



2009 What is the Impact of Sleep Apnea on Canadians?

- › An estimated **858,900 (3%) Canadian adults** 18 years and older reported being told by a health professional that they have **sleep apnea**.
- › In addition to those who reported being diagnosed with sleep apnea, **over 1 in 4 (26%) adults** reported symptoms and risk factors that are associated with a **high risk of having or developing obstructive sleep apnea**.

Fast Facts from the *2009 Canadian Community Health Survey—Sleep Apnea Rapid Response*

Sleep apnea is a sleep related breathing disorder. The word *apnea* means ‘no breathing’, and *sleep apnea* refers to pauses in breathing that occur during sleep. On average, these pauses last for 10 to 30 seconds, until the brain reacts to overcome the problem. With each episode of apnea, blood oxygen levels are reduced (hypoxia), and sleep is disturbed as the sleeper must wake briefly to resume breathing. However, the sleeper typically does not become fully awake, and usually has no recollection of the awakening. This cycle happens repeatedly throughout the night, interfering with the normal sleep pattern that one needs to feel rested and refreshed in the morning.

Sleep disturbances and repeated reductions in blood oxygen levels result in excessive daytime sleepiness, reduced quality of life, and impaired cognitive function such as memory loss and poor concentration. Additionally, sleepiness, which is the primary symptom of sleep apnea, increases the risk of motor vehicle collisions and work-related injuries. Sleep apnea is associated with serious health conditions that include: hypertension, ischemic heart disease, irregular heart beat, heart failure, cerebrovascular disease, depression, and type 2 diabetes.¹⁻⁶

There previously existed no national estimates on the prevalence of sleep apnea in Canada. The Public Health Agency of Canada developed and funded the 2009 **Sleep Apnea Rapid Response Questionnaire** to estimate, for the first time, the prevalence of sleep apnea in the Canadian population. The survey, conducted by Statistics Canada as part of the Canadian Community Health Survey, interviewed a nationally representative sample of 9,523 Canadians ages 12 years and older. This fact sheet focuses on sleep apnea in adults ages 18 years and older; and, the number of adult survey respondents (n=8647) was weighted to ensure that estimates would be representative of the adult Canadian population.

An estimated 858,900 Canadian adults 18 years and older reported being told by a health professional that they have sleep apnea.

- The prevalence of self-reported sleep apnea was 3% among adults ages 18 years and older; this rose to 5% in individuals 45 years and older.
- Three out of four Canadians reporting sleep apnea (75%) were 45 years and older.
- The prevalence of self-reported sleep apnea in adult men was nearly double that in adult women.
- 25% of adults reporting sleep apnea rated their general health as fair or poor compared to 11% in the general population.

- › Individuals with sleep apnea had other **chronic conditions**.
- › Many Canadians were **diagnosed** with sleep apnea **without the benefit of sleep laboratory testing**.

In addition to the people who reported being diagnosed with sleep apnea, over one in four adults reported symptoms and risk factors that are associated with a high risk of having or developing obstructive sleep apnea^a, the most common form of sleep apnea.

- **Over one in four Canadian adults (26%) was at high risk for having obstructive sleep apnea** based on the presence of three or more of seven risk factors/symptoms for obstructive sleep apnea: snoring loud enough to be heard through closed doors; often feeling tired, fatigued, or sleepy during the daytime; having been observed to stop breathing during their sleep; having been diagnosed with high blood pressure; having a body mass index (BMI) greater than 35 kg/m²; being over the age of 50 years; and being male.⁷
- 73% of adults at high risk for obstructive sleep apnea were men, and 76% were over the age of 50 years.
- 12% of adults at high risk of obstructive sleep apnea were obese with a BMI greater than 35 kg/m², based on self-reported height and weight. Maintaining a healthy weight can reduce the risk of developing sleep apnea.

Individuals with sleep apnea had other chronic conditions.

- Compared to the general adult population, Canadian adults who reported being diagnosed with sleep apnea were:
 - › 2.5 times more likely to report having diabetes;
 - › 1.8 times more likely to report hypertension;
 - › 2.2 times more likely to report heart disease; and,
 - › 2.2 times more likely to report a mood disorder such as depression, bipolar disorder, mania or dysthymia.

Many Canadians were diagnosed with sleep apnea without the benefit of sleep laboratory testing.

- To be diagnosed with sleep apnea, guidelines published by the Canadian Thoracic Society recommend that an individual undergo polysomnography testing at a sleep laboratory.¹ However, portable home monitoring devices are also sometimes used to test for sleep apnea.
- 23% of Canadian adults who reported being told by a health professional that they have sleep apnea also reported that they were never referred to a sleep laboratory for overnight testing, while 77% reported that they were referred for overnight testing.

Note:

^a Obstructive sleep apnea (OSA) is the most common form of sleep apnea. Other forms of sleep apnea include central and mixed apnea.

› While many individuals with sleep apnea were receiving treatment, **most were still overweight or obese**, a key factor in obstructive sleep apnea.

While many individuals with sleep apnea were receiving treatment, most were still overweight or obese, a key factor in obstructive sleep apnea.

- Continuous Positive Airway Pressure (CPAP), which provides pressurized air through a mask to prevent upper airway collapse, is the primary treatment option for patients with sleep apnea.
- Other treatment options for sleep apnea include behavioural treatments such as weight loss, avoidance of alcohol and sedatives, and oral or dental appliances to re-align the oral cavity.¹
- 71% of Canadian adults who reported being told by a health professional that they had sleep apnea also reported being prescribed some treatment for this condition.
- 89% of adults with sleep apnea were overweight or obese, based on self-reported height and weight.

Additional information on sleep apnea, the 2009 Sleep Apnea Rapid Response Questionnaire, and the Canadian Community Health Survey can be found online at:

- The Lung Association: www.lung.ca
- Statistics Canada: www.statcan.gc.ca
- Life and Breath: Respiratory Disease in Canada. Sleep Apnea: www.phac-aspc.gc.ca
- This fact sheet can be found online at: www.phac-aspc.gc.ca

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