

Appendix D

Cardiac Conditions

Emergency Response means circumstances when firefighters attend a crisis situation, including, but not limited to: a fire, car crash or other incident as part of their active firefighting duties.

Background

1. Cardiac conditions may be the result of exposure to noxious inhalants and other chemicals, including: carbon monoxide, carbon disulfide, halogenated hydrocarbons and nitroglycerin/nitrates.
2. Carbon monoxide decreases the oxygen-capacity of the blood and reduces the oxygen supply available to the heart.
 - a. Carbon disulfide, a widely used solvent has been shown to increase the risk of cardiovascular disorders, including coronary artery disease and hypertension.
 - b. Halogenated hydrocarbons in acute exposures have precipitated sudden death due to abnormal heart rhythms.
 - c. Exposure to nitroglycerines and nitrates has been shown to lead to increased risk of cardiac chest pain, heart attacks and sudden death.
3. *The Workers' Compensation Act, 2013* (the "Act") (Section 28) and *The Workers' Compensation General Regulations, 1985* (the "General Regulations") (Section 22.3) outlines the presumption of occupational disease for firefighters, which includes a cardiac injury.

Guidelines

1. Claims will be considered if a cardiac condition is the result of the inhalation of noxious gases, such as: carbon monoxide, carbon disulfide, nitroglycerine and nitrates.
2. As per the Act, if a firefighter suffers a cardiac injury that manifests within 24 hours of an emergency response, it is presumed to be an occupational disease. No minimum period of employment applies (POL 03/2020, Injuries – Firefighters).
3. However, regardless of whether the presumption is met, full file development will occur, which involves obtaining all relevant medical information and a complete history of the worker's professional firefighting duties (POL 04/2017, Injuries – Occupational Disease).
4. POL 05/2013, Injuries – Heart Attack provides additional direction for cardiac injuries that are the result of a work-related incident, such as: electric shock, penetrating or non-penetrating chest injuries, unusual physical exertions or strains and traumatic events.