When should I see my health care provider or go to an Emergency Department?

You may need to see your health care provider or go to the Emergency Department if you:

- vomit 2 times or more in a 12 hour period
- have stomach pain and nausea that will not go away
- have diarrhea that does not stop or is getting worse
- have a high fever (greater than 38°C or 100.4°F)
- have a cold, infection or flu that is getting worse
- have extreme thirst, confusion, excessive sleepiness, vision loss or general weakness

See your health care provider or go to the emergency department if your condition gets worse.

People with Type 1 diabetes, see your health care provider or go to the Emergency Department:

- if your blood sugar or ketones are not decreasing after taking 2 correction doses of insulin

People with Type 2 diabetes, see your health care provider or go to the Emergency Department:

- if your blood sugar level is too high
What is low blood sugar?

Low blood sugar is when your blood sugar is less than 4.0 mmol/L. It is also called hypoglycemia.

What happens when your blood sugar is low?

- headache
- blurry eyesight
- hunger
- irritability
- sweating
- dizziness
- fast heartbeat
- shaking
- anxiety
- weakness, feeling tired

If you have one or more of these symptoms, test your blood sugar to see if it is less than 4.0 mmol/L.

If your blood sugar is less than 4.0 mmol/L, you need to treat it right away. If left untreated, your symptoms could get worse and you could pass out.

If you are not able to test your blood sugar, treat your symptoms right away.
How do I treat low blood sugar?

Step 1
- Stop what you are doing.
- Eat or drink 15 grams of fast-acting carbohydrate. Choose one of these:
  - 3 to 6 glucose tablets (depending on brand)
  - 3 teaspoons, cubes or packets of table sugar (may be dissolved in water)
  - 3 teaspoons of honey
  - ¾ cup regular pop (not sugar free or diet)
  - ¾ cup fruit juice
  - 3 to 6 candies (depending on brand)

Step 2
- Sit down and rest for 10 to 15 minutes. Check your blood sugar level again.
- If your blood sugar is still less than 4.0 mmol/L or if the symptoms of low blood sugar do not go away, repeat Step 1.

If you have a low blood sugar just before a meal or snack, treat it as described in Steps 1 and 2 and then have your regularly planned meal or snack and medication.

If your next meal is more than one hour away, have a snack with a starch and protein such as:
- ½ cup of milk plus 2 plain cookies
- ½ cup of milk with ½ cup cereal
- 6 crackers with 1 oz cheese
- 1 slice of bread with 1 tablespoon peanut butter or 1 oz meat or cheese

This will help maintain your blood sugar level until your next meal.
What causes low blood sugar?

- not eating at regular times or missing meals or snacks
- eating less carbohydrates than usual
- doing more exercise or activity than usual
- taking more diabetes medication or insulin than you need
- drinking alcohol

Talk to your health care provider if you have low blood sugars often. Always carry a source of fast-acting carbohydrate with you.

What is high blood sugar?

A high blood sugar level is when the amount of sugar in your blood is higher than your target level. High blood sugar is also called hyperglycemia.

What causes high blood sugar?

High blood sugar can be caused by:

- missing your diabetes medication
- taking too little diabetes medication
- eating too much, especially foods high in carbohydrates
- being sick or under stress
- side effects from other medications

What are the signs of high blood sugar?

When your blood sugar level is high, you may:

- be thirsty, have a dry mouth and skin
- urinate more often
- feel tired or weak
- feel hunger or nausea
- have stomach pains or cramps

People with Type 1 diabetes may also have fruity smelling breath. It may also smell like acetone or nail polish remover.
What do I do if I have high blood sugar?

- Test your blood sugar level every 4 hours.
- Drink sugar free fluids such as water or diet pop.
- If you have Type 2 diabetes, an activity such as walking may help to lower your blood sugar.
- If you have Type 1 diabetes and your blood sugar is above 14.0 mmol/L, then do not do any activity. Check your blood for ketones.

What are ketones?

If you have Type 1 diabetes, ketones develop when your body does not have enough insulin to use sugar for energy. Instead, your body breaks down stored fat for energy and ketones are made as a result.

Ketones can make you very sick. If your blood sugar is high because you are sick, the build up of ketones can make your illness worse.

If you have Type 1 diabetes you always need to take insulin. When you are sick, you may need to take more insulin and test for ketones more often. Ask your health care provider about how to test for ketones.

What do I do if my blood sugar remains high?

- Test your blood sugar more often. Your health care provider will help you decide how often to test.
- Drink more water or other sugar free fluids – as long as you have not been told otherwise by your health care provider.

If your blood sugar remains high, you may need to call your health care provider to:

- adjust your diabetes pills, insulin or both
- adjust your meal plan
Driving and diabetes

When you take insulin or some types of pills for diabetes, you are at risk of having a **low blood sugar while driving**. These medications lower your blood sugar quickly.

If you have a low blood sugar while driving, you are a danger to yourself and others. A low blood sugar is also called hypoglycemia.

Your blood sugar should be **over 5.0 mmol/L to drive**.

Remember “Over 5 to Drive”.

If you drive a commercial vehicle, there are different guidelines for your blood sugar level. Please discuss with your health care provider and ask for a copy of “Diabetes and Commercial Driving”.

What do I need to do before I drive?

**Always test your blood sugar just before driving.**

- If your blood sugar **is over 5.0 mmol/L**, you can drive. Test your blood sugar after every 4 hours of driving.
- If your blood sugar **is 4.0 to 5.0 mmol/L**, eat a snack with carbohydrate, such as cheese and crackers or ½ sandwich to raise your blood sugar over 5.0 mmol/L.
- If your blood sugar **is less than 4.0 mmol/L** or you have one or more of the symptoms of a low blood sugar, you need to raise your blood sugar quickly by doing **Steps 1 and 2** on page 2.

What do I do if I feel a low blood sugar while I am driving?

If you feel that your blood sugar is low:

- pull to the side of the road and stop driving
- remove your keys from the ignition
- test your blood sugar
- treat a low blood sugar by doing Step 1 and Step 2 on page 2
- wait 45 to 60 minutes before driving
Drive safely

Always wear your medical alert identification.

Keep an “emergency kit” in your vehicle to prevent or treat low blood sugars. This kit should contain:

- glucose tablets
- drinks with sugar such as juice or regular pop
- granola bars
- 2 or 3 plain cookies

Always travel with your blood glucose monitor and testing supplies.

Do not keep your monitor and supplies in the vehicle as they can be affected by hot or cold temperatures.

When is it unsafe to drive?

A person who is likely to have a low blood sugar (hypoglycemia) may not be fit to drive. You may need to test your blood sugar more often if you:

- were recently diagnosed with diabetes and are learning how to use insulin
- are unable to recognize early signs of hypoglycemia
- are not testing your blood sugar regularly or keeping your blood sugar well controlled
- have moderate hypoglycemia (needing others’ help) or severe hypoglycemia (needing emergency medical care)

By law, doctors must report anyone they consider to be unfit to drive.

It is important to follow up with your health care provider to review your blood sugar patterns.
For more information

- Call Telehealth at 1-866-797-0000
- Visit the Hamilton Health Sciences patient education library: www.hhsc.ca/pedl
- Visit the Diabetes Canada website: www.diabetes.ca