# Diabetes and Driving: What Restrictions Should Be Placed on People With Diabetes, and What Is Fueling This Controversy?

Joseph Largay, PAC, CDE

e have all seen the news story: person with diabetes crashes car. If the accident was indeed related to diabetes, it was most likely the result of a severe hypoglycemic event. It is also more than likely that the person has hypoglycemia unawareness resulting from hypoglycemia-associated autonomic failure. In other words, he or she no

longer experiences any warning signs of hypoglycemia.

In my experience, this condition is more prevalent in the type 1 diabetic population.

I recently reviewed the American Diabetes Association (ADA) position statement "Diabetes and Driving" (available from http://care. diabetesjournals.org/content/35/

Supplement 1/S81. full.pdf) and thought I would share some of the most interesting points of this document.

Numerous parties are particularly interested in this topic. Some have concerns that hypoglycemia, retinopathy, and neuropathy may impair a person's ability to drive safely. Others worry that people with

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# ADA Mission Statement

The mission of the American Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes

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diabetes are being unnecessarily profiled.

Licensing requirements for driving differ from state to state. Some states do not require any medical documentation, but most require completion of a medical form confirming the driver's ability to safely operate a motor vehicle. I have completed hundreds of these forms for patients with diabetes. Some drivers have been involved in motor vehicle accidents (MVAs), but most have not. I can remember only two patients from whom I felt it necessary to temporarily withhold driving privileges because of a recent severe hypoglycemic event.

Interstate commercial drivers must follow federal regulations, but otherwise, private and commercial drivers may be subject to a variety of state-level regulations. Licensing decisions within each state actually may be made by someone who is not a health care professional, but rather an administrator.

MVAs related to diabetes are fairly rare. Other conditions such as attention deficit disorder and sleep apnea are associated with similar or higher risks for collisions. Accident risks are also higher for younger drivers and those who drive after midnight.

The challenge seems to be how best to identify patients with diabetes who are at risk for MVAs to provide them with preventive education. There are even online programs that help to educate people with diabetes who are at risk for MVAs.

Although most of the restrictions placed on driving apply to people who are using insulin, studies seem to indicate that the most significant risk factor is any recent severe hypoglycemic event.<sup>2</sup> Even moderate hypoglycemia has been shown to impair cognitive functioning and driving ability. It is understandable, therefore, that patients should know what their glucose level is and take measures to correct it, if necessary, before driving. They should also always carry a source of carbohydrate to consume, if necessary, to prevent or treat hypoglycemia if they are to be driving for extended periods.

ADA, in its 2013 Standards of Care document,<sup>3</sup> states that patients who take multiple daily injections of insulin or are on insulin pump therapy should monitor their glucose more frequently. The guidelines suggest monitoring before each meal, occasionally postprandially, at bedtime, before physical activity, and when they think they might have low blood glucose, as well as after treatment for hypoglycemia (to confirm its resolution) and before important tasks such as driving. For some individuals, this could be eight times per day or more.

I find it ironic that, for many patients with diabetes, insurance companies limit the number of test strips they will cover per month, even though 1) it seems clear that increased monitoring is associated with improved outcomes and 2) we would all like to know that people with diabetes are checking their glucose before getting behind the wheel of a car. I would assume that, for most people, just driving to and from work adds at least two extra tests per day to their self-monitoring regimen. If we are expecting patients to act responsibly and to test before driving, then perhaps insurance companies could facilitate this by increasing their coverage of test strips.

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## REFERENCES

<sup>1</sup>American Diabetes Association: Diabetes and driving. *Diabetes Care* 36 (Suppl. 1):S80–S85, 2013

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