



The JHSC brings workers and employers together to identify existing or potential health and safety hazards in the workplace.

X-ray use in BC manufacturing

BC manufacturers are leading the growth in the use of X-ray machines to help ensure product quality and government/regulatory conformance.

Are x-rays harmful?

X-rays are harmful but injuries are rare. You are exposed to more radiation from the sun or dental X-rays than when using x-ray machines in the workplace. However, best practice is to reduce exposure to X-rays.



Why is this important to the JHSC?

With the growth in BC manufacturing, the use of X-ray machines in manufacturing will also grow. The risk of using X-ray equipment is also likely to rise. At least 100,000 BC workers could be affected by some level of occupational radiation exposure each year.

X-ray safety should be included in regular inspections and reporting. The types of inspections and reporting required might be different.

The JHSC should consider two fundamental principles:

- Do everything reasonable to ensure worker safety and keep x-ray exposure ALARA (As Low as Reasonably Achievable).
- Ensure the employer fulfills its obligations related to x-ray safety in the workplace as defined by the Workers Compensation Act.

The JHSC should be aware of, and make recommendations based on, emerging best practices – such as the appointment of an X-ray Safety Officer (XSO).

What is the employer's responsibility?

Employers must comply with the requirement of the Radiation Emitting Devices (RED) Act when buying or selling radiation-production equipment.

The employer must comply with the Workers Compensation Act, Occupational Health and Safety Regulation – 296/97, Part 7, Division 3 – “Radiation Safety.”

The employer must:

- Ensure that the exposure of workers to ionizing radiation is kept ALARA –below the safe exposure limits.
- Have a workplace specific X-ray Safety Program
- Have an Exposure Control Plan if a worker exceeds or may exceed exposure limits.
- Provide counselling about the reproductive hazards associated with radiation as requested.
- Install, operate and maintain x-ray equipment in accordance with standards
- Conduct regular x-ray surveys as required
- Maintain x-ray survey records for at least 10 years.



For additional resources visit:

In British Columbia, radiation safety is regulated in the Workers Compensation Act, Occupational Health and Safety Regulation – 296/97, Part 7, Division 3 – “Radiation Safety.”

