

The Daily

Statistics Canada

Wednesday, January 13, 2010

Released at 8:30 a.m. Eastern time

Releases

Canadian Health Measures Survey, 2007 to 2009

2

Between 1981 and 2009, fitness levels of Canadian children and youth, as well as those of adults, declined significantly, according to the first findings from the Canadian Health Measures Survey. This is the most comprehensive national survey ever conducted in Canada to determine fitness levels.

Aircraft movement statistics: Small airports, October 2009

4

Employment Insurance Coverage Survey, 2008

4

New products and studies

5



Statistics
Canada

Statistique
Canada

Canada

Releases

Canadian Health Measures Survey

2007 to 2009

Between 1981 and 2009, fitness levels of Canadian children and youth, as well as those of adults, declined significantly, according to the first findings from the Canadian Health Measures Survey (CHMS). This is the most comprehensive national survey ever conducted in Canada to determine fitness levels.

The CHMS captured key information relevant to the health of Canadians by means of direct physical measurements, such as body measurements, cardio-respiratory fitness, musculoskeletal fitness and blood pressure.

In Canada, for the past two decades, assessments of fitness levels of Canadians have relied almost exclusively on the body mass index (BMI) because it can easily be calculated from height and weight. The BMI has shown that Canadian adults have become heavier over the past 25 years.

However, the BMI is only one indicator. A variety of other measures, therefore, are required to gain a more complete understanding of fitness levels associated with current and future risk of disease. These complementary measures are provided by the CHMS, in which survey respondents underwent body composition measurements and participated in fitness tests in mobile examination centres.

Data from the CHMS show that fitness levels of children and youth have declined significantly since 1981, regardless of age or sex. Fitness levels of adults have also declined, particularly among younger adults.

Among youth aged 15 to 19, the percentage whose waist circumference put them at an increased or high risk of health problems more than tripled.

Among adults, decreases in fitness levels over the same period were particularly pronounced for young adults aged 20 to 39.

Within this group, the percentage with a waist circumference that placed them at a high risk for health problems more than quadrupled. The proportions went from 5% to 21% among men, and from 6% to 31% among women.

Roughly 3% of the adult population had high blood pressure that was undiagnosed in 2009.

Note to readers

Today's release marks the first release from the Canadian Health Measures Survey. The survey collected key information relevant to the health of Canadians by means of direct physical measurements such as height, weight, body measurements (waist and hip circumference, skin folds), physical fitness (grip strength, flexibility, muscular endurance and aerobic capacity), blood pressure, lung function and oral health.

These indicators were collected from March 2007 to February 2009 on a representative sample of about 5,600 Canadians aged 6 to 79 years at 15 sites across the country.

The survey used a mobile examination centre, namely a specially designed pair of trailers staffed by fully trained health professionals, to collect physical measures of health.

These results provide national baseline data on the extent of such major health concerns as obesity and hypertension, as well as the extent to which these health conditions may be undiagnosed or unreported among the population.

Body composition and fitness of children and youth

The BMI is calculated by dividing weight in kilograms by height in metres squared.

During the survey period of 2007 to 2009, the majority of Canadian children and youth (74%) had a BMI that was neither overweight nor obese, based on physical measurement of their height and weight. Slightly more than 17% were overweight and 9% were obese.

The average BMI for Canadian children was similar to that of children in the United States.

Younger Canadian children aged 6 to 11 had a slightly lower BMI than American children did. However, the difference in the BMI of Canadian and American youth and teens was not statistically significant.

The CHMS results were compared with data from the 1981 Canadian Fitness Survey. Survey results showed a significant deterioration in the body composition of children aged 6 to 19 between 1981 and 2009, regardless of sex or age.

At the age of 12, Canadian boys and girls are now taller than they were in 1981. However, rates of childhood obesity and overweight have risen because of increased body fat, not greater muscularity.

Among teen boys in the age group 15 to 19, the proportion classified as overweight or obese rose from 14% to 31% between 1981 and 2009. Among teen girls, it increased from 14% to 25%.

Among both teen boys and girls, the proportion in the waist circumference category who were at high or increased risk of health problems more than tripled.

Also, the strength and flexibility of boys and girls has declined significantly since 1981.

Body composition and fitness of adults

During the 2007-to-2009 period, just under 38% of adults were at a healthy weight. About 1% were underweight, 37% were overweight and 24% were obese.

Proportionally, many more adult men than adult women were overweight. However, roughly equal proportions of both sexes were rated as obese.

On average, the BMI of Canadians was lower than that of Americans, especially in two age groups: 20 to 39 and 40 to 59. Differences were not significant in the age group 60 to 79.

Moving beyond the BMI, abdominal obesity, as reflected by a high waist circumference, is now regarded as the factor that indicates the greatest health risk related to obesity.

On the basis of their waist circumference, 31% of women and 21% of men aged 20 to 39 were considered to be at high risk for health problems. By the age of 60 to 69, the proportions were more than twice as high: 65% of women and 52% of men.

About 32% of Canadian men and women aged 15 to 69 were categorized as having a "good" health benefit level, based on their aerobic fitness ratings. Larger proportions of adults have a "fair" and "needs improvement" rating (40% of men and 47% of women) than an "excellent" or "very good" rating (27% of men and 22% of women).

Aerobic fitness was assessed by calculating the predicted maximal aerobic power, an estimate of the maximum volume of oxygen an individual will intake per minute of exercise relative to their body weight.

Among adults, decreases in fitness levels between 1981 and 2009 were particularly pronounced for young adults aged 20 to 39. Within this group, the percentage with a waist circumference that placed them at a high risk for health problems more than quadrupled, from 5% to 21% among men, and from 6% to 31% among women.

At the age of 40 to 69, the percentage of males and females whose waist circumference placed them

at a high risk for health problems more than doubled between 1981 and 2009.

Similarly, the percentage whose body composition was classified as "fair/needs improvement" rose fourfold among young adult men, from 5% to 20%, and sevenfold among young adult women, from 4% to 29%. Body composition includes the BMI, waist circumference and skin-fold measurements.

Blood pressure

In 2009, more than 90% of the adult Canadian population aged 18 to 79 had an acceptable blood pressure, defined as less than 140/90, that is, 140 millimetres of mercury (systolic) over 90 millimetres of mercury (diastolic).

Of this adult population, 6.4%, or just fewer than 1.6 million people, were measured with high blood pressure, that is 140/90 or higher. Half of them, an estimated 762,000 or about 3% of the adult population, were unaware of their condition.

High blood pressure increases greatly with age. Among adults aged 60 to 79, just over 17% had a measured blood pressure of 140/90 or higher.

CHMS data indicate that men have higher systolic blood pressure for all population age groups through middle age, although women measure higher in older age groups. By age 60 to 79, women measure higher systolic blood pressure than men (127 compared with 122). The increase in female systolic blood pressure occurs after menopause and has also been consistently noted in the United States.

Definitions, data sources and methods: survey number 5071.

The studies "Fitness of Canadian adults: Results from the 2007-2009 Canadian Health Measures Survey", and "Fitness of Canadian children and youth: Results from the 2007-2009 Canadian Health Measures Survey", part of *Health Reports*, Vol. 21, no. 1 (82-003-X, free), are now available from the *Key resource* module of our website under *Publications*.

A set of *Health Fact Sheets* (82-625-X, free) is also available.

The publication *Canadian Health Measures Survey: Cycle 1 Data Tables*, 2007 to 2009 (82-623-X, free), is now available from the *Key resource* module of our website under *Publications*.

For more information about the Canadian Health Measures Survey, 2007 to 2009, or to enquire about the concepts, methods or data quality of this release, contact Media Relations (613-951-4636), Communications and Library Services Division. ■

Aircraft movement statistics: Small airports

October 2009

The number of take-offs and landings at the 134 airports without air traffic control towers reached 50,435 movements in October. Year-over-year increases were reported by 45 of these airports. At 2,681 movements, Guelph, Ontario, was the most active site in October, followed by Goose Bay, Newfoundland and Labrador (2,296 movements).

Available on CANSIM: tables 401-0021 and 401-0022.

Definitions, data sources and methods: survey number 2715.

The October 2009 issue of *Aircraft Movement Statistics: Airports without Air Traffic Control Towers (TP 141)* (51-008-X, free) is now available from the *Key resource* module of our website under *Publications*. This report is a joint publication of Statistics Canada and Transport Canada.

For more information, or to enquire about the concepts, methods or data quality of this release, contact Client Services (toll-free 1-866-500-8400; transportationstatistics@statcan.gc.ca), Transportation Division. ■

Employment Insurance Coverage Survey 2008

The product *Employment Insurance Coverage Survey: Public Use Microdata Files* is now available for 2008.

Definitions, data sources and methods: survey number 4428.

To order a copy of *Employment Insurance Coverage Survey: Public Use Microdata File*, 2008 (89M0025X, \$1,500), for more information, or to enquire about the concepts, methods or data quality of this release, contact Client Services (toll-free 1-800-461-9050; 613-951-3321; fax: 613-951-4527; ssd@statcan.gc.ca), Special Surveys Division. ■

New products and studies

Aircraft Movement Statistics: Airports without Air Traffic Control Towers (TP 141), October 2009
Catalogue number **51-008-X** (PDF, free; HTML, free)

Health Reports, Vol. 21, no. 1
Catalogue number **82-003-X** (PDF, free; HTML, free)

Canadian Health Measures Survey: Cycle 1 Data Tables, 2007 to 2009
Catalogue number **82-623-X** (PDF, free; HTML, free)

Health Fact Sheets,
Catalogue number **82-625-X** (HTML, free)

Employment Insurance Coverage Survey - Public Use Microdata File, 2008
Catalogue number **89M0025X** (CD-ROM \$1,500)

All prices are in Canadian dollars and exclude sales tax. Additional shipping charges apply for delivery outside Canada.

Catalogue numbers with an -XWE, -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; -XPB or -XPE are paper versions; -XDB or -XDE are electronic versions on diskette; -XCB or -XCE are electronic versions on compact disc; -XVB or -XVE are electronic versions on DVD and -XBB or -XBE a database.

How to order products

To order by phone, please refer to:

- The title
 - The catalogue number
 - The volume number
 - The issue number
 - Your credit card number.
- From Canada and the United States, call: **1-800-267-6677**
From other countries, call: **1-613-951-2800**
To fax your order, call: **1-877-287-4369**
For address changes or account inquiries, call: **1-877-591-6963**

To order by mail, write to: Statistics Canada, Finance, 6th floor, R.H. Coats Bldg., Ottawa, K1A 0T6.
Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 5% GST and applicable PST.

To order by Internet, write to: infostats@statcan.gc.ca or download an electronic version by accessing Statistics Canada's website (www.statcan.gc.ca). From the *Our products and services* page, under *Browse our Internet publications*, choose *For sale*.

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001-XIE.

Published each working day by the Communications and library Services Division, Statistics Canada, 10G, R.H. Coats Building, 100 Tunney's Pasture Driveway, Ottawa, Ontario K1A 0T6.

To access *The Daily* on the Internet, visit our site at <http://www.statcan.gc.ca>. To receive *The Daily* each morning by e-mail, send an e-mail message to listproc@statcan.gc.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2010. All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.