

SAFETY AWARENESS

Brief Topic Safety Refresher Training For Associates

2024

Diesel Exhaust and Your Health

From trains to semi-trucks, many large commercial vehicles burn diesel fuel for power. Unfortunately, diesel emissions contain approximately 20 times more harmful particles than regular gasoline. This puts those in the transportation industry at an increased risk for adverse health effects caused by diesel exhaust. To stay safe during your daily operations it is important to follow safe work practices that will reduce your exposure.

Exposure Risk

In the long-term, occupational exposure to diesel exhaust increases the risk of lung cancer and other lung diseases by 40%. In the short-term, exposure can cause:

- Fatigue
- Drowsiness
- Tightness in the chest
- Wheezing
- Altered sense of smell
- Irritation of the nose, eyes and throat
- Nausea
- Heartburn

If you begin to feel any of these symptoms while working in an area where a diesel engine is running, notify your supervisor and move to an area where you can get some fresh air.

Maintenance

Preventive maintenance practices can reduce the amount of harmful exhaust diesel engines produce.

- Service engines regularly to ensure they function properly and emit as little exhaust as possible.
- Check for leaks in the exhaust system.
- Never tamper with an engine to try and improve fuel economy. Adjustments may increase emissions.
- Use emission control devices such as collectors, particle traps or air scrubbers. Replace any filters and clean such devices regularly.
- Check the vehicle's driving compartment for any damage that may allow exhaust to seep in while in operation. This could include cracks or holes in the cab's body or damage to weather stripping around doors and windows.

Other Controls

If other control methods cannot reduce the amount of exhaust in the air, then use PPE.

- Only a full-face piece, positive pressure, supplied air respirator can provide adequate protection.
- Make sure respirators are properly fitted, cleaned, stored and maintained by OSHA standards.
- Always use PPE in addition to, and never as a substitution for, other control methods.

Prevention

Exposure increases exponentially when dealing with diesel exhaust in an enclosed area. To improve ventilation:

- Run engines indoors only when absolutely necessary.
- Attach exhaust extraction hoses to the tailpipes of idling vehicles to direct exhaust outside.
- Use mechanical ventilation systems to help move contaminated air out of the work area.
- Open as many doors and windows as practically possible to increase circulation.
- Do not run diesel engines near the fresh air intake of a building.