

HEALTH AWARENESS: DIABETES AND YOUR HEALTH



Diabetes is a disease with very serious health consequences when left untreated. Based on 2016 census data, it's estimated that one-third of Canadians have diabetes or pre-diabetes. Almost all of these are type II diabetes, which is hopeful in a way, because type II diabetes in the early stages can be managed and even reversed with diet and lifestyle. As many as 40% of diabetics don't know they have the disease, so it's very important to become familiar with the risk factors and symptoms of diabetes. This is especially true of forestry workers as they include some of the jobs that have the highest risk levels for the development of diabetes.

Diabetes occurs when the management system for glucose breaks down. Normally, when blood glucose levels rise following a meal, the hormone insulin is released from the pancreas. Insulin binds to receptors in the brain, liver, muscle and fat tissue, allowing glucose to enter the cells. There it can be used as fuel, or converted into fat and stored. Problems arise when food and drink high in refined sugars are consumed on a regular basis, because these sugars are absorbed very quickly and the amount of insulin released is based on the speed that the glucose enters the blood. Cells stop responding to the constant high levels of insulin, which means even more insulin is needed to manage glucose, and eventually the pancreas becomes damaged and insulin production stops. This is the progression that leads to type II diabetes.

Both high glucose and high insulin have very negative effects on the body, causing increased inflammation and damaging the small nerves and fine blood vessels where gas and nutrient exchange occur. This means that tissues like the eyes and kidneys are particularly at risk. High insulin also compromises the kidney's ability to excrete excess salt, which can raise blood pressure. Complications of diabetes include high blood pressure, cardiovascular disease, kidney failure and blindness.

Facts:

- Thirty percent of strokes, 40% of heart attacks, 50% of kidney failures, and 70% of non-trauma caused amputations are due to diabetes.
- More than 90% of all diabetes cases are type II.
- Obesity quadruples the risk of getting type II diabetes.
- Many of the risk factors for diabetes are linked to lifestyle, including lack of physical activity, smoking, alcohol consumption, and a high intake of refined carbohydrates.
- Some other diseases also raise the risk of getting diabetes including cardiovascular disease or high blood cholesterol and some medications and hormone disorders.
- Diabetes has a genetic component as well. Some ethnic groups are more susceptible to diabetes (African, Arab, Asian, Hispanic, Indigenous or South Asian descent) and a family history of diabetes also increases your risk.

What to expect:

- American statistics show that truck drivers are 34% more likely to have diabetes than the average worker. Forestry workers are 20% more likely to have this disease.
- Diabetes is thought to start four to seven years prior to diagnosis.
- Fewer than 50% of Canadians know the early warning signs for diabetes. See your health care provider if you experience:
 - Unusual thirst
 - Frequent urination
 - Weight change (gain or loss)
 - Extreme fatigue or lack of energy
 - Blurred vision
 - Frequent or recurring infections
 - Cuts and bruises that are slow to heal
 - Tingling or numbness in the hands or feet
 - Trouble getting or maintaining an erection if you are male

What you can do:

- Men over the age of 40 years should get tested for diabetes at least every three years. If you have multiple risk factors consider annual testing.
- Eat a diet that is low in processed carbohydrates and high in fibre. Fresh fruits and vegetables, legumes and whole grains are good choices.
- Physical activity is a very powerful way to reduce the need for insulin and restore insulin sensitivity. Get a minimum of 150 minutes of moderately vigorous physical activity every week.
- Stabilizing your blood sugar with a good diet and exercise will prevent the development of diabetes and keep your reaction times and vigilance at their best.
- Stop smoking and limit your intake of alcohol.
- Try to maintain a healthy body weight.
- Get enough sleep and manage your mental stress.
- If you have been diagnosed with diabetes it's even more important that you follow these recommendations and take your prescribed medication.

What Employers and Supervisors can do:

- Make sure that your employees are aware of the risk factors and early warning signs for diabetes.
- If you have workers who are very overweight or obese consider bringing in a nutritionist to give a talk to them and their families about shopping and healthy eating at home, at work and on the road.
- Run a physical activity challenge where your staff can mark their activity on a chart that is located in a communal area and through which they can get points towards some kind of incentive or fundraise for a local charity.
- Bring in a public health nurse to talk about diabetes and how to identify the early warning signs.
- Offer confidential free diabetes screening.
- Ensure that all employees have access to healthy food and opportunities for physical activity while at work (see links below for more information on physical activity and healthy diets).
- Serve fresh fruit or veggies and dip with tea or water, rather than donuts and soft drinks at meetings.

More information:

Diabetes basics and additional details: www.niddk.nih.gov/health-information/diabetes

Diabetes Canada tools and podcasts: www.diabetes.ca/resources

Healthy Nutrition Crew Talk: www.bcforestsafe.org/node/3435

Physical Activity Crew Talk: www.bcforestsafe.org/node/3435