



FACT SHEET

Module 5.1

Adverse Conditions: Dust Storms

WHAT IS A DUST STORM?

A dust storm is created whenever strong turbulent winds pick up loose dirt and sand particles in such quantity as to reduce visibility seriously.

WHEN AND WHERE DUST STORMS OCCUR

Dust storms can be expected during the afternoons of hot summer days when "thunderhead" clouds are seen. They generally result from wind and thunderstorm activity, and become hazardous to traffic. They have the appearance of solid walls of dust and can be seen approaching from some distance.



A dust storm usually arrives suddenly in the form of an advancing wall of dust and debris which may be miles long and several thousand feet high. They strike with little warning, making driving conditions hazardous. Blinding, choking dust can quickly reduce visibility, causing crashes that may involve chain collisions, creating massive pileups. Dust storms usually last only a few minutes, but the actions a driver takes during the storm may be the most important of his or her life.

LIGHTS OFF IF YOU PULL OVER

Vehicles approaching from the rear and using the advance car's lights as a guide have inadvertently left the roadway and in some instances collided with the parked vehicle. Make sure all of your lights are off when you park off the roadway.

DUST STORM SAFETY TIPS

- If dense dust is observed blowing across or approaching a roadway, pull your vehicle off the pavement as far as possible, stop, turn off lights, set the emergency brake, take your foot off of the brake pedal to be sure the taillights are not illuminated.
- Don't enter the dust storm area if you can avoid it.
- If you can't pull off the roadway, proceed at a speed suitable for visibility, turn on lights. Use the painted fog line to help guide you. Look for a safe place to pull off the roadway.
- Never stop on the travel portion of the roadway.
- If you are on a freeway, leave the freeway at an exit ramp, if possible.
- Heavy rain may follow the dust storm. Watch for flooded highway dips even though it may not have rained where you have been.

DUST STORM TRAGEDY ON INTERSTATE HWY 15 LEADS TO VISIBILITY SENSORS

In May 2013, near Sunburst, Montana, a driver was killed in a nine-vehicle pileup when a tractor-trailer rear-ended her. The alkali flat area has been an interstate driving hazard for years. Alkali dust can create a “white-out” condition and the Montana Department of Transportation decided to install visibility sensors. When visibility drops, lights and signs placed one-half mile on either side of the highway will flash to warn drivers of low visibility ahead and to slow down or pull over. Sunburst middle school students received a \$20,000 technology grant in 2013 to sample water and soil in the alkali flat, design models and conduct experiments to test ideas to mitigate the danger. Their research may help save lives.

TUMBLEWEEDS

High winds cause dry “tumbleweeds” to break away from their roots and roll across the countryside. They are light masses of small, brittle stems and are not hazardous to automobiles.

DO NOT take evasive action to avoid tumbleweeds. By so doing, you endanger yourself and other traffic.

