developers will have to grapple with some of the complexity of these changes, despite the lack of consensus over their scope and nature.

The authors wish to express their gratitude to the many readers and reviewers of this paper to date. The iterative process of writing, review and rewriting has doubtless made this a much more useful document. The responsibility for any remaining shortcomings rests with the authors.

Philip Groff
January, 2000.

Introduction

The Lalonde Report, *A New Perspective on the Health of Canadians* (1974) is arguably one of the most successful and influential health policy documents produced in Canada. It marked a change in the way Canadians think about health, shifting from a focus largely on medicine and the medical practitioner to an examination of determinants in each of four health fields. This broadened scope was intended to serve as an analytical framework within which research and policy evaluation could be conducted. However, it was increasingly understood to be a public statement of an emerging new platform upon which health policy could be developed.

1999 marked the 25th anniversary of the publication of the Lalonde report. This anniversary offered an excellent opportunity to review and assess the evolution of Canadian health policy and to prepare for its future orientation. The anniversary also gave us the chance to look at the impact of new ideas on policy and practice in health. There is much to be gained from standing back and taking a broader look at Canadian health policy. At worst, it will help us to appreciate our successes and failures in a larger context; at best, it can help us to identify the next emerging health policy framework.

Indeed, just as the Lalonde Report marked a shift toward a more inclusive concept of health twenty-five years ago, a similar expansion of scope is occurring today. Because of new sources of information and increased capacity to process information, we have an increased understanding of the role of socioeconomic factors and other conditions of living on our health.

Additionally, it is worth noting that Canadians have themselves changed in the past twenty-five years. The demographic make-up of the country is not the same as when the last framework presented itself. The average Canadian is older today than twenty-five years ago, though by no means old. Immigration, at a low in the period before the Lalonde report is now at an all-time high. We are attracting more new Canadians and from different regions of the globe. Any new policy framework will have to be informed by all these changes in the population to be served. Demographic analyses have more to tell us than just such broad trends however. One of the strengths of the Lalonde Report was its emphasis on the need to identify populations at risk. Throughout this report, it is our intention to report data, where possible, in terms of age, gender, socioeconomic class, and ethnicity in an attempt to identify which populations within Canada are at risk, and for what.

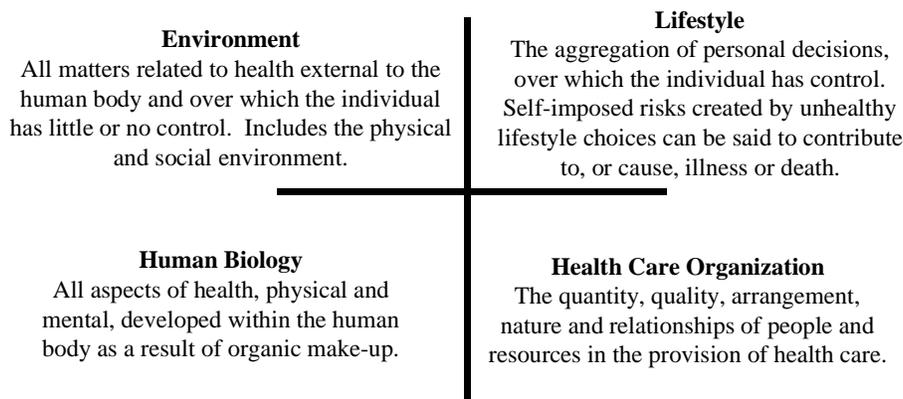
By studying changes in demographics, policies, institutions and attitudes in response to the shift in concept during the Lalonde era, we will be better equipped to understand and shape the transitions as we move toward a new platform in health policy.

The Health Field Concept

A New Perspective on the Health of Canadians articulated a newly emerging framework, in which health was conceptualized as dependent upon more than just universal access to the health care system. The Lalonde report introduced a division of health determinants into four health fields: lifestyle, the health care organization, human biology, and the environment,

both physical and social. While this division was never meant to be exclusive or exhaustive, it was designed to help policy makers think “outside the box” of health care.

Figure 1: The Health Field Concept



Earlier drafts of the report included a proposed tool for change within each of these quadrants: social marketing in the lifestyle quadrant, reorganization in the health care organization quadrant, research in the human biology quadrant and legislation in the environment quadrant. In preparing for the next health policy framework, it is useful to examine the conditions in the Canadian health field within each of these quadrants both in the early seventies—the era supplying the data upon which the Lalonde report was written—and comparable data from twenty-five years later. It is hoped that these snapshots will allow for the assessment of changes in each quadrant, without assigning specific causal connections between the publication of the Lalonde report and the changes noted.

Lifestyle

The lifestyle field was defined as “the aggregation of decisions by individuals which affected their health and over which they more or less have control,” in the Lalonde report.¹ The identification of self-imposed risks to health, and the prediction of new areas of potential improvement in population health through behavioral change, were perhaps the most significant contributions of the report. Such unhealthy behaviors as smoking, drinking and driving, eating to excess and forgoing exercise were to be targeted using social marketing—presumably to counter the lifestyle marketing already employed by commercial interests such as liquor and tobacco companies.

Health Care Organization

The health care organization field encompassed all of the medical system traditionally associated with health in Canada, and the more traditional targets of health policy. The

report stressed that relegating the health care system to only one of four quadrants of the health field was not meant to diminish its importance in Canadian health care, rather to elevate other potential determinants to equal importance. The tool for change in this field was reorganization.

Human Biology

The Human Biology quadrant encompasses “all those aspects of health, both physical and mental, which are developed within the human body as a consequence of the basic biology of man and the organic make-up of the individual.”² In other words, the myriad determinants of health that originate with our common genetic heritage. From the perspective of health policy, with the possible exception of genetic counseling, little can be done to directly change human biology or its impact on health. The recommended tool for change was research.

Environment

The Lalonde report defines the environment field as all those influences on health which are external to the individual and over which the individual exerts little, if any control.³ Following the lead of Thomas McKeown, the report stresses the historical impact of improvements in the physical living environment of communities on the health of those communities. It also hints that the social environment might play an equally important role as the physical environment, though few specifics are addressed. Since the Lalonde era, much more attention is being paid to the social determinants of health, and thus we will examine developments in this field for both physical and social environmental factors.

Health Status

While the Lalonde report is most noteworthy for its discussion of health determinants in terms of the health field concept, the authors do point out that the health status of a population is one of two major problems to be considered in creating health policy. According to the report the major indicators for the health status of a population are life expectancy and mortality rates, causes of death and morbidity statistics. Indeed, while the document largely marks the shift in focus of attention to health determinants previously overlooked as targets for health policy such as lifestyle and the physical environment, it was the presentation of an overview of causes of death in Canada which drew much of the immediate attention.⁴

The report stresses that at the dawn of the seventies, Canadians could feel proud of improvements in the health status of the population over the preceding century. The same can be said of today, with respect to the past twenty-five years. Many indicators of health status show tremendous improvements during this period. Children born today can expect to live, on average, 5 years longer than they would have if born in the seventies.⁵ Mortality rates for most causes of death have decreased substantially since the early seventies— demonstrated most dramatically by the tremendous reduction in heart attack fatalities.⁶ Canadians can now expect to survive their first heart attack, unlike the era of the early seventies. At the opposite end of the life span, all indicators of negative birth outcome: peri-natal, neonatal and infant mortality, show a marked decline.⁷ Many indicators of morbidity, such as reports of most diseases requiring public health notification⁸ and hospital separations for most causes, have also declined.⁹

These statistics are encouraging, however, not all the news is good. While most causes of death have shown a decline during the past twenty-five years, deaths due to cancer have remained constant, and the incidence of cancer has increased steadily.¹⁰ Notifiable diseases and many other forms of morbidity may be in decline, but there are concerns about the resurgence of infectious diseases both old and new, such as tuberculosis and AIDS.¹¹ This trend stands in contrast to the Lalonde Report's prediction that the future of medicine would be an almost exclusive focus on chronic conditions, in light of the many successes in the war against infectious disease during the twenty-five years prior to Lalonde.¹² Additionally, the gains in health status have not been uniform for all Canadians. Markedly higher incidences of disease and elevated mortality rates are observed amongst Canada's disenfranchised: the poor, elderly, and Aboriginal populations. There is also the question of whether we are often combating mortality at the expense of morbidity. When one notices the sharp increase in virtually all incidence of disease among the very old, with a concomitant increase in patronage of the health care system, one might be tempted to ask if we are focussing too much on adding years to life, rather than life to years.

Perhaps the most striking feature of the trends in health status over the past twenty-five years is that the rate of improvement seems to have slowed. Most of the downward trending curves in incidence and mortality rates have begun to flatten out. This trend suggests that a sea change may be at hand. Whatever progress has been made of late, we may have reached the point of diminishing returns for further efforts in the same direction. The time for a new approach to health may be at hand, if further progress in the health status of Canadians is to be realized.

Beyond the Boxes

The Health Field Concept was fruitful in that it accurately marked a transition in thinking about health "outside the box" of health-care. But by its very nature it was also limiting, as it substituted four boxes for one. The authors of the report acknowledge this fact. Many interesting phenomena are only visible when one looks at areas of overlap between the four fields.

For example, it is striking to note that while most people in Canada are smoking less than they did twenty-five years ago, the cohort of teenage girls is actually smoking more. Here we have an example of social marketing failing to produce healthy lifestyle changes within a particular demographic group. Of course, this could be interpreted as the successful use of social marketing on the part of the tobacco companies. However, this interpretation does not give insight into why this particular cohort did not respond to the antismoking campaigns. When one further considers the large proportion of Canadian society made up of teenage girls, the echo of the baby-boom generation, this fact is particularly alarming and suggests that new tools for change need to be developed and implemented. A similar pattern is observed among Canada's urban poor and in the Aboriginal population. It would seem that smoking is at least as much an indicator of the impact of the social environment on health as it is of the impact of lifestyle. In short, we see the failure of a lifestyle remedy to have universal success due to forces from the social environment.

Additionally, while the Report made many interesting predictions about the impact of the tools for change within each quadrant, it is perhaps more interesting to note the successes achieved through the application of tools from outside a particular field. Again drawing upon data from the lifestyle quadrant, it is gratifying to note that the incidence of driving without seatbelts has declined dramatically in the past twenty-five years, with the predicted result of declining fatalities from automobile accidents. Despite being considered a lifestyle choice in the Lalonde era, however, the tool for changing this behavior was largely one of legislation. By the late nineties all provinces and territories have mandatory seatbelt laws in place, and there is a nearly 90% compliance rate with these regulations. Thus in contrast to the above example of smoking statistics, here we have an environmental remedy succeeding at solving a lifestyle problem.

Explosion of Information

An undeniable change during the past 25 years is the explosion of available health data. This is the result of increased computing power, statistical sophistication and more comprehensive survey instruments, which collectively allow for a more detailed analysis of population health indicators.

That there are better, more thorough databases in the health field, and indeed in all fields, today than 25 years ago almost rates the designation of a trivial truth. The explosion of information since the beginning of the Lalonde era is demonstrated in the increased numbers of professional publications in the life sciences. During the past twenty-five years, the number of professional scientific journals in the field of genetics alone, has increased from 61 to 256,¹³ while in the field of neuroscience the number of journals has increased from 45 to 473.¹⁴ In addition to an increasing quantity raw empirical data being available, there have been many innovations in the collation, storage and distribution of this information utilizing new technologies of the past 25 years. These methods include user-friendly spreadsheet and statistical applications software, near-universal access to affordable computers capable of using this software, internet databases and search engines such as OVID and Medline, and organisations set up to facilitate the distribution of this knowledge base such as the Cochrane Collaboration. Health Canada has recently entered this arena with a publicly accessible set of documents on all aspects of health, including recent research reports on its web site.

Such a proliferation of available data would be of little use without sufficient computational power with which to process and analyse. Fortunately, this explosion of information comes precisely at a time when we have the computing power to make use of it. In fact, the increased availability and accessibility of data has been partially fuelled by the developments in computer technology in the past twenty-five years. When the data for the Lalonde report were being collected, computers were room-sized machines, operating on stacks of punch cards, carrying out lists of simple instructions, albeit with what seemed like amazing speed and accuracy. Computers were large, slow, expensive, beyond the means of all but the largest corporations and educational institutions. At the cutting edge, today's supercomputers have processing speeds of approximately 1 teraflop (1000 billion instructions per second). This represents an increase in quality and not just quantity as, "with 1 teraflop of capability you could complete in a single second a calculation that would take about 700

000 lifetimes of hard work, assuming that you are able to do a sixteen digit multiplication in about five seconds, without error.”¹⁵

But supercomputers are still large, and beyond the means of most computer users. What is perhaps more intriguing about the rise of computer technology in the past 25 years is the democratization of information processing. In the early seventies even science fiction writers had not predicted the rise of the personal computer that by the late nineties has become just another electronic appliance in many Canadian homes. Even under-funded research labs now have desktop computers, which far exceed the capacity of the major research computers of the Lalonde era.

Hand in hand with the developments of computer technology have been a number of developments in statistical methodology. There have been some genuine innovations in statistical practice in the past twenty-five years. Perhaps more importantly is the current use of older, more powerful techniques, which were seldom employed because of computational limitations such as path analysis,¹⁶ logistic regression,¹⁷ discriminant analysis¹⁸ and meta-analysis.¹⁹

As the millennium approaches, part of the impetus for a new health policy platform, and also one of the forces that will determine its eventual shape, is the birth of the new information age. Never before in human history has there been the potential to create, manipulate, analyze and distribute so much information, in all fields, including health. The vast increase in informational processing made possible by the computer revolution has prompted at least one analyst to mark this as the dawn of a fourth level of human society, the first three being marked by the invention of language, writing, and printing respectively.²⁰ If we are indeed on the verge of a “New Renaissance”, with all the institutional and societal changes that such a term implies, it is not surprising that a new framework for health policy should also be emerging at this time.

The Current Report

The remainder of this report is divided into two main sections:

The remainder of this physical document contains summary reports on a number of topics. First we chart the demographic changes in Canada over the past twenty-five years. Then we present the data on each of the quadrants of the health field concept, with the environment further divided between physical and social conditions. Finally there is a section covering key indicators of change in health status during this period.

The web site for the report contains a series of technical appendices. Here one can find all the data cited earlier in this document, complete with source information and interpretative aids. It is our hope that the presentation of these data will foster further discussion of issues raised and facilitate further analyses and interpretations. The tables of contents for these appendices are appended to the current document to aid the interested reader in searching the electronic archives on the web site.

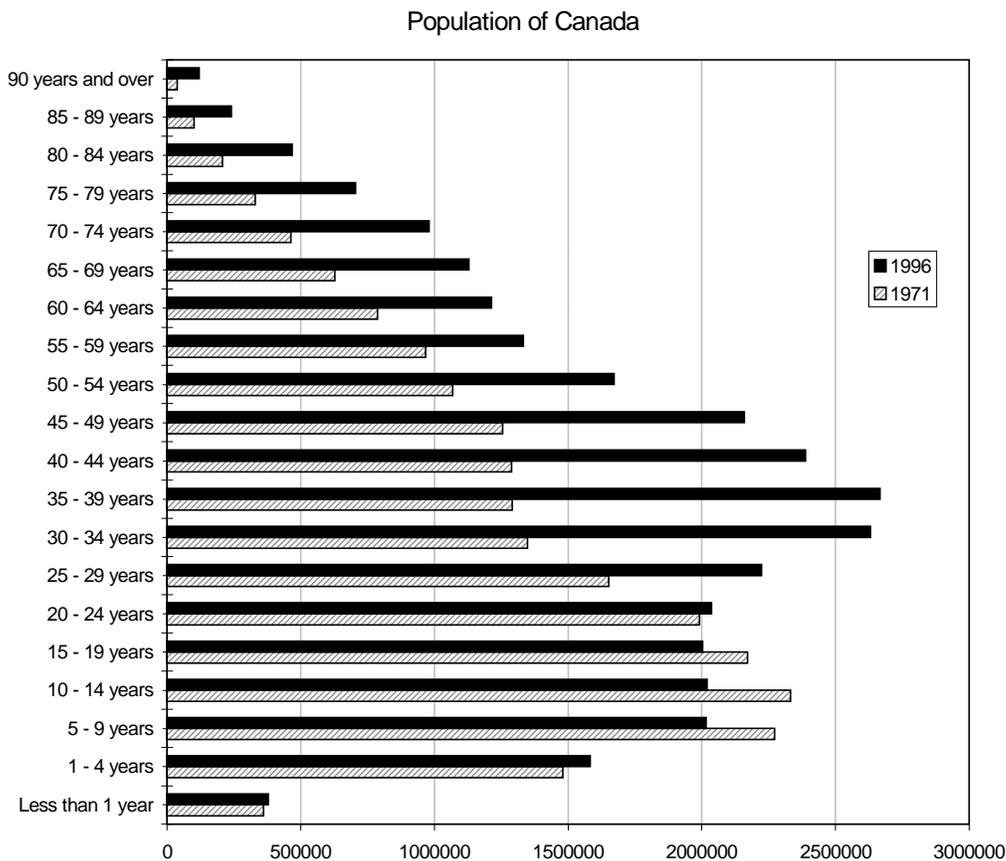
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Demographics

According to David Foot, “Demographics, the study of human populations, is the most powerful—and most underutilized—tool we have to understand the past and to foretell the future.” In fact, he goes on to claim that in the realm of social behaviour, “demographics explain about two-thirds of everything.”¹ Accordingly, an understanding of demographics should play an important part in the evolution of evidence-based health policy. For example, some of the seemingly paradoxical trends noted in the following chapters of this report—such as the fact that we are exercising more frequently yet still gaining weight, as noted in the *Lifestyle* section—are understandable in light of demographic change between the 1970s and the 1990s. The population is aging.

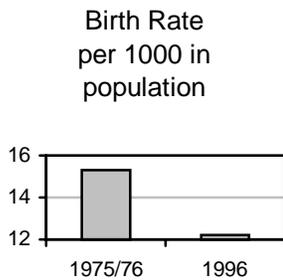
The single most important demographic fact is that every year, everyone gets one year older. When one examines particular demographic cohorts of Canadians in light of this fact, various trends visible over the past 25 years become interpretable and intelligent projections can be made for the future. The single largest demographic cohort in Canadian society is the cohort of people born during the twenty years from immediately after World War II, collectively known as the Baby Boom. In relative terms, Canada had



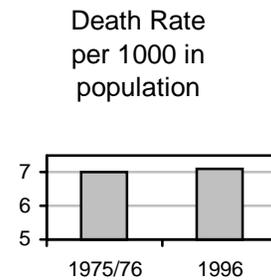
the largest post-war baby boom of any nation; thus, any intelligible policy framework will have to consider this enormous cohort of people.

From 1947 until 1966, 9.9 million Canadians were born both here, and abroad, later to immigrate here. In 1972 the leading edge of the Baby Boom was turning 25. In 1997, this same group started turning 50 years old. This cohort of 30-50 years olds now accounts for 1/3 of the population of Canada. The current project will examine the key indicators in the health field concept, both when the oldest Baby Boomers were 25 and when they were 50, with an eventual view toward forecasting the Canadian Health field when they turn 75.

By 1996, most of the members of the Baby Boom had entered or passed their prime child bearing years, resulting in what some demographers have referred to as the Baby Boom

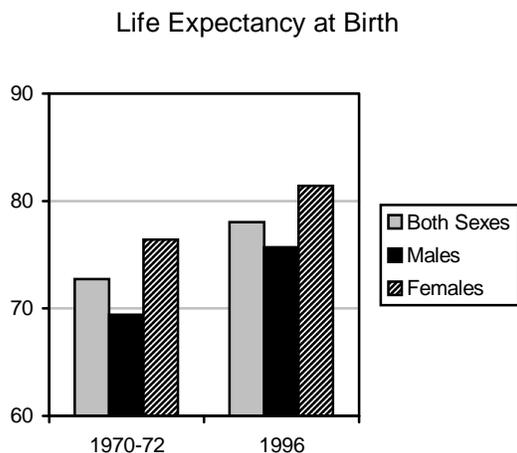


Echo. This is the cohort of the children of the Baby Boomers who in 1996 ranged between 5 and 20 years of age. It must be noted, however, that the Baby Boomers have had nowhere near as many children as their parents. In fact, from the 1970s to the



1990s there has been a fairly steady decrease in both the birth rate² and death rate³ in Canada.

While this trend in the general population is also visible in the Aboriginal population it must be noted that in both the pre-Lalonde era and the current one, the Aboriginal population has a higher birth rate than the general population, while in recent years the death rate among registered Aboriginals in Canada has actually dropped below the national average. Both of these effects are likely due to the relative youth of the



Aboriginal population in Canada, compared to the overall national average age.⁴ Both trends also serve to highlight the fact that Aboriginal Canadians in many ways form a distinct population cohort, whose particular characteristics and needs will be addressed in each section of this report.

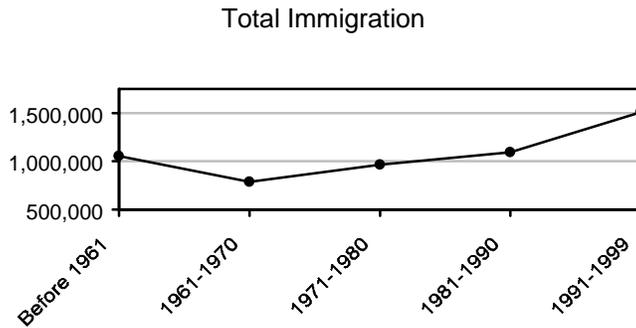
Increases in the Canadian population during this time are due to immigration, as well as to the fact that we are living, on average, five years longer than we did in 1970. In addition, while the birth rate has been lower than the replacement rate, of two children per family, the large cohort of Baby

Boomers have now all passed into or through their primary child bearing years. And while these 9 million post-WWII boomers may not have been having as many children as

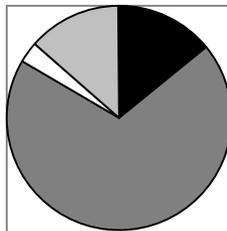
their parents did, or indeed enough to replace themselves, they have still produced a large number of children, nearly 6.5 million of them.

In 1971, when the Boomers ranged from 5-25 years old, Canada was a young country. There is a strong link internationally between the average age of a country and its socioeconomic development—developing nations tend to be young nations. Younger nations also tend to send immigrants to older nations. Today, however Canada is no longer a young country by world standards. That designation is now held by various nations in Latin and South America, as well as parts of Southeast Asia and Oceania.⁵ Thus in the current era, the population of Canada can be described as aging, though not old, with a substantial population of younger Canadians, as well. This younger population is not composed solely of the children of the Baby Boom, however. Both immigrant and Aboriginal populations are on average approximately 5 years younger than the general population, with all the socioeconomic characteristics this implies.⁶

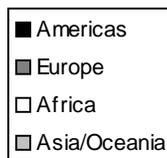
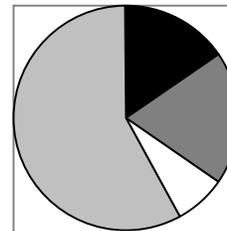
Canada has been a popular destination for immigrants throughout this century, though in the decade of Canada’s greatest youth, immediately preceding the Lalonde era, we experienced a slight lull in persons seeking Canadian citizenship. In the 1990s, an aging Canada has been experiencing record levels of immigration from around the world.⁷ The places of origin for our immigrant population have changed, however, with many more immigrants arriving from younger regions such as South, South-East and East Asia, and relatively few arriving from older Europe.⁸



Places of Origin for Immigrants to Canada 1961-1970



Places of Origin for Immigrants to Canada 1991-1996



In conclusion then, the demographic make up of Canada is very different now, from the makeup in the time of the Lalonde report. Our population is older, though by no means elderly. The fastest growing segments of our population, however, are senior citizens, late teens, and immigrants from South and East Asia. The future of Canadian health policy will have to be mindful of these facts.

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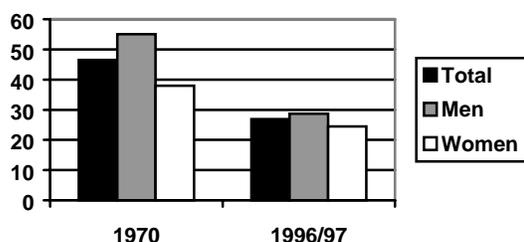
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Lifestyle

In 1974, *A New Perspective on the Health of Canadians* suggested that “lifestyle”—defined as “the aggregation of decisions by individuals which affect their health and over which they more or less have control”¹—was as integral as doctors and hospitals to the health of Canadians. The Lalonde Report, as the *New Perspective* came to be known, argued that self-imposed risks contributed greatly to Canadian morbidity and mortality: “Sedentary living, smoking, over-eating, driving while impaired by alcohol, drug abuse and failure to wear seatbelts are among the many contributors for which the individual must accept some responsibility and for which he [*sic*] should seek correction.”²

Considered new and radical in the 1970s, the Lalonde Report’s observations are taken for granted today. Changes in lifestyle behaviours have accompanied this shift in attitude. From *ParticipACTION* to seatbelts to tobacco, Canadians have made significant efforts to improve their health by reducing self-imposed risks. However, it is important to note that progress is not uniform for *all* Canadians: in nearly all areas of lifestyle behaviour, Canadians with more education and higher incomes showed the most improvement. And, in some areas, Canadians seemed to have reached what could be termed a “point of diminishing returns”: positive changes in some lifestyle behaviours seem to have leveled off.

Smoking in Canada, 1970-1996/97



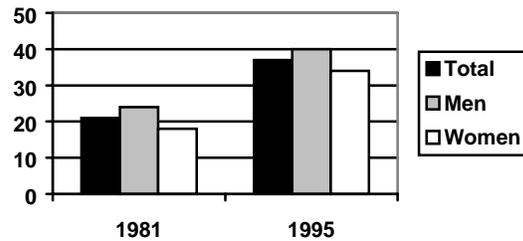
Take smoking. One of the most important preventable causes of illness and death in Canada and other industrialized countries, it is also one area in which Canadians have made great improvements in the past twenty-five years. In 1970, 46.5 percent of Canadian (55 percent for men and 38 percent for women) smoked cigarettes.³ By 1996, that number had dropped by over a third, to 26.9 percent (28.7 for men; 24.5 for women).⁴

However, smoking rates declined by only 19 percent⁵ for Canadians with an elementary education or less, compared to a decline of nearly 69 percent for those with university degrees.⁶ In 1996, 62 percent of Canada’s First Nations population smoked, a rate double that of non-Aboriginal populations.⁷ As well, the rate of improvement is slowing, and, in some cases, reversing: in 1990, the prevalence of current smoking among 15- to 19-year olds was 21 percent—the lowest since 1966. But, by 1994/95, this trend had clearly reversed: 28 percent of teenagers in this age group smoked, and the trend was most evident in teenage girls.⁸

“Sedentary living” has been replaced by “Active Living” for many Canadians. Over the past quarter-century, our physical activity levels have changed, as have our understandings about levels of exercise necessary to benefit health. For example, the 1976 Survey of Physical Recreation and Sport counted as active those who had exercised in the past *month*. Today, physical activity is measured in daily and weekly bursts of

intensity. The Canadian Fitness and Lifestyle Research Institute reports that the percentage of active Canadians has increased by about 1 per cent each year since 1981, from 21 percent to 37 percent in 1995.⁹ Another 28 percent were “moderately active” in 1995, compared to 17 percent in 1981.¹⁰ In both the seventies and the nineties, however, Canadians with more education were more likely to be active: in 1995, 45 percent of degree-holders exercised regularly, versus 29 percent of those with less than a secondary education.¹¹

"Active" Canadians, 1981 & 1995

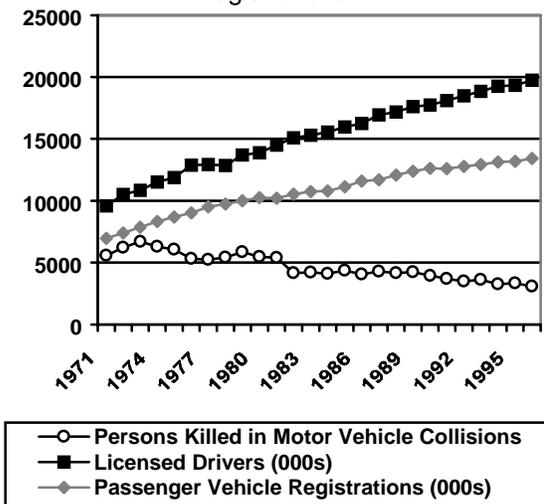


Related to exercise are both nutrition and healthy body weight. Here, change and improvements over time are less marked. Canadians eat more fruit and vegetables than they did in the 1970s, eat less red meat and more poultry, and have made the switch from full-fat to skim and low-fat milk.¹² Overall consumption of oils and fats, however, has risen slightly, as has consumption of calories and protein.¹³

Although we exercise more, the CFLRI reports that Canadians overall have become fatter: the proportion of adult Canadians who are definitely overweight¹⁴ has increased steadily since 1985.¹⁵ The increase is most apparent in men: there are more overweight men than there are women, and the percentage of men at a healthy weight is decreasing at a faster rate than it is for women. (These figures, however, do not take into account the effects of an aging population.) In 1996, 44 percent of Canadians were at an acceptable weight for their height; close to one fifth of Canadians had some excess weight to the

point of a *possible* health risk, and 29 percent to the point of a *probable* health risk. Another 8 percent were underweight: one positive trend is a decrease in underweight women from 1985 to the present. Again, the likelihood of being definitely overweight decreases with each successive level of education.¹⁶

Motor Vehicle Fatalities Relative to Licensed Drivers & Vehicle Registrations



“Death and injuries due to automobile accidents could probably be reduced by 50% if everyone wore seat-belts, *and* if stricter measures were taken to reduce the number of impaired drivers. In spite of this knowledge,” wrote Lalonde in 1974, “the rate of seat-belt wearing stays at about 10% and alcohol continues to be a factor in half the traffic accidents.”¹⁷

Today, the vast majority of Canadians wouldn't dream of getting behind the wheel without buckling up: close to 90 percent of Canadian drivers and passengers always wear seatbelts,¹⁸ and the number of traffic fatalities has decreased by almost 45 percent since 1970, despite a doubling of both licensed drivers and cars on the road.¹⁹ A big factor in this change is legislation: no province had mandatory seatbelt laws in 1971; by 1996, all provinces and territories had enacted such legislation.²⁰

Rates of impaired driving have decreased as well: from 1973 to 1993, the number of fatally injured drivers with illegal blood alcohol levels of between 81 and 150 mg decreased by nearly half, and nighttime drinking after driving went from 16.4 percent in 1974 to 10 percent in 1996/97.²¹

Generally, more Canadians drink less alcohol than they did in the 1970s, and frequent drinking has declined.²² The use of tranquilizers has also declined substantially, while most other psychotropic and illicit drug use has not altered substantially.²³ Then as now, alcohol remained the most widely used substance while illicit drugs the least-used yet most commonly discussed substance.²⁴

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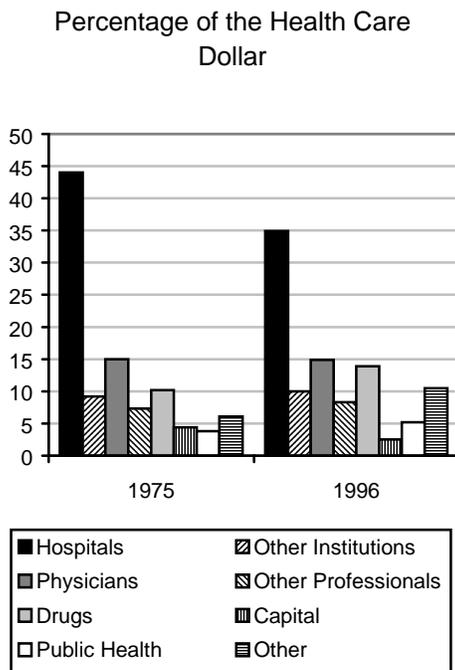
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Health Care Organization

A New Perspective on the Health of Canadians was a remarkable document in that it suggested that policy for health had to consider factors other than the traditional health care organization. Nonetheless it is to the practitioners, services, and other resources of this sector that people first look when they think of their health. Thus, while relegated to the status of one of four quadrants in the Lalonde report, it remained an important part of the health field and an important focus for health policy.¹

While people have always been concerned about their health, and the ability of the health care organization to provide essential services for its maintenance and improvement, the nature of those concerns has changed dramatically between the 1970s and the 1990s. The early 1970s, filled with confidence at the promise of universal coverage, public concerns focused on the defeat of “killer” diseases² such as cancer; a cure for which was certain by 1990 for most Canadians.³ By the 1990s a global recession and a series of government cutbacks at both the federal and provincial levels have eroded that confidence to the point where today’s citizens seem less concerned about what miracles the health care organization may be able to perform in the future, but rather whether there is a future for the health care organization itself.⁴

A paradox faces Canadian health policy at the turn of the millenium. Canadians are concerned about declining care yet many indicators of activity in the health care organization suggest that more resources are being consumed and more services provided to more clients than ever before. More funds are being allocated to the health care system. More numbers and kinds of health care workers are being employed. More



patients are being admitted to and discharged from hospitals and more procedures are being performed in hospitals. More prescriptions are being filled and there are more visits to outpatient facilities are being reported. All of which seem to indicate progress in the amount of care provided. However, when viewed from another perspective the reverse can also be said to be true. More funds are being allocated but the government has cut back its contributions, and increasingly the private sector is being asked to shoulder the responsibility for health care. More workers are being employed but there is both increased specialization among physicians and professionalization among nurses leading to a sense of increased distance between patient and caregiver. The nature of care provided is also changing with lengthy hospitalizations for convalescence replaced increasingly by short stays, prescription drugs, ambulatory

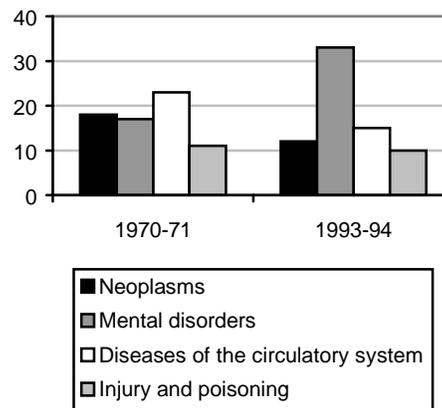
clinics and home care. Thus, while there is more activity in the health care system of the 1990s than in the Lalonde era, each person feels less connected to it.

The first point to address is funding levels. In contrast to public concerns about the cutbacks to the health care system, the fact is that more money is being spent on health care now, than ever before. Both as a percentage of GDP, which rose from 7.1% to 9.5% over that past 25 years, and measured in terms of per capita expenditures on health care which rose by 50% in the same time frame, spending on health care has increased.⁵ What have changed significantly from the 70s to the 90s however, are both the source of the funding and the categories of expenditure. The source of the health care dollar has shifted from a 75:25 public sector to private sector ratio, to one closer to 70:30. In the 1970s the primary category of expenditure was hospitals while in the current era the fastest growing category of expenditure is prescription drugs.⁶

In terms of health care workers, the story is one of increased numbers with decreased accessibility. The number of physicians has increased from just over 28,000 in 1971 to nearly 55,000 in 1996.⁷ However, during this same time period the number of recognized medical specialties in Canada has nearly doubled, once certificates of special competence and other accreditations are taken into account.⁸ This, despite a moratorium on the creation of further specialties in 1970 by the Royal College of Physicians and Surgeons of Canada,⁹ and noted public preference for a general practitioner they can trust.¹⁰ During the same time-period the number of nurses in Canada has doubled, with nearly all the increase being graduate nurses.¹¹

The nature of care has changed in the past 25 years. Hospital stays for most conditions are much shorter. For example, cardiac patients spend 35% less time in hospital compared to the 1970s.¹² There has been greatly increased usage of all institutions with increases over the past twenty-five years in indicators such as bed usage at both short and long term care institutions, visits to clinics, emergency rooms and ambulatory care centers, and numbers of hospital separations.¹³ Homecare, which accounted for less than 1% of all public-sector health spending in the 1970s, now accounts for more than 3.5%, and there is pressure to provide more. Finally, there is a distinct change in the way health consumers in the 1990s approach the health care system. Today people are increasingly turning to various media for information about their health status and care options. A U.S. government agency conducted a one day study of health information being accessed through the internet for quality of advice and discovered more than four hundred web sites containing misleading or erroneous information. The agency has issued warnings to patients about the potential for misinformation.¹⁴ Doctors are now being encouraged to provide patients with more

Average Length of Hospitalization



information about their health status and care. For example Canada's pharmacopoeia now contains a 160-page patient information section.¹⁵

Disillusioned with perceived threats to the traditional health care system, many Canadians are turning to one or another of the various practices now collectively referred to as alternative medicine. There has been exponential growth in the vitamin and herbal remedies industry since the 1970s, with health food stores, health oriented cookbooks, massage therapists, acupuncturists, and other such practitioners much more readily available. The Canadian College of Naturopathic Medicine registered 445 naturopathic practitioners within Canada in 1996. The number had increased to 536 by 1998.¹⁶ The *National Population Health Survey of 1994-95* reported that 5% of Canadians age 12 and older reported using some form of alternative health care, while the *National Population Health Survey of 1996-97* reported that that number had risen to 7%.

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Human Biology

This element, “includes all those aspects of health, both physical and mental, which are developed within the human body as a consequence of the basic biology of man and the organic make-up of the individual.”¹ While clearly seen as a key determinant of health, “causing untold miseries and costing billions of dollars in treatment services,” there is nonetheless little that can be said or done about this. Our basic biological makeup hasn’t changed in recent years and is unlikely to succumb to any but the most draconian health policy interventions, bordering on eugenics. Of course, we have begun to recognize that our biological makeup isn’t carved in stone, and thanks to researchers such as Fraser Mustard have begun to see our biology as much as an effect as a cause.

What can be done about human biology from the perspective of policy is to encourage and sponsor research into our basic makeup and the links between this and health. In the twenty-five years from the era prior to the Lalonde report to the present day a great deal of research has been done on Human Biology, resulting in an explosion of information within the life sciences. Despite evidence that more money is being spent on health research than ever before there is concern that funding for important research cannot be maintained, and that research agencies such as the Medical Research Council of Canada are no longer able to focus on the science to be done, instead having to focus on financial concerns. Finally public opinion about medical research has changed in the past 25 years. Whereas, there was nearly universal optimism about the future applications of medical research in the 1970s, today the public is more cautious. Additionally, concerns about research into the basic genetic heritage of humankind, already voiced in the 1970s, are still being echoed today, particularly in light of recent developments in genetic and reproductive technologies.

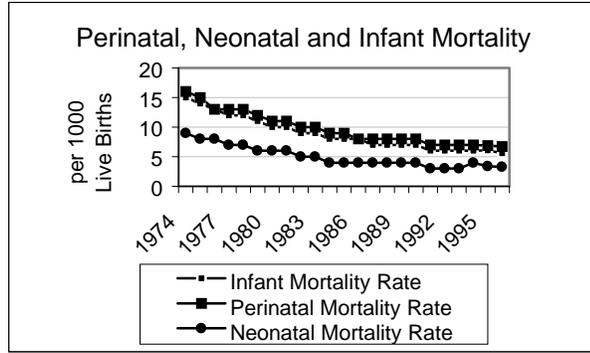
Research on Human Biology has increased tremendously in recent years. The Human Genome Project was started in 1991 as a fifteen-year project to map all seventy thousand human genes. April 1998 marks the halfway point of the project. Initial composition of the Human Genome Organization (HUGO), the international advisory body overseeing the project, consisted of 210 scientists from around the world, including eleven Canadians. There have been many promising discoveries made about links between the genetic makeup of individuals and their health status in recent years: a genetic marker for Alzheimer’s disease was discovered at McGill University, two new genes implicated in Juvenile Diabetes were discovered at University of Calgary, two genes associated with spinal muscular atrophy were discovered at the University of Ottawa, and a genetic link to schizophrenia was established at University of Toronto,² there have been ongoing studies on the genetic bases of various cancers³, and genetic links have been implicated in mood disorders such as severe depression and bipolar disorder.⁴

Nonetheless, there are still few clear population indicators of human biology and health and one must settle for indirect measures of the influence of genetic endowment such as birth outcomes.⁵ All three measures of negative birth outcome: infant mortality, perinatal mortality, and neonatal mortality, have shown a sharp decline over the seventies and early eighties with a recent flattening of this trend. Likewise, morbidity statistics on the prevalence of congenital anomalies⁶ can give some indication of the status of the

population in terms of human biology. Again we see a decrease in morbidity over the past 25 years.

The Medical Research Council of Canada (MRC) is the primary funding agency for health-related research in the country. In his 1971 annual report, the president of the MRC identified the greatest challenge facing the agency as the need to encourage researchers to

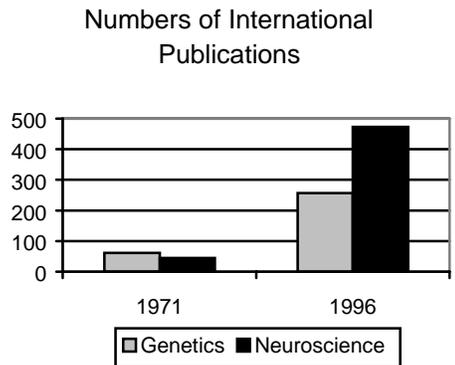
focus on more applied problems in addition to work on basic science.⁷ 1995, the president of the Medical Research Council, in his annual report, explained that the greatest challenge facing the council was the ability to maintain funding given the decline in governmental support for scientific research.⁸ During this twenty-five year period, however, MRC spending on research grants more than doubled from just over \$81M to \$190M, adjusted for inflation.



In the early 1970s, public confidence in medical research was very high. The vast majority of Canadians surveyed (86 percent) believed that a cure for cancer would be discovered by 1990.⁹ Today, in general, the public is more cautious about the future of medical research; a cure for AIDS is perceived as a long way away, though it is maintained that progress is being made.¹⁰

Somewhat paradoxically, in the current era, medical research is perceived as increasingly necessary as traditional antibiotic therapies are failing and more strains of drug-resistant bacteria are being encountered.¹¹ In addition, there is call for more research on the determinants of human fertility as male fertility rates decline worldwide.¹² Meanwhile, concerns about the potential of genetic research and engineering are quite similar to what they were in the 1970s. In 1996, a conference convened in Montreal discussed ethical issues arising from the Human Genome Project.¹³ The concerns expressed were quite similar to those voiced at a May, 1973 conference held at York University which discussed the technological advances in the field of human genetics¹⁴ and possible ethical concerns arising from them. Concerns included the nature of personhood under Canadian law,¹⁵ cloning, and in-vitro fertilization,¹⁶ as well as other techniques for the detection and eventual prevention of genetic disease.¹⁷

There has been a recent explosion of information in the life sciences. In 1971, there were 61 professional periodicals published worldwide in the field of genetics.¹⁸ Similar interest was developing in human neuroscience. In October 1971, nearly 1,400 of the 1,700 members of the Society for Neuroscience met in Washington, DC, to hear the presentation of



just over 250 papers.¹⁹ At this time, there were 45 professional periodicals published in the field of neuroscience.²⁰ In 1996, there were 256 professional publications in the field of human genetics published worldwide.²¹ Similarly, interest in the field of neuroscience has increased dramatically in recent years. In November, 1996, over twenty-five thousand of the nearly twenty-seven thousand members of the Society for Neuroscience met at their annual convention in Washington, DC to hear over 12,500 papers.²² There were 473 professional publications in the field of neuroscience published worldwide, an increase of 951 percent over the early 1970s.²³

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Environment: Physical

A New Perspective on the Health of Canadians suggested that the “environment”—that “about which the individual can do little or nothing”—played a far greater role in the health of populations than did any inadequacies in the health care system. Taking its cue from Thomas McKeown, the report suggested that, historically, changes in the physical environment were essential to improvements in health.¹ Elements of the environment—the contamination of drinking water, sewage, polluted lakes and rivers, air pollution, and the effects of urbanization needed to be examined, and improved. “There is no doubt,” stated the report, “that future improvements in the level of health of Canadians lie [in part] in improving the environment.”²

The early 1970s marked the beginning of a renewed interest in the physical environment. The 1962 publication of Rachel Carson’s *Silent Spring* first aroused concern about the effects of pesticides and other chemicals on the Earth.³ In 1971, Prime Minister Trudeau formed the federal Department of the Environment⁴; he and US President Nixon signed the first Great Lakes Water Quality Agreement,⁵ and Nixon declared the first Earth Day. Environmental organizations such as Pollution Probe and Greenpeace were born.⁶ It was a time of great hope and excitement for what could be described as the fledgling “Green” movement.

Twenty-five years later, how have things changed? It is difficult to measure and assess environmental change; the sheer enormity and complexity of the subject defy precise overall judgement. The past quarter-century has witnessed both improvements and setbacks for the Canadian (and international) environment. The *World Wildlife Fund* reports that the earth lost one-third of its forest, freshwater, and marine and animal resources between 1970 and 1995.⁷ On the other hand, environmental levels of many hazardous contaminants in our air, earth and water have declined dramatically in Canada since reaching a peak in the 1970s.⁸ We use our resources more efficiently, but that greater efficiency is offset by increases in consumption. We still face a many challenges and a variety of potential threats to our health from the environment. Below, we examine some of the ways in which Canada’s physical environment has changed since the Lalonde era.

Overall, air quality has improved substantially in Canada’s urban areas, and the levels of most air contaminants have diminished since the late 1970s. Concentrations of carbon monoxide, nitrogen oxides, and sulphur dioxide declined significantly, and concentrations of lead have fallen to trace levels since the 1970s as a result of a ban on leaded gasoline.⁹ However, since the 1970s, average ground-level ozone levels have climbed by 29 percent, despite a 50 percent reduction in severe pollution episodes (i.e. where air levels exceeded air quality objectives).¹⁰ Despite these improvements, poor air quality still effects our health, as illustrated by rates of childhood asthma, one of the most common health problems related to air pollution: since 1978, the prevalence of childhood asthma has increased nearly three and half times.¹¹



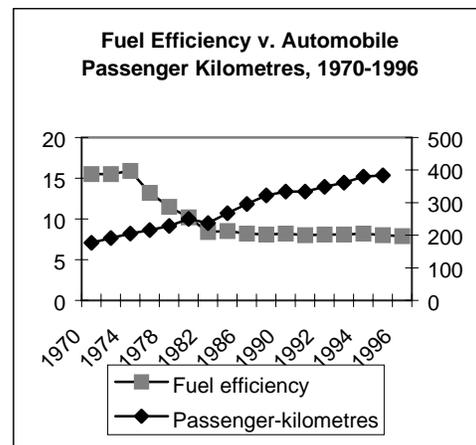
In 1971, the average Canadian hadn't even heard of the ozone layer, much less of a hole in it. Since 1973, there has been a steady decrease in the amount of ozone in the upper atmosphere, leading to health threats from overexposure to ultraviolet (UV) radiation. Supplies of ozone-depleting substances (like chlorofluorocarbons (CFCs)) have decreased since the late '70s, and most have been phased out since the early '90s.¹² However, carbon dioxide emissions, which contribute to global

warming, have *increased* since the 1970s and are expected to double over the next forty years.¹³

“Lake Erie is Dead” proclaimed newspaper headlines in the late 1960s. The Great Lakes suffered pollution from phosphates, toxic chemicals, and were subject to overfishing, nutrient enrichment, and the introduction of new species, such as zebra mussels. Over the past twenty-five years, considerable efforts have led to the cleanup of the Great Lakes: chemical spills, physical and industrial pollution, phosphorus inputs and several contaminants (namely PCBs, DDT and mercury) have all declined. As a result, wildlife species are once again flourishing in the area. For example, populations of the double-crested cormorant, which suffered birth defects and eggshell thinning from DDT, have increased three hundred times since 1971. Despite these improvements, the lakes still face many challenges.¹⁴ One of these is acid rain. As a result of various control programs, emissions of sulphur dioxide, one of the leading causes of acid rain, were at “1.7 million tonnes in 1994, representing a 56% reduction from 1980 levels.”¹⁵

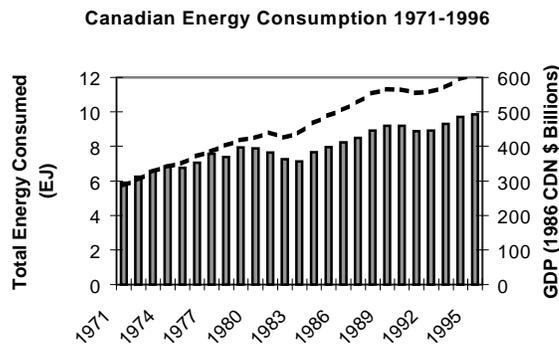
The ways in which Canadians consume natural resources in our built environment have enormous implications for the environment. Canadians are world leaders when it comes to consumption: one measure—the “ecological footprint”—suggests that if everyone in the world conformed to Canadian standards of living and consuming, we would require the resources of more than three planet Earths.¹⁶

One major area of consumption for Canadians is transportation, especially the automobile. Our reliance on cars puts stress on the environment in the form of emissions, pollution caused by oil spills and leaks, natural resource and fossil fuel consumption, land use for roads and lots, noise pollution, and injury and death as a result of accidents. Between 1979 and 1995, automobile use in Canada more than doubled,¹⁷ as did the number of vehicles registered and the number of licensed drivers between 1971 and



1996.¹⁸ Thus, although the cars we drive today are much more fuel-efficient than they were a quarter century ago (7.9 versus 15.5 litres per thousand kilometres), that greater efficiency is offset by the greater number of vehicles on the road.¹⁹

In the last century, Canada has shifted from a mainly rural to a mainly urban population; the share of the population that is urban has increased by about 10 percent since 1961. Most new housing in Canada is in suburban communities; studies have shown that suburban residents drive twice as far, walk and cycle one-third as often, consume twice as much energy and produce twice as much pollution as downtown residents.²⁰



Canadian consumption of energy increased by about 29 percent between 1971 and 1996. Most notable were increases in nuclear energy and natural gas. As with the automobile, although we use energy more efficiently than we did in the past, we also use more of it.

We can see the result of unsustainable consumption of natural resources in the declining

Atlantic cod stocks. In 1971, Environment Canada reported a good year for Canadian cod fisherman²¹; in 1996, the Atlantic cod fishery was shut down due to the depletion of cod stocks.

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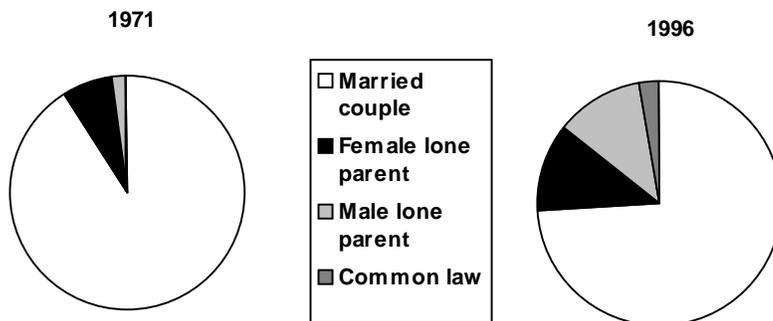
Environment: Social

The Lalonde Report—suggested that “one of the most important but least understood environmental problems is the effect of rapid social change on the mental and physical health of Canadians.” Working conditions, “alienation” arising from “the crumbling of previous social values and their replacement by others whose long-term effect is still unknown,”¹ and new technologies, stated the report, all invite “stresses whose effect on health can be disastrous.”² As well, “the number of economically deprived Canadians is still high, resulting in a lack of adequate housing or inadequate clothing. All the foregoing environmental conditions create risks which are a far greater threat to health than any present inadequacy of the health care system.”³

In the ensuing twenty-five years, the Lalonde Report’s observations of the social environment’s influence on health have been strengthened and verified. We now have the tools and research capacity to measure the impacts of socioeconomic forces on health. Research on inequalities in health and population health indicates that, indeed, social conditions have significant, widespread, and lasting effects on the health of populations.⁴ And policymakers face tough questions about how to address these issues.

It is therefore worth examining the ways in which Canada’s social environment has changed since the Lalonde Report was issued. Family types and structures have undergone major shifts, the most dramatic of which has been the rise in numbers of single mothers. Canadians have become more educated. Change in the working world has been characterized by a rise in nonstandard work and increasing numbers of women in the work force. At the same time, unemployment levels have risen and the distribution of earnings has become more unequal. In the 1970s, poverty tended to be a problem of the elderly; today, as one newspaper headline put it, “Poverty is single and she has a child.”⁵ Some argue that our “social health” has suffered, even as GDP rises. Below, we discuss some of the major trends in the social environment since Lalonde.

While “traditional” husband-wife families remained the norm from 1971 to 1996, the increase in other family types has somewhat eroded their majority. Not only have marriage rates fallen while divorces rates rose, but the proportion of common-law and lone-parent

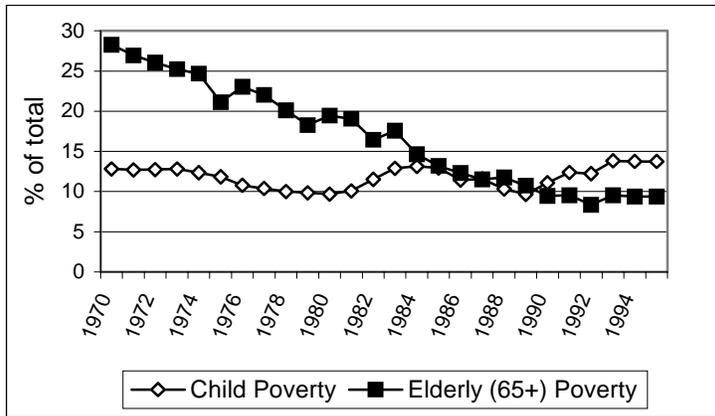


families also grew at much faster rates than did married-couple families.⁶ Most striking, though, has been the growth in female lone-parent families; their

numbers grew by more than three times and their proportion of total families rose from 7 to 12 percent.⁷ During the same period, dual-earner families became the norm: in 1996,

both spouses worked in 56 percent of married-couple families, compared to just 34 percent in 1971.⁸

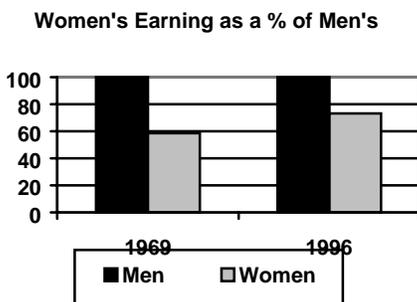
These changes reflect changes in other areas of the social environment. Closely linked to the rise in families headed by female lone parents are changes in the distribution of wealth and economic disparity. Population health literature suggests that relative income is more likely to be important to health status than absolute income. In Canada, while the rich indeed got richer and the poor a bit poorer, overall income disparity did not change dramatically between 1970 and 1995. In both 1970 and 1995, the bottom decile received about 1.5 percent of total income.⁹



What *has* changed is the *nature* of poverty and the profile of poor communities. In the 1970s, poverty was a problem of the elderly. Families headed by seniors dominated the bottom decile of household income (26 percent) in 1970; by 1996, those families accounted for only 6 per cent. Today’s poor are female lone parents and

their children: “single mothers accounted for 24 per cent of those in the bottom decile in 1970 and a staggering 40 percent in 1995.”¹⁰ At the other end of the scale, dual-earner families make up the majority of high-income households.¹¹

“Before 1975,” remark Betcherman and Lowe, “the average annual employment rate never got above 7.5 percent; since then it has not dropped below that level.”¹² Not only are unemployment rates higher today than they were in 1970 (6 percent then versus 9.2 percent in 1997), but the nature of unemployment has changed, from a seasonal to a cyclical phenomenon driven by technological displacement, economic restructuring, and downsizing.¹³ This adjustment reflects the changing nature of work itself since the seventies: declines in agricultural and manufacturing have been offset by gains in business and the service sector. Increasingly, we are shifting away from full-time permanent positions. “Nonstandard” work—part-time, short-term, and self-employment—has risen gradually since the 1970s, from 25.2 percent to 30.5 percent of all employment.¹⁴ However, it accounts for roughly half of all new job creation over the



past two decades. Earnings have stagnated over the past twenty-five years, while the distribution of earnings has become more unequal.

While the majority of adult women (58 percent, compared to 38 percent in 1970) worked outside the home in 1996, women still only earned 73.1 cents for every dollar earned by men. Still, women fare better than they did in 1969, when

they earned 58.7 percent of what men did.¹⁵ While women have made significant inroads into what were traditionally “male” professions in the 1970s, they still encounter glass ceilings barring their way to advancement.¹⁶

Level of education plays an important role in determining socioeconomic status. It is often linked to better health status and health behaviours, such as tendencies to smoke less, exercise, and maintain a healthy weight. In the 1996-97 NPHS, 30 percent of university graduates rated their health status as “excellent,” compared to only 19 percent of respondents with less than a high school education.¹⁷ We became better-educated between 1971 and 1996: the number of Canadians with less than an elementary education dropped by nearly two-thirds, while the proportion of university graduates rose from 5 to 13 percent.¹⁸

Has the social environment improved since Lalonde’s time? One measure, the gross domestic product (GDP), suggests that it has. However, another measure, the Index of Social Health (ISH), tells a different story. The ISH measures social indicators—for example, childhood poverty, drug abuse, unemployment, affordable housing, social assistance beneficiaries—and suggests that we have lost ground in these areas since the late 1970s, even as GDP continue to rise.¹⁹

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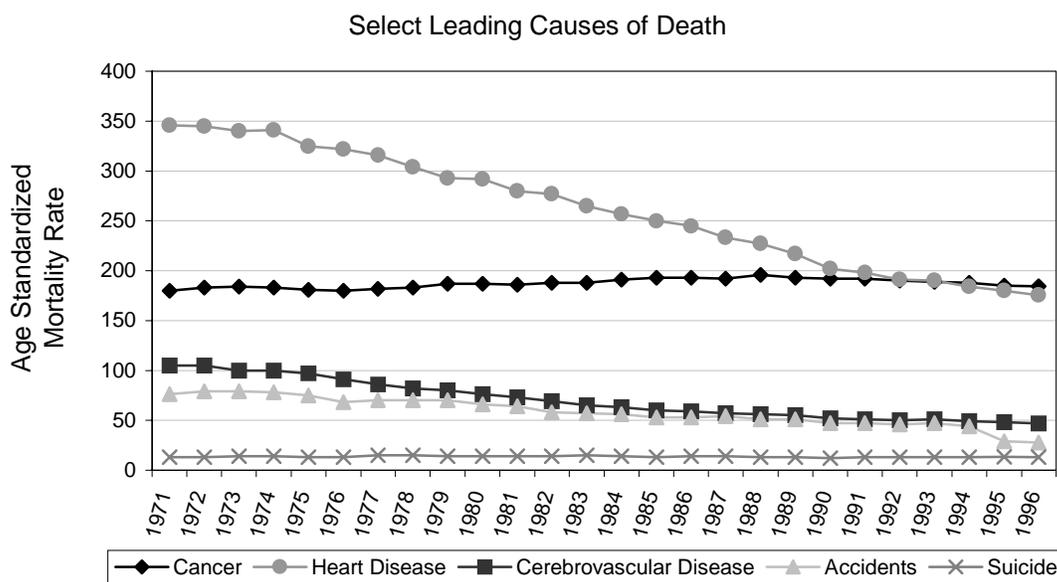
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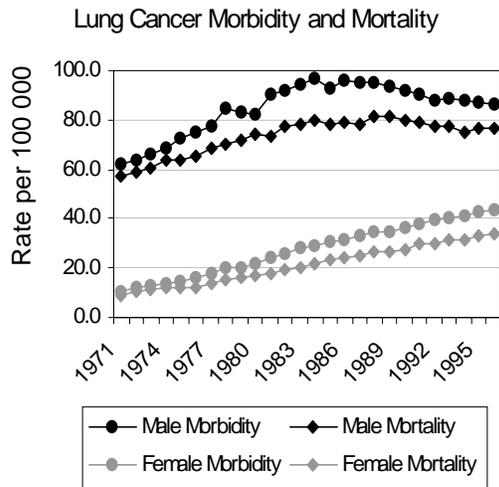
Health Status

While the Lalonde report is most noteworthy for its discussion of health determinants in terms of the health field concept, the authors do point out that the health status of a population is one of two major problems to be considered in creating health policy. Indeed, while the document largely focuses attention on several determinants such as lifestyle and the physical environment, not previously considered targets for health policy, it was the presentation of an overview of causes of death in Canada which drew much of the immediate attention.¹ One of the emphases of the report was that Canadians had much to be proud of in terms of improved health status this century, and that is still the case today. What has changed during the past 25 years is that there has been an explosion of available health status data, resulting from increased computing power, statistical sophistication and more comprehensive survey instruments, which collectively allow for detailed analysis of population health status indicators.

According to the Lalonde report the major indicators for the health status of a population are life expectancy and mortality rates, causes of death and morbidity statistics. The first of these, life expectancy and mortality rates, have been addressed elsewhere under *Demographics*. An examination of causes of death reveals that many major killers in the early 1970s, such as heart disease have shown a marked decline in recent years. Even cancer has shown no general growth in mortality. In contrast to these numbers, is the chilling realization that morbidity statistics show an increasing proportion of the population developing cancer, and a return of infectious diseases both old like tuberculosis, and new like AIDS as major causes of concern for health workers.² Additionally we can expand this list of determinants by the inclusion of more recent



measures of self-reported health status, based upon contemporary population health surveys which show that many Canadians feel healthier than they did as recently as 6 years ago.



cancer among women.⁴ Within in the population of Aboriginal Canadians the mortality rates for virtually all causes are considerably higher than in the population as a whole, and perhaps more significantly show none of the signs of gradual decline associated with mortality rates in the general population over the past 25 years. These facts are particularly salient when one considers that in general, the Aboriginal population is much younger than the general population.⁵ Accordingly, this makes all Aboriginal Canadians a population at risk.

The assessment of morbidity is much more difficult than that of mortality, as people who are ill, but choose not to enter the hospital system, or are unable to do so, are not counted. Accordingly, the best indicators of morbidity in the population are reported cases of diseases required of physicians by public health authorities, data from hospital separations, and more recently, self-reported health status.

In 1970⁶, the most common diseases requiring public health notification were gonococcal infections and measles.⁷ By 1995, the most common diseases requiring public health notification were gonococcal infections, hepatitis and salmonella.⁸ In addition to salmonella, there is increased concern about food poisoning in general after an apparent outbreak of cyclospora transmitted by American berries in the summer of 1996; meanwhile stories of deaths linked to E-coli bacteria in hamburger fill the news media.⁹ The first case of AIDS was reported to the Canadian government in 1982, though it is suspected of existing in this country since the late 1970s.¹⁰ HIV (known early on as GRID, or gay-related immunodeficiency syndrome) is first identified in the United States in 1981 as a rare new epidemic of pneumonia found among homosexual men. Unheard of in the Lalonde era, AIDS has become a major public health concern. There were 1,212 cases of AIDS reported in Canada in 1995.¹¹ Also of concern to public health workers are increased incidents of diseases long thought conquered by medical science. Experts are raising warning of a potential epidemic of tuberculosis¹² while many Aboriginal leaders lament the fact that the epidemic has already begun among Aboriginal Canadian communities, particularly in the Far North.¹³ The incidence of tuberculosis within

Turning to causes of death in some detail, in the Lalonde era, the most common cause of death for both men and women is heart disease, with cancer and cerebrovascular disease in second and third places respectively.³ By the 1990s, mortality rates for nearly all causes of disease have declined, particularly the rates associated with perinatal disorders (See Demographics) and various cardio-vascular diseases, most notably ischemic heart disease. Deaths due to malignant neoplasms remain fairly constant, and even increase slightly though this does not represent a general increase, as much as the greatly increased mortality rates for lung

Canada's Aboriginal communities has declined slightly in recent years, but still exists at rates far higher than in the general population.¹⁴

In the 1970s, statistics on hospital separations indicate that the most common reasons for hospitalization are respiratory disease, digestive disturbances, and complications arising from pregnancy and childbirth.¹⁵ Accidental causes account for the greatest number of potential years of life lost, and heart disease accounts for the second greatest number.¹⁶ Current statistics on hospital separations show a sharp decline in hospitalizations for virtually all causes, most notably for respiratory diseases and diseases of the genito-urinary system; there is a distinct increase, however, in hospitalizations for mental disorders.¹⁷ Cancer accounts for the greatest number of potential years of life lost.¹⁸ Most causes of death account for fewer potential years of life lost.

The most dramatic increase in potential years of life lost is in suicides.¹⁹ In the current era suicides are in decline in nearly all age groups with the most notable exceptions being the dramatic increase for children aged 1 to 14 and teens aged 15 to 19.²⁰ UNICEF notes with alarm the high incidence of suicides among Canadian teens compared with other industrialized countries though, to date, experts are unable to pinpoint a likely cause.²¹

As for self-reported health status, we have data only from the mid 1980s onward, though the trends are encouraging with 89% of the population reported that they feel of better health than others of their age-group in 1994/95 while only 58% reported so feeling in 1991. In general, men reported a higher level of health than women, and younger people reported a higher level of health than older people in both surveys.²² Some caution must be exercised in interpreting these results, however, as there were far fewer respondents in 1994/95 than in 1991 and thus the sample may reflect a self-selection bias.

In conclusion, we are living longer, though not necessarily better than in the early 70s. There has been some trade off between mortality and morbidity, with many causes of death in decline, or at least delayed, though with increased incidence of many serious chronic conditions. Perhaps this finding points to the greatest insight gained from the time of the Lalonde Report, that health status is multifaceted and complex. The question of whether the population is healthier now than 25 years ago does not admit an easy answer.

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