

X-rays in Manufacturing

Approximately 75% of manufacturers in BC expect that their businesses will grow over the next three years. With the expected growth and the consumer demand for excellence, we anticipate greater use of x-ray and related technologies to assure top product quality.

X-rays in Manufacturing

- Commonly used
 - Performing quality checks (anomaly detection)
 - Detecting of bone fragments in meat
 - Non-destructive testing
 - Cracks or flaws in materials



What does regulation say...

- BC Occupational Health and Safety Regulation
 - Health Canada Safety Codes



Contents of an X- Ray Exposure Control Plan

1. Statement of Purpose & Responsibilities
2. Risk Identification, Assessment, Controls
3. Education and Training
4. Written Work Procedures
5. Health monitoring
6. Documentation
7. Review

Statement of Purpose and Responsibilities

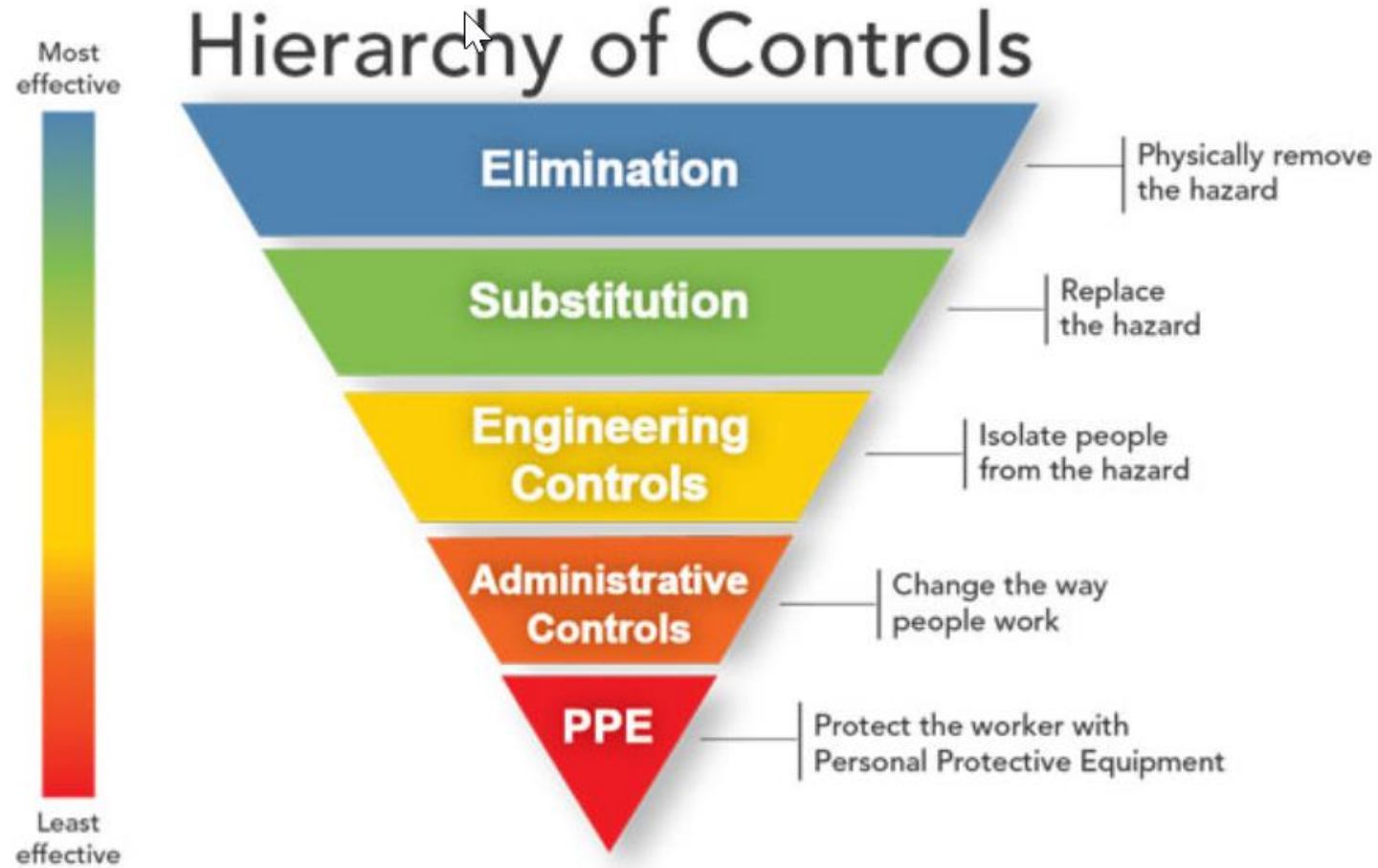
- Company Commitment
- Responsibilities of the
 - Employer,
 - Supervisors, and
 - Workers
 - XSO

Risk Identification, Assessment

- Inventory, Manufacturer's Manual, SME's
- Likelihood and Severity of Exposure



Controls



Education and Training

- This training will include the following:
 - X-ray hazards
 - Health Effects
 - Engineering and administrative control measures
 - X-ray safety regulations
 - Responsibilities
 - Incident reporting
 - Written work procedures

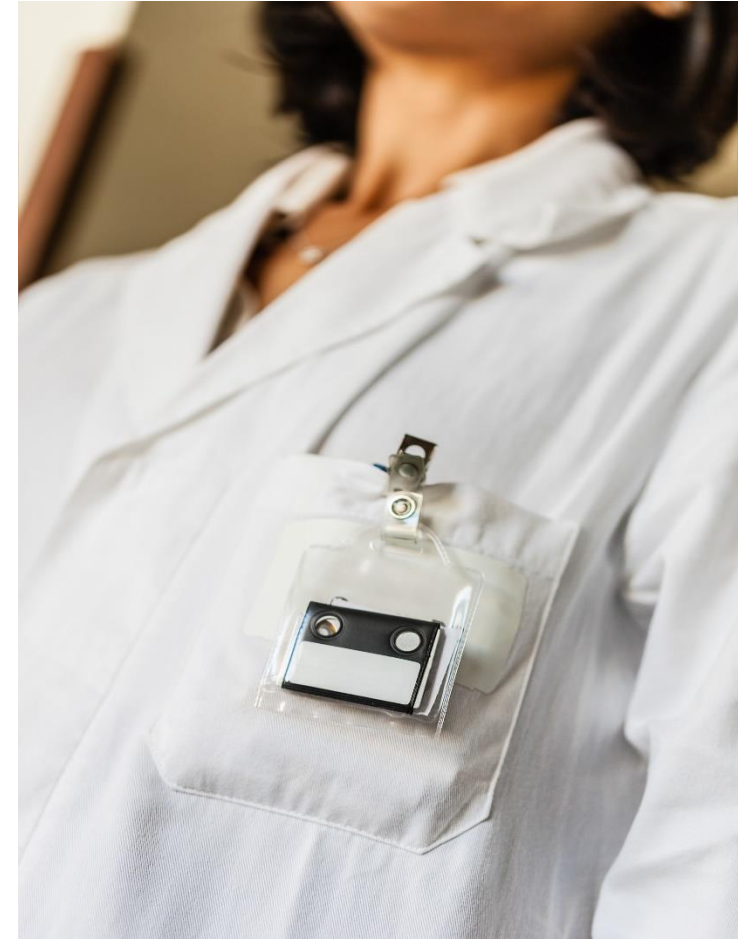
Written Work Procedures

The written instructions can include:

- Safe use of the equipment
- Emergency procedures
- Specifications for personal protective equipment
- Interpretation of any signage/markings

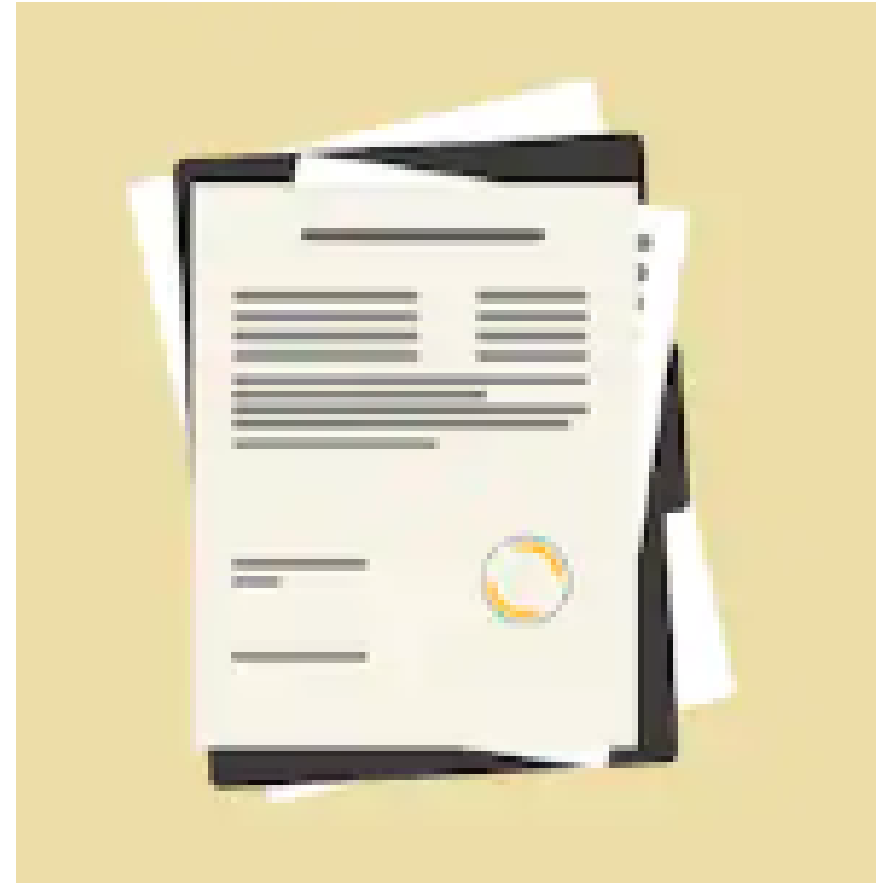
Health monitoring

- Personal Dosimetry
 - Used to measure the cumulative radiation dose due to ionizing radiation.
 - Wear them near the body's vital organs, such as on the chest or torso



Documentation

- Training and instruction records
- Hazard reporting records
- Investigations of exposure incidents
- Equipment purchasing records
- Radiation survey records
- Personal dosimetry data



Review

- At least annually
- Consultation with the JHSC or Health and Safety Representative



Resources

Manufacturing Safety Alliance of BC

Radiation Awareness

Online Course – Free for members

OHS Support Line 604.795.9595

