

## Respiratory illness from poultry dust exposure

### What is the potential risk?

In agricultural environments such as poultry farms, workers may be exposed to airborne particles known as bioaerosols, which can put workers at risk of illness.

Poultry dust is composed of a mixture of bioaerosols, which are airborne particles of organic matter. The bioaerosols found in poultry dust may include:

- Viruses
- Bacteria and endotoxins
- Fungi and glucans
- Mites
- Feathers and animal dander
- Grain dust
- Pollen

Cleaning poultry pens or cages, moving or cleaning machinery, or walking through poultry pens disturbs poultry dust that has settled. This releases it into the air where it may be inhaled by workers. Due to the densely stocked and enclosed nature of poultry buildings, bioaerosols can reach high concentrations, and may affect workers' respiratory systems.

Epidemiological studies have noted that workers with prolonged exposure to bioaerosols are at a greater risk of developing chronic respiratory illnesses, such as asthma and other infections.

Workers who may be at risk of exposure include those who work with and around poultry or other birds.

### Which industries may be at risk?

- Aviary
- Egg farming
- Poultry farming

### 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 Regulation (the Regulation) and Guidelines that are most relevant to this risk.

Many of the fungi, bacteria, and biological toxins found in poultry dust are designated as hazardous substances under section 5.1.1 of the Regulation. Section 6.34 of the Regulation requires that employers implement an exposure control plan (ECP) if there is a potential for worker exposure to a biological agent that is a hazardous substance.

The ECP must meet the requirements of section 5.54 of the Regulation and include the following elements:

- A risk assessment
- A list of work activities for which there is occupational exposure
- Engineering and administrative controls used to eliminate or minimize occupational exposure
- The personal protective equipment to be used
- Worker education and training

## Where can I find resources?

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

WorkSafeBC book: [Controlling Exposure: Protecting Workers from Infectious Disease](#)

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