Obesity
Ontario obesity rates remain high.

What's new this year?
This reports contains new data for 2005. This report also includes new data for youth obesity (12–17 years) for the years 2000/01, 2003, 2005.
Obesity Rates
Percentage of adults (aged 18+) self-reporting obesity, Ontario, 2005, by sex

Target: decrease to 10% by 2020

Source: Statistics Canada (Canadian Community Health Survey 3.1, 2005)
Notes:
1. Obesity (adults): Body Mass Index of 30 or greater. Body Mass Index (BMI) = weight in kilograms/(height in metres) squared
2. Excludes pregnant and lactating women
3. Age-standardized to 1991 Canadian population
4. +/- significantly higher/lower than Ontario
5. * Significantly higher for males than for females within this region
What do the results show?

- Obesity rates remain too high. Figure 1
- In all local health integration networks (LHINs), except 2003 rates for Toronto Central, a higher percentage of men and women were obese than the Cancer 2020 target of 10%. Figure 1
- The lower rate in Toronto Central is consistent with obesity rates in populations with a higher percentage of non-Caucasians. Ethnicity, occupation, culture and socioeconomic status may all account for this regional variation.
- In Ontario, 16% of males and 14% of females aged 18 and over are obese. Figure 2
- In 2005, more than 6% of Ontario boys aged 12–17 and almost 3% of Ontario girls were obese based on self-reports. Figure 3. By comparison, objectively measured obesity among Ontario youth in
2004 was 11% for males and 7% for females.3

- Teenage males reported significantly higher obesity rates than their female counterparts for every time period measured from 2000/01–2005. *Figure 3*

**Why is this important to Ontarians?**

- More than one-third of all cancers is attributable to diet, obesity and inactivity.
- Obesity is linked to an increased risk for some cancers (e.g., breast, endometrium, colon, kidney and esophagus) and a number of other chronic illnesses.4,5
- The BMI classification system is effective for: comparing patterns within and between populations (when the populations have similar demographics, socioeconomic status, and ethno-cultural make up); evaluating priorities for interventions; and, evaluating the impact of interventions. See *Technical Information* for measuring obesity among children and youth.
- The most critical long-term consequence of childhood obesity is persistence into adulthood, with associated risk for its co-morbidities.6

**How does Ontario compare?**

- Ontario’s rates show no statistically significant difference from national rates, which show that 17% of men and 14% of women in Canada aged 18 and over are obese.2,8
- British Columbia has the lowest obesity rates in the country at 13% of the population.8

**What is being done?**

- Promoting healthy eating and active living is a key priority of the Ontario Ministry of Health Promotion.
- Early initiatives of this Ministry include a preliminary action plan to promote health eating and active living, launched in June 2006, in response to the 2004 Report of the Chief Medical Officer of Health.9
- In 2006, Cancer Care Ontario and the Canadian Cancer Society, Ontario Division released the *Report on Cancer 2020*, providing an update on, and recommendations for, a cancer prevention plan that includes targets for nutrition, body weight, and physical activity.10
• The Ontario Government’s mandatory program and service guidelines for public health units include requirements for nutrition, healthy weights and physical activity.\textsuperscript{11}

• A province-wide effort, similar to the anti-tobacco strategy, is required to tackle high obesity rates. Ontario's Action Plan for Healthy Eating and Active Living, launched by the Ministry of Health Promotion, is an important start.

**Technical Information**

**Definition**

• Obesity in adults is measured using the Body Mass Index (BMI). A BMI between 18.5 and 24.9 is healthy. A BMI from 25.0 to 29.9 is overweight, and a BMI of 30 and over is considered obese.

• Obesity in children and youth is measured using a method established by the International Obesity Task Force (IOTF). BMI cut-points for overweight and obesity are lower for children and adolescents than for adults, are sex-specific and rise incrementally with every year of age.\textsuperscript{12} Using thirty years’ worth of data (1963-1993) from the United States, Great Britain, the Netherlands, Brazil, Hong Kong and Singapore, BMI centile curves were derived to pass through the points of 25 (overweight) and 30 (obesity) at age 18. Also, since pubertal development influences body fat, the IOTF cut-points are sensitive to sexual maturation.\textsuperscript{13} The obesity rates in this analysis are based on the IOTF criteria.

• BMI:
  • Does not apply to pregnant or breastfeeding mothers
  • May be an overestimate for adults who are either lean or muscular and fit, and for youth
  • May underestimate the risk for seniors or those who are of certain ethnic or racial groups\textsuperscript{14}
  • Does not take bone density or weight fluctuations into account

**Data Sources**

• Canadian Community Health Survey, cycle 1.1 [2000/01], Statistics Canada, Ontario Share File, Ontario, Ministry of Health and Long-Term Care

• Canadian Community Health Survey, cycle 2.1 [2003], Statistics Canada, Ontario Share File, Ontario, Ministry of Health and Long-Term Care

• Canadian Community Health Survey, cycle 3.1 [2005], Statistics Canada, Ontario Share File, Ontario, Ministry of Health and Long-Term Care
Data Quality

Timeliness
- There is a need for more timely, comprehensive, province-wide risk factor surveillance data to support ongoing monitoring of progress toward Cancer 2020 targets in relation to policy changes and health promotion initiatives. This could be achieved by provincial support to expand and enhance the Rapid Risk Factor Surveillance System.

Accuracy
- Current research suggests that measures of central adiposity (i.e., the amount of excess weight carried around the waist area) such as waist circumference or waist-to-hip ratio may be better indicators of cancer risk than body mass index for population level surveillance.\textsuperscript{15,16}
- The Canadian Community Health Survey (CCHS) relies on the self-reported height and weight of survey participants. Research suggests that respondents on self-reported surveys tend to understate their weight and overstate their height, resulting in a BMI that is too low. The prevalence of obesity based on measured height and weight is estimated at 23% and 22% in Ontario men and women aged 18 and over respectively.\textsuperscript{17}
- Self-reported BMI tends to be even lower when derived from telephone interviews compared to in-person interviews.\textsuperscript{14} The 2003 survey involved a higher proportion of telephone surveys; caution should be used when comparing results from the three surveys (2000/01, 2003, 2005) because of this change in the administration of the survey.

Notes
7. Canadian Community Health Survey (CCHS 2.1 and 3.1) indicator profile, by sex, Canada, provinces, territories, health regions (June 2005 boundaries) and peer groups, every 2 years (number) http://www.statcan.ca/english/freepub/82-221-XIE/2006001/profiles.htm