Appendix B

Respiratory Diseases

Background

1. Occupational health specialists recognize a connection between some industrial work environments and respiratory disease when a worker is exposed to substances such as: bacteria, viruses, tobacco smoke, car exhaust and other air pollutants.

2. Common symptoms or signs of respiratory disease include trouble breathing and shortness of breath. Workers will often complain of a long-term cough that will not go away, may cough up blood, or experience pain while inhaling or exhaling.

3. Some substances can cause a worker to have upper respiratory irritation or irritation of their nose and/or throat. Workers will often have cold-like symptoms, such as a runny nose and scratchy throat.

4. The following are guidelines for the adjudication of respiratory disease claims.

Guidelines

1. Claims will be considered if exposure during the course of employment results in respiratory diseases including: asthma, chronic obstructive pulmonary disease (COPD), lung cancer, chronic bronchitis, emphysema, and heart related conditions.

2. In the workplace, respiratory diseases may be caused by the inhalation of substances, including but not limited to, the following:
   a. Dusts from wood, cotton, coal, asbestos, silica, talc, cereal grains, coffee, pesticides, drug or enzyme powders, metals and fibreglass.
   b. Fumes from metals that are heated and cooled quickly.
   c. Smoke from burning organic materials, which can contain a variety of dusts, gases and vapours.
   d. Gases such as formaldehyde, ammonia, chlorine, sulphur dioxide, ozone and nitrogen oxides.
   e. Vapours given off from liquids and solvents. They usually irritate the nose and throat before they affect the lungs.
   f. Mists from paints, hairspray, pesticides, cleaning products, acids, oils and solvents.

3. Some respiratory diseases have specific causes, such as:
   a. Asbestos: Asbestos fibres within the lungs may result in asbestosis, or forms of lung cancer. Smoking tobacco in combination with asbestos exposure can accelerate the cancer by approximately five times.
   b. Radon: Radon particles are absorbed by the lung and the resulting radiation dose increases the risk of lung cancer. Scientists estimate the risk of developing lung cancer because of radon exposure is 10 to 20 times higher for smokers than for people who have never smoked.

c. Carbon Monoxide: Carbon monoxide exposure reduces the blood's ability to carry oxygen and can cause carbon monoxide poisoning. Symptoms of carbon monoxide exposure include: headaches, dizziness, sleepiness, weakness, nausea, vomiting, confusion, and disorientation. At very high levels it causes loss of consciousness and death.

d. Nitrogen Dioxide: Some studies have shown that when people with asthma inhale low levels of nitrogen dioxide while doing physical activity, their lung airways can narrow and become more reactive to harmful inhaled materials.

e. Sulphur Dioxide: At high exposure levels, it causes the lung airways to narrow causing wheezing, chest tightness, and/or breathing problems. People with asthma are particularly susceptible to the effects of sulphur dioxide.

4. Industries or occupations with a greater risk of a worker developing respiratory diseases include, but are not limited to, the following:

   a. Jobs that involve exposure to fumes from metals and other substances that are heated and cooled quickly. This includes welding, smelting, furnace work, pottery making, plastics manufacture, and rubber operations.

   b. Firefighters are at special risk from inhaling noxious smoke and combustion gases. This risk can also be found in jobs where chemical reactions occur with high heat operations, such as: welding, brazing, smelting, oven drying and furnace work. POL 03/2020 Injuries - Fire Fighters provides additional direction for cancer claims involving firefighters.

   c. Painters and auto-body repair technicians who breathe in vapours given off from solvents.

   d. Hairstylists, artists and exterminators could be effected by mists or sprays from hairsprays, cleaning products and oils.