

Winter Is a Particularly Dangerous Time for Combustible Dust



Some safety hazards are clearly seasonal. For example, snow and ice are only issues in the winter, while excessive heat is only an issue for most workplaces in the summer. But did you know that combustible dust is more hazardous in the winter than at any other time of year?

As WorkSafeBC explains in a recent hazard alert, the risk of a dust explosion increases when low humidity levels, like those seen in the winter, make dust easy to disperse and ignite.

In fact, one of the two recent sawmill incidents in BC occurred in the middle of winter; the second one happened in early spring. And industrial incident investigations by the [US Chemical Safety Board](#) found that seven out of eight fatal combustible dust explosions between 1995 and 2009 occurred during cold winter months.

In addition to low humidity, a number of common changes in wood processing and other facilities as the weather becomes colder can increase the risk of explosions:

- Control measures and clean up practices that rely on the use of water may not be suitable or effective.
- Openings such as bay doors and wall dampers may be closed, increasing the degree of enclosure and reducing natural ventilation or make up air.

- Ventilation may be reduced or shut down to conserve heat.
- Re-circulation of air from exhaust systems may also increase.
- Portable heating units potentially introduce additional ignition sources into the workplace.

So going into the winter, it's especially important to take steps to control the risks associated with combustible dust, including the additional risks due to the weather, such as:

- Conducting a risk assessment
- Implementing appropriate dust control measures
- Controlling ignition sources.