



# Frequently Asked Questions about **On-Board Diagnostics (OBD) and Emission Testing**

from Ecology's Air Quality Program

**Q: What is “On-Board Diagnostics (OBD)?”**

**A:** OBD is a type of computer technology that is built into 1996 and newer gasoline vehicles. It monitors a vehicle's emission control system and other key engine parts to ensure they are working properly. The OBD system detects problems that increase the air pollution coming from the vehicle.

**Q: How does OBD work?**

**A:** When a vehicle's on-board computer detects an emission problem, it turns on a dashboard warning light to alert the driver, much like the way the oil light appears when a vehicle is low on oil.

**Q: What should I do if my OBD “check engine” dashboard light comes on?**

**A:** Take your vehicle to a repair technician with the appropriate equipment to diagnose and repair OBD systems.

**Q: How do I know if my vehicle has OBD?**

**A:** All 1996 and newer gasoline cars and light trucks (gross vehicle weight rating less than 8,501 pounds) have OBD. Some older vehicles may have a similar computer system, but the connections and problem codes may be different.

**Q: What's the difference between the emission test on a vehicle with OBD and one without it?**

**A:** If your vehicle has OBD, the lane operator at the test station will plug in a cable to the vehicle's computer connection (usually located in front of the driver's feet) to download emission-related information. This has no effect on the vehicle.

If your vehicle does not have OBD, or has a type of OBD system that has problems with OBD testing, the lane operator will do a tailpipe test. For a tailpipe test, the operator inserts a probe into the tailpipe while the engine is running, to sample air pollutant levels.

**Q: Is an OBD test better than a tailpipe test?**

**A:** The OBD test is both quicker and more effective in identifying polluting vehicles than the tailpipe test. It provides more specific information about what needs to be repaired than a tailpipe test does. It can also quickly eliminate clean vehicles from needing further action.

**Q: What should I do before my vehicle has an OBD test?**

**A:** You aren't required to do anything before the OBD test. You may check your vehicle's OBD connector to see if it is damaged or missing. The connector is located in different places for different vehicles. Usually, it is in front of the driver underneath the dash. On a few vehicles, it is hidden behind the ashtray or some other out-of-sight location. Your vehicle's owner's manual may have more information.

You may also check to see if the bulb in the "check engine" light is working. To do this, turn the ignition key on while leaving the engine off.

**Q: I took my car in for an emission test, but it couldn't be tested because the OBD system was "not ready." What does that mean?**

**A:** Before an OBD test can be done, most of the emission control system monitors have to complete their checks of the emission control equipment. Depending on the age of your vehicle, if one or two monitors have not yet completed their checks, the vehicle is "not ready" for an OBD test. If this happens, you will need to drive your vehicle further to allow these monitors to finish testing the equipment. The amount and type of driving needed varies according to the vehicle. You may need to check with your dealer, repair facility, or Ecology for the specific drive cycle for your vehicle.

It's always a good idea to test your vehicle as early as possible after receiving your renewal notice, in case of a delay such as this. An emission test is valid for 365 days, so you can have your test done whenever it is most convenient for you.

**Q: What if my OBD vehicle fails the emission test?**

**A:** If your vehicle fails the emission test, it will need to have repairs done before it can be retested. The test station staff will give you a list of Department of Ecology-authorized repair shops. All the shops on this list are able to diagnose and repair problems shown by OBD systems.

**Q: Are OBD repairs covered under warranty?**

**A:** Only the OBD computer itself and the catalytic converter are warranted for eight years or 80,000 miles. However, many automakers provide extended warranty coverage beyond that required by law. Check your vehicle's warranty documents for more information.

You can get more information about OBD at <http://obdclearinghouse.com/generalinformation/>.

*If you need this information in another format, please contact Tami Dahlgren of the Air Quality Program at (360) 407-6800. If you are a person with a speech or hearing impairment, call 711 or 1-800-833-6388 for TTY.*