Wood Dust Exposure Stats and Facts

FACTS

1. Wood dust is the major wastes from timber and wood-based panel processing, including wood sawing, sanding, chipping, flaking, etc., which easily causes fire and explosions.
2. During the productions of wood and biomass products, dust explosion is one of the highest risks threatening the safety of production equipment and personnel, because dust is released and handled in any way.
3. Employees working with wood are at risk from breathing in fine particles of wood dust. Inhaling dusts at work can cause lung damage and over time may develop into respiratory diseases such as chronic obstructive pulmonary disease (COPD) and occupational asthmas.
4. Cutting processes and how aggressive the machine blade profile is, as well as the type of wood, soft or hardwood, will determine the type of wood dust produced.
5. Wood dust may be explosive if part of a cloud of wood dust ignites and flame spreads through the rest of the cloud. Not all flammable dusts are equally explosive, and the extent of the explosion will vary.
6. There are two main types of hazards with wood dust:

   - A flash fire can occur when an unconfined wood dust cloud catches fire.
   - A destructive explosion can occur when the wood dust is contained and therefore a build-up of pressure occurs.

STATS

- A different review of 10 studies found a significantly increased risk of lung cancer with wood dust exposure; those who were exposed to wood dust were at least 20% more likely

to develop the disease, and those who worked in wood dust-associated occupations had a 15% greater risk. In contrast, a slightly reduced risk of lung cancer was noted in people in Nordic countries who were exposed to primarily softwood dust.

- Another study out of Canada found the risk of lung cancer related to wood dust exposure was increased by approximately around 40%. The most common occupations linked with exposure were construction work, timber, and furniture making.
- According to WorkSafe, diseases associated with wood dust and welding fumes included cancers, asthma, and chronic lung conditions.
- At the current time, it’s thought that occupational exposures to chemicals and other substances are responsible for up to 27% of lung cancers in men.