

Driving Guidelines and Diabetes

Driving and Diabetes

Diabetes may affect driving performance due to the presence of complications associated with diabetes that can reduce reaction response and time (such as diabetic eye disease (retinopathy), nerve damage (neuropathy), kidney disease (nephropathy), cardiovascular disease, peripheral vascular disease) and because of incidents of hypoglycemia.

Due to the fact that these factors are different from person to person, people with diabetes have the right to be assessed for a drivers licence on an individual basis. In order to assess the suitability of people with diabetes to drive, medical evaluations are needed to document any complications and to assess blood glucose (BG) control, including how often one experiences hypoglycemia and the severity or the hypoglycemia events.

Hypoglycemia

Hypoglycemia means low blood glucose levels; often this is when your blood glucose is below 4.0mmol/L. Hypoglycemia or low blood sugar can affect driving performance and may contribute to some of the accidents that involve people with diabetes.

Requirements for ALL Drivers with Diabetes

Persons with diabetes should:

- Have their fitness to drive assessed on a case-by-case basis.
- Take an active role in helping to assess their ability to drive by maintain accurate medical records, accurate BG logs and a well-calibrated BG meter.
- Be able to demonstrate how they are able to avoid, recognize and appropriately treat for hypoglycemia.

Driving Guidelines:

Drivers should:

- Measure their BG immediately before and at least every 4 hours during long drives. They should always carry a BG monitor, fast acting sugar and appropriate snacks in the vehicle and that are within reach (ex. Attached to the sun visor).
- **NOT** drive when their BG is less than 5.0mmol/L. If BG is less than 4mmol/L treatment with fast sugar is needed and following appropriate hypoglycemia protocol is required and persons should not drive for at least 45-60 minutes after effective treatment of the low blood sugar. If BG is between 4.0-5.0mmol/L the drive should have a snack before driving.
- **STOP** and **TREAT** themselves as soon as hypoglycemia and/or impaired driving is suspected. Again, persons should not drive until at least 45-60 minutes after effective treatment of the low blood sugar.

Private or Commercial Drivers Managing Type 2 Diabetes with Diet or Oral Diabetes Medications

- Should complete an annual medical exam and should include an assessment of the severity of any present complications of diabetes (retinopathy, nephropathy and cardiovascular disease) and a decision by the physician on whether or not any of the present complications could increase the risk of an accident.
- Persons with diabetes who control their diabetes with diet and lifestyle alone or diet and lifestyle combined with taking oral diabetes medications are at low risk of a severe hypoglycemia reaction and can usually drive all types of motor vehicles if they remain under regular medical care (a minimum of 2 clinic visits for their diabetes during the last year).

Private Drivers Treated with Insulin

- Persons with diabetes who require insulin to control their diabetes can drive private vehicles if they remain under regular medical care (a minimum of 2 clinic visits for their diabetes during the last year).

Commercial Drivers Managing Diabetes

- Persons with diabetes who drive truck may be at increased risk for highway accidents compared to private drivers because on average they spend more of their time behind the wheel and travel longer distances. Their job description may also require intermittent heavy labor and shift work.

Initial Application for a Commercial Licence

- A questionnaire needs to be completed which assesses risk (work schedule, insulin regimen, symptoms or hypoglycemia) and frequency of hypoglycemia episodes.
- An internist, endocrinologist or family physician must perform the initial, complete assessment.
- The applicant must provide evidence of attending a diabetes education program.
- The applicant should provide medical records for the previous 24 months (2 years) and an HbA1C measurement taken within the last 3 months.
- The applicant should have a full eye exam performed by an ophthalmologist or optometrist.
- The applicant must have a BG log or their blood sugars performed at least twice daily during for the past 6 months.

Exclusion Criteria for Maintenance of a Commercial Licence

- Hypoglycemia within the last 6 months that have required the assistance by an outsider to provide treatment or have resulted in a loss of consciousness even if spontaneous recovery occurred.
- Hypoglycemia that occurred without warning symptoms (known as hypoglycemia unawareness) unless there is documentation of recovery or warning symptoms at a later date.
- Uncontrolled diabetes defined by:
 - HbA1C greater than 12% **or**
 - More than 10% of BG levels are <4.0mmol/L
- A significant change to your insulin regimen (ex. Changing the type of insulin, number of injections daily or introduction of insulin). If this occurs the person should be assessed frequently by daily or weekly phone consults or visits with respect to hypoglycemia episodes and be permitted to drive if the variation in BG levels shows low risk.
- Visual impairment.
- High-risk proliferative retinopathy.
- Peripheral neuropathy or cardiovascular disease with potential to affect driving.
- Inadequate testing and recording of BG.
- Inadequate knowledge of the causes, symptoms and treatment of hypoglycemic reactions.

Annual Medical Recertification of Commercial Drivers Treated with Insulin

- All commercial drivers treated with insulin are required to have an annual medical exam and recertification.

The following needs to be obtained:

- Medical records for the last 12 months
- Questionnaire to be completed
- Complete physical exam
- Complete eye exam by an ophthalmologist or optometrist
- HbA1C done within the last 3-4 months
- Log of BG readings during the last 6 months taken at least twice daily

Driving Guidelines (Specific for Commercial Drivers Treated with Insulin):

Drivers should:

- Carry their BG meter and supplies with them at all times
- Have a fast acting sugar source within easy reach in the vehicle (ex. Attached to the sun visor)
- Test BG level within 1 hour of driving and approximately every 4 hours while driving.
- **STOP** driving if BG levels fall below 6mmol/L and **NOT** resume driving until BG level has risen above 6.0mmol/L after the ingestion of food.
- **STOP** and **TREAT** themselves as soon as hypoglycemia and/or impaired driving is suspected. Again, persons should not drive until at least 45-60 minutes after effective treatment of the low blood sugar.