

Article

Health Fact Sheet

Metabolic syndrome in Canadians, 2009 to 2011

Health Statistics Division

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- | | |
|----------------|--|
| . | not available for any reference period |
| .. | not available for a specific reference period |
| ... | not applicable |
| 0 | true zero or a value rounded to zero |
| 0 ^s | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| P | preliminary |
| r | revised |
| X | suppressed to meet the confidentiality requirements of the <i>Statistics Act</i> |
| E | use with caution |
| F | too unreliable to be published |
| * | significantly different from reference category ($p < 0.05$) |



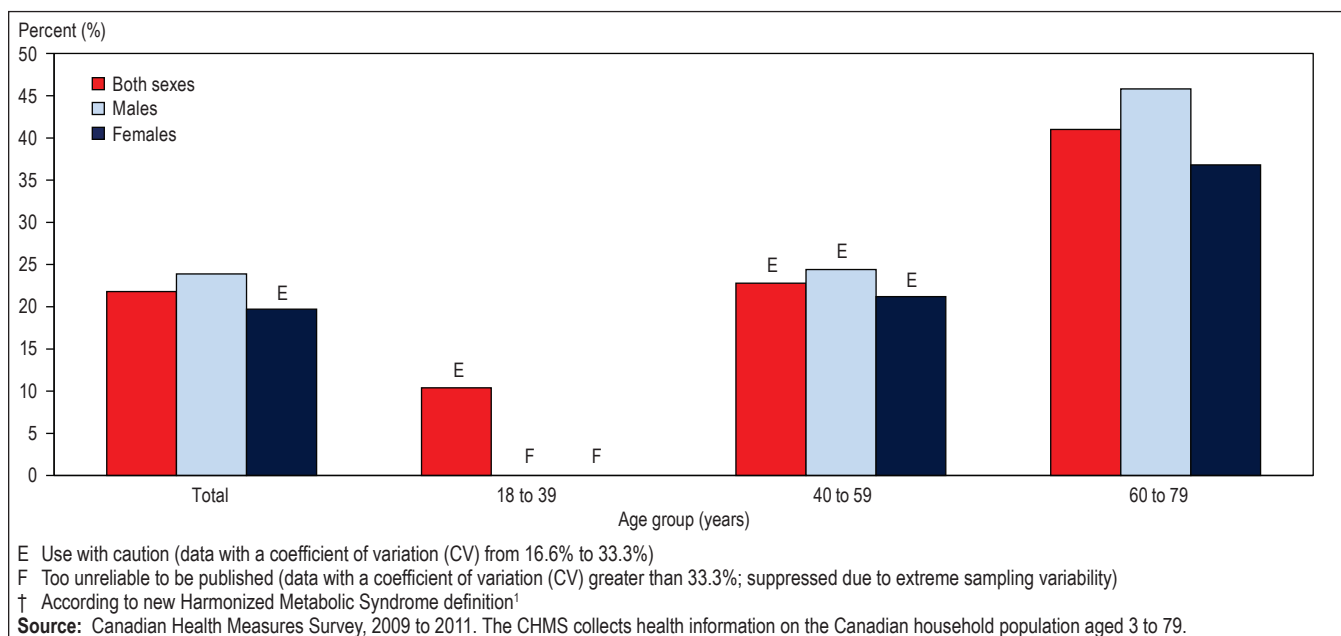
Metabolic syndrome in Canadians, 2009 to 2011

Results from the 2009 to 2011 Canadian Health Measures Survey (CHMS) indicate that 1 in 5 Canadian adults aged 18 to 79 had metabolic syndrome.

Metabolic syndrome is a clustering of risk factors that increase a person's risk of cardiovascular disease and type 2 diabetes.¹ These risk factors include abdominal obesity (high waist circumference), elevated triglycerides, low high-density lipoprotein (HDL), high fasting blood glucose, and high blood pressure.¹

Metabolic syndrome was found in 22% of Canadians aged 18 to 79 years (Chart 1). The prevalence of metabolic syndrome increases significantly with age such that only 1 in 10 Canadians aged 18 to 39 years were found to have metabolic syndrome compared to 4 in 10 Canadians aged 60 to 79 years. There were no significant differences found between males and females.

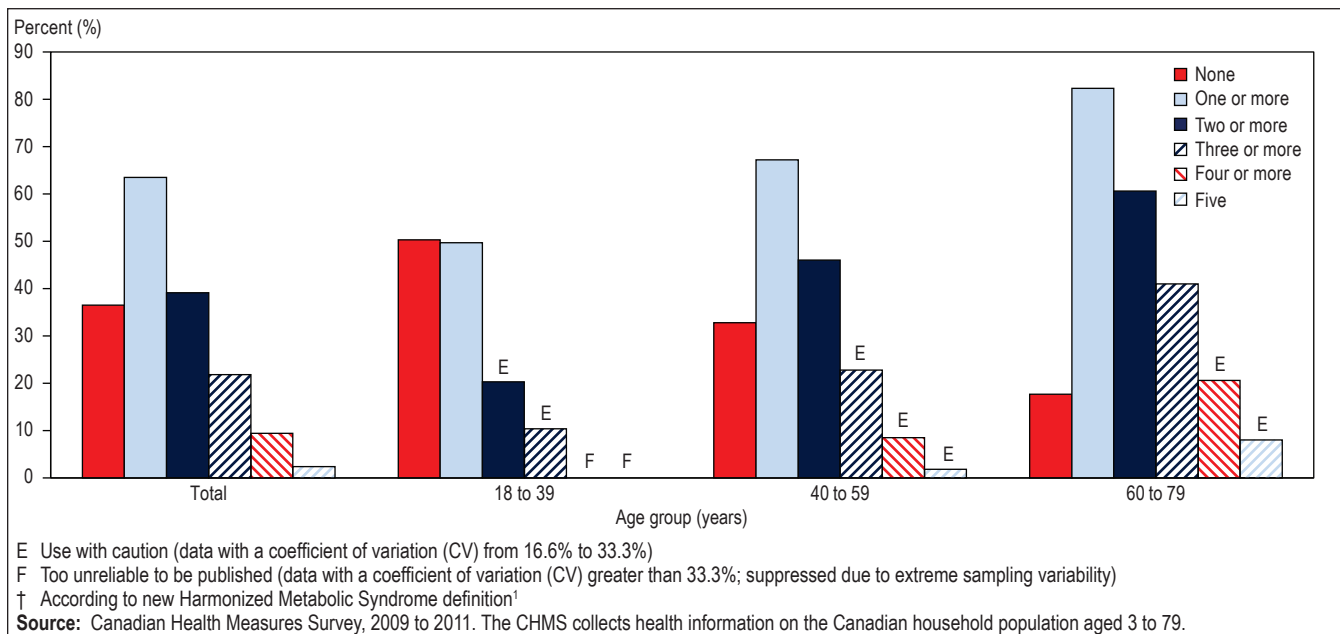
Chart 1 Metabolic syndrome[†], by age group and sex, household population aged 18 to 79, Canada, 2009 to 2011



Though only 22% of Canadian adults were determined to have metabolic syndrome based on having three or more component risk factors, 39% had two or more components, 64% had at least one, and only 37% had none at all (Chart 2). The number of metabolic syndrome risk factors increased significantly with age: approximately 5 in 10 adults aged 18 to 39 had at least one risk factor, compared to approximately 8 in 10 adults aged 60 to 79. Similarly, 2 in 10 adults aged 18 to 39 had at least 2 risk factors, compared to 6 in 10 adults aged 60 to 79. There were no significant differences in the number of component risk factors between males and females.



Chart 2 Proportion of the population by number of metabolic syndrome components[†], by age, household population 18 to 79, Canada, 2009 to 2011





About metabolic syndrome

Metabolic syndrome was determined according to recent unified criteria.¹ Under these criteria, metabolic syndrome is present if any three of the following criteria are met:

Table 1 Criteria for diagnosis of metabolic syndrome¹

Criterion	Cut-off for males	Cut-off for females
Abdominal obesity	Waist circumference ≥102 cm	Waist circumference ≥88 cm
Elevated plasma triglycerides	≥1.7 mmol/L	≥1.7 mmol/L
Elevated fasting blood glucose	≥5.6 mmol/L	≥5.6 mmol/L
Decreased HDL cholesterol	<1.03 mmol/L	<1.30 mmol/L
Elevated blood pressure	≥130/85 mmHg	≥130/85 mmHg
HDL = high density lipoprotein		

Additionally, the use of any medication for any of the above criteria is considered as meeting that specific criterion.

References

1. Alberti K, Eckel RH, Grundy SM, et al. Harmonizing the metabolic syndrome. A joint interim statement of the International Diabetes Federation Task Force on Epidemiology and Prevention; National Heart, Lung, and Blood Institute; American Heart Association; World Heart Federation; International Atherosclerosis Society; and International Association for the Study of Obesity. *Circulation*. 2009;120(16):1640-5.

For more information on the Canadian Health Measures Survey, please contact Statistics Canada's National Contact Centre (toll-free 1-800-263-1136; 613-951-8116; infostats@statcan.gc.ca).