

## Flour dust exposure

### What is the potential risk?

Workers exposed to flour dust are at risk of health effects such as occupational asthma, respiratory sensitization, and allergy to flour dust. Flour is an organic dust that may be made from a number of different grains including wheat, rye, millet, barley, oats, and corn. Flour contains allergens that are both naturally occurring and additives.

Activities such as mixing, pouring, and weighing flour creates airborne flour dust, which workers may inhale. Workers exposed to flour dust may develop an allergy or sensitization after repeated exposures. Once sensitization occurs, exposure to even a small amount of flour dust can trigger an asthma attack or allergic reaction.

The association between exposure to flour dust and the development of occupational asthma or other respiratory symptoms is well documented in scientific literature. Health effects due to flour dust inhalation has resulted in occupational disease claims in B.C.

Workers in bakeries, flour manufacturing, and food processing settings may be at risk of developing adverse health effects as the result of exposure to flour dust.

### What industries may be at risk?

- Baked goods manufacture
- Biscuit, pasta, or other dry food product manufacture
- Flour mill

### How can I reduce the risk in my workplace?

As an employer, you need to know if there is the potential for the risk identified in this advisory to be present in your workplace. It's your responsibility to regularly inspect your workplace, and to ensure that your safety procedures and practices control the risk. The following information highlights some of the sections of the Occupational Health and Safety (OHS) Regulation and Guidelines that are most relevant to this risk.

Section 5.54 of the OHS Regulation requires that the employer implement an exposure control plan (ECP) when:

- (a) exposure monitoring under section 5.53(3) indicates that a worker is or may be exposed to an air contaminant in excess of 50% of its exposure limit,
- (b) measurement is not possible at 50% of the applicable exposure limit, or
- (c) otherwise required by this Regulation.

Section 5.57 of the Regulation requires that worker exposure to sensitizers must be maintained at levels as low as reasonably achievable below the exposure limit.

Additional ECP requirements are also specified in sections 5.55–5.59.

## Where can I find resources?

You can access the following resources on [worksafebc.com](https://worksafebc.com):

- WorkSafe Bulletin: [Exposure to flour dust at work can cause asthma](#)

For more information on how we identified this risk, visit [worksafebc.com/emergingrisks](https://worksafebc.com/emergingrisks).