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Statistical Report
on the
Health
of
Canadians

Prepared by the Federal, Provincial and Territorial Advisory Committee on Population Health

Statistical Report on the Health of Canadians

Prepared by the Federal, Provincial and Territorial Advisory Committee on
Population Health

for the
Meeting of Ministers of Health

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Canada



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Canada



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Preface

The *Statistical Report on the Health of Canadians* is the result of a collaborative effort by Health Canada, Statistics Canada, and the Canadian Institute for Health Information. The current *Report* is the second edition of a statistical overview of the health of the Canadian population. Like the first edition in 1996, *Report on the Health of Canadians: Technical Appendix*, this *Report* was commissioned by the Federal, Provincial and Territorial Advisory Committee on Population Health. A companion to the current report, *Toward a Healthy Future: Second Report on the Health of Canadians*, provides more discussion and is less statistical in its treatment of these topics.

Print copies of this *Statistical Report on the Health of Canadians* and of *Toward a Healthy Future: Second Report on the Health of Canadians* are available from provincial and territorial Ministries of Health or from:

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Disclaimer

A large number of authors (and reviewers) from a variety of agencies contributed to this *Report*, and their contributions on the various topics are for the most part descriptive. Interpretation of the data and the commentary in the introductory sections are those of the authors, however, and should not be taken as official statements by their employers or the Federal, Provincial and Territorial Advisory Committee on Population Health.

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The authors came from Statistics Canada (Jason Gilmore — all topics except as specified below; Paula Woollam — Topics 19, 25, 37, and 74), the Canadian Institute for Health Information (Terry Campbell — Topic 26; Barbara McLean — Topics 27, 76, and 77; Joan Roch and Sharon Tracy — Topics 28 and 60; Joan Roch and Geoff Ballinger — Topic 29), Health Canada (Margaret Litt — Topic 15; Sandra Houston — Topics 20 and 50; Margaret Herbert — Topic 62; Jocelyn Rouleau — Topic 65; Jo-Anne Doherty — Topic 69; Robbi Jordan — Topic 70; John Farley, Chris Archibald, and Howard Njoo — Topic 71; Paul Sockett — Topic 72; Howard Morrison — Topic 79), and the private sector (Thomas Stephens — Topics 11, 12, 14, 21–24, 31, 38, 39, 41, 45, 51, 52, 54, 63, 80, and introductions). They interpreted original data produced for this report in Statistics Canada by Pino Battisti and Ai Chau, and in Health Canada by Prem Khosla.

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Project management was provided by Stephanie Wilson (until September 1998), Lynda Bottoms (from September 1998), Dyanne Wilson (from January 1999), and Carol Silcoff (Health Canada), guided by an interagency team consisting of Pamela White (Statistics Canada); Joan Roch (Canadian Institute for Health Information); Maureen Carew, Bill Bradley, Hilary Robinson (until August 1998), and Linda Senzilet (from September 1998) (all from Health Canada); and Thomas Stephens.

The working group provided liaison with the Federal, Provincial and Territorial Advisory Committee on Population Health, which commissioned the *Report*. The group was chaired by John Millar (British Columbia) until December 1998 and subsequently co-chaired by Shaun Peck (British Columbia) and Kimberly Elmslie (Health Canada). Members were Jamie Blanchard (Manitoba), Gary Catlin (Statistics Canada), André Corriveau (until December 1998) and Peter Barss (until March 1999 — Northwest Territories), Stephan Gabos (Alberta), Clyde Hertzman, Debra Keays (until September 1998), and Hope Beanlands (Nova Scotia), Odette Laplante (until April 1998) and Madeleine Levasseur (Quebec), Randy Passmore (Saskatchewan), Craig Shields, Serge Taillon (Canadian Institute for Health Information), Monique de Groot (Health Canada), and other Health Canada members who served for various periods of time: Maureen Carew, Gregory Sherman, Paul Gully, Hilary Robinson, Linda Senzilet, and Rachel Moore.

Members of the Federal, Provincial and Territorial Advisory Committee on Population Health (and its Working Group) are listed in Appendix A.

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Introduction

Objectives of this Report

This is the second version of the *Statistical Report on the Health of Canadians*. Like the original in 1996,¹ this Report provides a comprehensive and detailed statistical overview of the health status of Canadians and the major determinants of that status. The original report was created for the Federal, Provincial and Territorial Advisory Committee on Population Health, which has also commissioned this update. The broad purpose of the Report is to help policy-makers and program planners identify priority issues and measure progress in the domain of population health.

The *Statistical Report* is meant to be a tool for learning as well as planning. The data identify populations at risk; suggest associations between health determinants, health status, and population characteristics; raise questions about the reasons for the widespread differences among the provinces and territories; and illustrate areas where Canada's health information system is robust, and others where it is relatively weak. These and other themes are touched on in the 11 section introductions of the *Statistical Report* and developed more fully in the companion publication, *Toward a Healthy Future: Second Report on the Health of Canadians*. One issue that cuts across almost all sections, however, is the relative paucity of data on Canada's Aboriginal population and on marginalized groups such as street people. While most of the topics in this Report describe at least 97% of the Canadian population, it is important to remember that the missing 3% often have a disproportionate share of health problems.

This edition of the Report updates 1996 topics wherever possible, usually using the same survey, but occasionally using improved sources. Of the 87 topics in the 1996 report, full or partial updates are provided

for 73. Seventeen new topics are included, 11 were dropped, and a few were combined. Most of the topics that were dropped fall into the category of *determinants* (ownership of fire safety equipment, health hazards at work, employee health benefits) or even “determinants of determinants” (knowledge of the causes of heart disease, knowledge of STD prevention, youth attitudes concerning drinking and driving, support for behavioural change), while only a few were indicators of *health status* (infertility, high blood pressure and high plasma cholesterol, dementia). All were dropped in the absence of current data, not because they are not important.

Organization of the Report

The *Statistical Report* is organized into two major parts, *Determinants of health* and *Health status*. The sections under *Determinants of health* are deliberately wide-ranging, covering the social and economic environment (11 topics), the physical environment (three topics), health services (15 topics), personal resources and coping (six topics), health knowledge (three topics), and lifestyle behaviours (14 topics).

Under *Health status* are 32 topics that provide a diverse view of health. Inevitably, much of this is about “negative” health, because existing statistics focus on morbidity and mortality, but positive aspects of health status are covered whenever the data exist (three topics). The other major sections are general health and function (four topics), injuries (four topics), conditions and diseases (14 topics), and death (seven topics). In all cases, these topics describe the health of individuals, which, when considered in the aggregate, may be thought of as *population health status*. In contrast, the health of *society* — in particular, the social, economic, and physical environment — is treated as a *determinant of individual health status*.

In its broad coverage of topics, the *Statistical Report* is consistent with many current conceptual frameworks, such as *Strategies for Population Health*² and the Evans-Stoddart model.³ This is intended to illustrate the very wide range of factors that affect health status, many of which are beyond the formal authority of health departments. However, the selection of topics, their relative length, or the ordering of sections is in no way meant to indicate their relative importance. Rather, this reflects the availability of appropriate data, as described further below. At the same time, only a few topics in this *Report* describe the resources and costs of the health care delivery system, as these have been under recent scrutiny in other projects, such as the National Forum on Health.⁴

The format of this edition is similar to that of the 1996 report, emphasizing breadth and consistency of presentation rather than depth of analysis. The text for each topic describes (a) its health significance, with cross-references to other relevant topics, (b) the results, with a focus on group comparisons — sex, age, social status, province/territory, and notable trends and relationships, (c) definitions, methods, and significant caveats affecting interpretation, and (d) references for data sources and any literature cited, including Internet websites for the agencies that are the principal sources of data.

The classification variables — sex, age, etc. — are similar to those used in the 1996 report, although income adequacy sometimes supplements education as an indicator of social status, and household type appears in some topics. The age groups in this edition are more detailed than in 1996; in particular, the large sample of the 1996–97 *National Population Health Survey* made it possible to differentiate ages 15–17 from ages 18–19, an important and revealing distinction for many topics.

Some readers of the first edition expressed interest in an urban/rural distinction. Such a variable is sometimes available for the major survey sources, but its interpretation is highly problematic. What appear to be urban/rural differences on individual variables could be confounded with province/territory of residence, socio-economic status, occupation, and perhaps ethnicity and age. There is a related problem defining areas that are clearly rural. Notwithstanding these problems, the *Report* provides some data on urban/rural differences.

Criteria for major data sources

The original 1996 *Report* utilized virtually all known data sources that were topical, national in scope, and reasonably recent. The *National Population Health Survey* of 1994–95 was an important source for the first edition; the cross-sectional data of the 1996–97 cycle of the *National Population Health Survey* are the major source for this update. The criteria for other data sources in this update were as follows:

- ◆ **subject matter relevance** — data items describing *health status* had to be at the *individual* level, while *determinants* could be individual- or community-level.
- ◆ **national coverage** — sources had to be Canada-wide (i.e., cover at least all provinces) and capable of providing reliable detail for *at least* the five regions (Atlantic, Quebec, Ontario, Prairies, British Columbia). Unfortunately, most tables do not have data for the territories.
- ◆ **recency** — data were meant to be no older than 1994–95 (although an exception was made in the case of air quality indicators).
- ◆ **standard classification variables** — individual-level data had to be available by a standard set of classification variables, as in 1996: age–sex groups,

province (or region) of residence, and socio-economic status (education or income). Data for the Aboriginal population are shown, where available, but, in general, there is no attempt in this *Report* to focus on any particular population group.

- ◆ **data quality** — sources had to be documented, of acceptable quality, and based on samples of adequate size and design to permit the reporting of age–sex and region-level detail without extensive data suppression resulting from confidence interval problems. In the case of a few indicators, sample sizes were insufficient to allow the data to be age-standardized by education or income groups. Some data collated from provincial/territorial sources by Statistics Canada and the Canadian Institute for Health Information may not precisely match the figures published by the provinces or territories because of editing procedures or definitional conventions.

About the tables and figures

Survey data are usually presented as whole numbers and thus may not always add up to the total because of rounding. Occasionally, data from small subsamples with a high coefficient of variation (CV) require qualification of the table entries, as follows:

- * moderate sampling variability; interpret with caution (CV = 16.6–33.3%)
- # data suppressed because of high sampling variability (CV > 33.3%).

Appendix A describes the sampling variability for the *National Population Health Survey*, the principal source of data for this *Report*. This table can be used to compare men and women or groups based on age, education, or income. It cannot be used to compare province-level data, as each province has its

own table of sampling variability. The relatively high sampling variability of the provincial data is indicated by the frequent * and # symbols in the tables. Further details on the sample design for this and other surveys used in the *Report* can be found in the documentation accompanying the public use data tapes. The reader should note the sample sizes that are described in the section “On definitions and methods” that accompanies every topic. The small differences in the estimated population appearing in tables based on the *National Population Health Survey* reflect non-response to individual survey items. Because these missing responses were generally about 2% or less of the total (except for income adequacy, sexual practices and positive mental health), they are not shown, but are averaged into the other categories that are reported in the tables.

International comparisons in the figures generally refer to “selected OECD countries.” The availability of data from members of the Organisation for Economic Co-operation and Development (OECD) varies greatly, and the selection of countries in any given figure was based strictly on the availability of recent data. This varies from country to country and from topic to topic; unfortunately, the United States and the United Kingdom are often missing from the figures, because the most recent data for them are several years older than those for Canada and most other OECD countries. This was also true for the first edition of the *Report*.

References

1. Federal, Provincial and Territorial Advisory Committee on Population Health. *Report on the Health of Canadians: Technical Appendix*. Prepared for the Meeting of Ministers of Health, Toronto, September 1996.
2. Federal, Provincial and Territorial Advisory Committee on Population Health. *Strategies for Population Health: Investing in the Health of Canadians*. Prepared for the Meeting of Ministers of Health, Halifax, September 1994.

3. Evans RG, Stoddart GL. Producing health, consuming health care. *Social Science and Medicine* 1990; 31: 1347–1363.
4. National Forum on Health. *Canada Health Action: Building on the Legacy*. Final Report of the National Forum on Health. Ottawa: Minister of Public Works and Government Services, 1997.