

## Smoking Vehicles

### What's wrong with vehicle smoke?

A smoking vehicle contributes more hazardous pollutants than a properly maintained one. Breathing vehicle smoke exposes you to highly toxic air pollutants including benzene and particulates that can have serious health impacts. This exhaust can also enter your vehicle and expose you and your passengers to highly concentrated levels of pollutants. Among other pollutants, vehicle smoke contains:

- **Nitrogen Oxides** contribute to ground-level ozone (smog) which can reduce lung function, inflame lung tissue, and lead to permanent lung damage.
- **Benzene** can cause respiratory damage and increase the risk of cancer.
- **Fine Particulates** can lodge deep in the lungs and lead to serious respiratory disorders and worsen existing heart and lung disease.

### Why else should I care?

A simple emissions malfunction can affect other systems, potentially resulting in higher repair costs in the future and reduced fuel economy now.

### Are older vehicles and diesels supposed to smoke?

No. A properly maintained gasoline vehicle should not emit smoke.

Diesel vehicles should not be expected to smoke, except during hard acceleration and by law cannot display visible smoke on public streets or highways for longer than 7 seconds. It is normal to see smoke during the first few seconds after starting your diesel engine. Water vapor is also common during cold and wet months.

### What do I do if I see a smoking vehicle?

Fill out a report online: <https://www.oregon.gov/deq/Get-Involved/Pages/File-Pollution-Complaint.aspx> or, report a smoking vehicle by calling **888-997-7888**. Please have the following information available:

- 1) License plate #
- 2) Make and model (or description) of vehicle
- 3) Location of vehicle (where traveling)
- 4) Date and time you saw the vehicle
- 5) Description of the smoke

### What happens to drivers caught operating a smoking vehicle?

If a vehicle smokes, law enforcement agencies have authority to issue appropriate citations. When a complaint comes to DEQ about a smoking vehicle a letter is sent to notify the vehicle owner that it's illegal and subject to a fine if stopped by law enforcement.



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Department of  
Environmental  
Quality

Air Quality  
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[www.oregon.gov/DEQ/](http://www.oregon.gov/DEQ/)

### Common Causes of Vehicle Smoke (Not to be used for diagnostic purposes)

| Gasoline Engines     |  |   |
|----------------------|--|---|
| Color of Smoke       | Diagnosis  | Probable Causes   |
| <b>White*</b>        | Coolant or water leaking into combustion chamber | <ul style="list-style-type: none"> <li>• Bad head gasket</li> <li>• Cracked block or cylinder head</li> <li>• Damaged head gasket</li> </ul>  |
| <b>Blue</b>          | Engine oil being burned                          | <ul style="list-style-type: none"> <li>• Oil leaking into combustion chamber</li> <li>• Worn piston rings, valves or cylinders, damaged head gasket, oil contacting the hot exhaust</li> </ul>  |
| <b>Black or Gray</b> | Incomplete fuel combustion                       | <ul style="list-style-type: none"> <li>• Clogged air filter</li> <li>• Carburetor choke malfunction, dirty fuel injectors, or emission system malfunction</li> <li>• Ignition timing off</li> <li>• Low compression due to engine wear</li> </ul>                       |
| Diesel Engines       |  |   |
| <b>White*</b>        | Improper air/fuel mixture                        | <ul style="list-style-type: none"> <li>• Faulty fuel injection system</li> <li>• Incorrect fuel injection and valve timing</li> <li>• Engine overheating</li> <li>• Faulty fuel pump and/or injection pump</li> </ul>   |
| <b>Blue</b>          | Engine oil being burned                          | <ul style="list-style-type: none"> <li>• Excess engine oil</li> <li>• Worn piston rings, valves or cylinders</li> </ul>   |
| <b>Black or Gray</b> | Incomplete fuel combustion                       | <ul style="list-style-type: none"> <li>• Damaged or clogged air filter</li> <li>• Faulty fuel injection system</li> <li>• Wrong grade of fuel</li> <li>• Incorrect fuel injection pump timing</li> <li>• Engine overheating</li> <li>• Low compression ratio</li> </ul> |

**\*Please note:** Water vapor (from condensation) is commonly mistaken for vehicle smoke during the winter season. Water vapor is not considered vehicle smoke and is normal for vehicles to emit.