

Exposure control plans [ECP] – Compliance with the OHSR



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Workplace Documents and Joint Committees

JC role to advise employer on program and policies and monitor effectiveness:

- Orientation and training records
- Written instructions provided to workers (lockout policies)
- Incident investigations
- Participate in evaluation of VIWP, working alone, PPE, confined space

Session Objectives

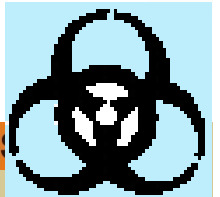
- What is an exposure control plan?
- When is an ECP is needed?
- Elements of an ECP
- Identify education and training requirements
- Infectious disease ECP

Exposure Control Plan

- A tool to document controls associated with exposures
- Reviewed annually in consultation with joint committee

Objective of the ECP is:

- minimizing risk of exposure
- minimizing risk of disease if an exposure does occur



What triggers exposure control plan requirements

- Exposure control plan triggered by exposure to:
 - Exposure to contaminants in excess of 50% of exposure limit (OHSR 5.54)
 - Exposure to designated substance (OHSR 5.57)
 - Carcinogens
 - Reproductive toxins
 - Sensitization critical effect

What triggers an exposure control plan (cont)

- **Biological Agents** - If a worker has or may have occupational exposure, as defined in section 6.33
- **Cytotoxic Drugs** - If a worker is or may be occupationally exposed to a cytotoxic drug
- **Lead** - If workers are or may be exposed to lead in excess of 50% of the exposure limits, or if exposure through any route of entry could result in elevated lead body-burdens
- **Asbestos** - if a worker may be exposed to potentially harmful levels

What triggers an exposure control plan (cont)

- **Toxic Process Gases** - If there is a risk of adverse health effects to workers from exposure to a toxic process gas
- **Ionizing and Non-ionizing Radiation**- If a worker exceeds, or may exceed, an applicable action level for ionizing or non-ionizing radiation
- **Heat Stress** - worker is or may be exposed to thermal conditions which could cause heat stress
- **Cold stress** - Thermal conditions that could cause cold stress or injury and/or could cause a worker's core body temperature to fall below 36°C (96.8°F)

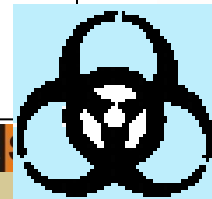
Content of an ECP

- Occupational Health and Safety Regulation

- Section 5.54
 - Purpose and Responsibility
 - Risk ID, assessment & Control
 - Education and training
 - Written work procedures
 - Hygiene / decontamination
 - Health monitoring
 - Documentation

Statement of Purpose and Responsibilities

- States the purpose of the ECP
- States who is responsible for administration, implementation and evaluation of the plan
- Describes responsibilities of management, supervisors and workers and other



6.35 Risk Identification

1. Identify all job classifications in which exposures occur:

Example (biohazards):

- all workers have occupational exposure*
e.g. OR nurses, OFA, paramedics
- some workers have occupational exposure
e.g. beat cops, hospital laundry workers

*Based on the definition of occupational exposure without regard to PPE and clothing

6.35 Risk Identification

2. List all tasks & procedures causing exposure

- applies where only some workers have occupational exposure
e.g. care aides, custodial, security
laundry worker - sorting dirty laundry
- does not apply where all workers have occupational exposure (e.g. OFAA)

Risk - Routes of Entry

- Needle stick or other sharps
- Blood splash / spit
 - Non intact skin – dermatitis, healing wound, lesion
 - Mucus membrane
 - Bite by human

Perform a risk assessment

- Evaluate tasks/job title identified as having a risk
- Quantitatively or Qualitatively assess risk

Findings of Assessment

- What do we do with the findings of a risk assessment?
 - Written work procedures
 - These procedures must be developed with the following in mind.....

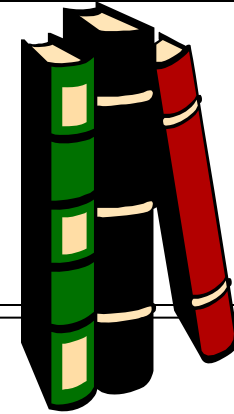
6.36 Control Procedures

- (1) Engineering & work practice controls
- (2) PPE
- (3) Housekeeping practices
- (4) Contaminated laundry - minimal handling
- (5) Regulated Waste Disposal
- (6) Standard Precautions (UP) for bloodborne pathogens

Exposure Control



6.38 Education & Training



Workers must be...

- informed about contents of the ECP
- educated & trained to work safely with & in proximity to potentially biohazardous material
- Trained in written work procedures for specific tasks

Education and Training

- **Goal:**
 - worker must be able to work safely with potential hazard

Education and Training

The employer is required to

- inform workers of the ECP contents
- provide definitions and discussion of relevant hazards
- provide information on exposure risk and controls

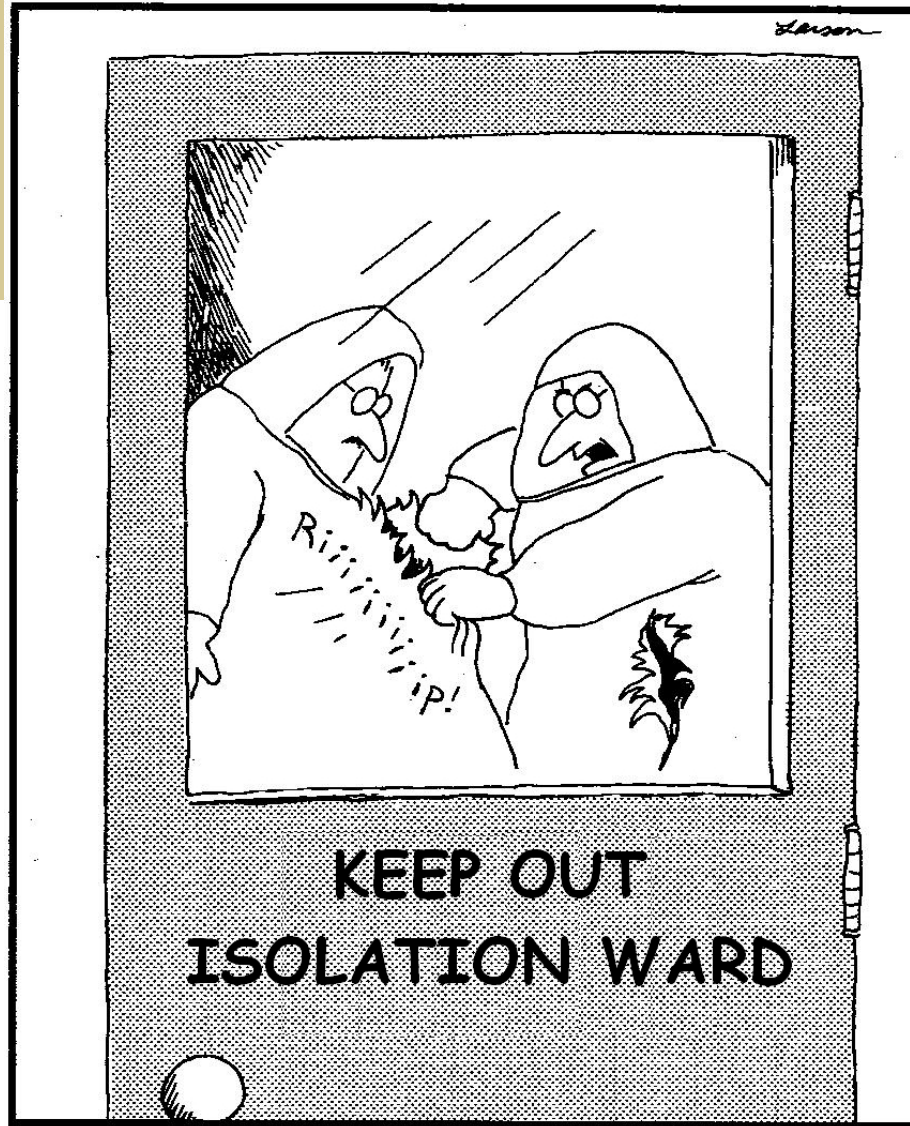
Education and Training

The employer is required to discuss:

- the control measures to minimize risk
- the availability of the Hepatitis vaccination (if there is occupational risk)
- post exposure management (including first aid, medical care, reporting systems and accident investigations)

Specific Example: Protecting Workers from Infectious Diseases – Exposure control plan for Tuberculosis





“So, Foster! That’s how you want it, huh? ...
Then take THIS!”

TB in Communities

Front Page, Alberni Valley Times

New TB case identified

SHAYNE MORROW AVTIMES Oct 14, 2008

Another case of tuberculosis has been identified in the Alberni Valley, according to the Vancouver Island Health Authority.

Late Friday afternoon, VIHA medical health officer, Dr. Lorna Medd, contacted the *Times* to advise of the latest discovery. Medd said health officials have now identified a strain of the disease that is unique to this region, which helps to track the progress of the outbreak.

"They do DNA fingerprinting. They are able to say, 'This is part of the Port Alberni outbreak strain,'" Medd said. "It's pretty amazing what they can do now. It's another method of surveillance."

All told, there have now been 41 cases of the strain identified on Vancouver Island — 33 in the Valley and eight outside our region. Medd noted that these aren't the only cases of TB on the Island — just the specific bug that originated here.

"We know that the eight cases outside the Valley were identified through DNA fingerprinting," Medd said.

SMorrow@avtimes.net



He's challenging Premier
MORROW / ALBERNI VALLEY TIMES

Lessons Learned

- Discuss concerns/exposures with all workers
- Involve local medical community
- Don't reinvent the wheel or the ECP



Employers are Responsible

Employers are required by law to ensure that all work is being conducted safely, and protect their workers from all work-related hazards, including exposure to infectious diseases.

When does Part 6 Apply?

1. **Biological agent:**

- Designated as a hazardous substance in section 5.1.1
- Risk Group 2, 3 and 4 infectious agents
- That can cause an adverse health effect in workers.

2. **Adverse health effect**, as defined in section 5.1

- An acute or chronic injury
- An acute or chronic disease, or
- Death.

3. **Occupational exposure**, as defined in section 6.33

- A reasonably anticipated contact with a biological agent
- Resulting from the performance of a worker's duties.

Infectious Diseases

- Bloodborne diseases
- Contact diseases
- Airborne diseases

Partial List of Industries that might need an ECP

- Physicians' offices
- Hospitals
- Nursing homes
- Home health care
- Drug treatment centres
- Dental offices
- Fire and rescue
- Law enforcement
- Correctional institutions
- Funeral homes and crematories
- Schools
- Veterinarian's clinics
- Animal farming (e.g., dairy)
- Research labs
- Groundskeepers
- Removal of regulated waste
- Construction Workers
- Sewer maintenance workers

Hierarchy of Controls

If there is a risk to a worker from exposure to a hazardous substance by any route of exposure, the employer must eliminate the exposure, or otherwise control it below harmful levels by:

1. Elimination or substitution (not practical for most infectious diseases)
2. Engineering controls (e.g., ventilated isolation rooms; physical barriers)
3. Administrative controls (e.g., encouraging sick workers to remain at home; hand washing; cough/sneeze etiquette; vaccinations)
4. Personal protective equipment (e.g., gloves, masks or respirators – may be the only option under some circumstances).



Personal Protective Equipment (PPE)

The *Regulation* does not dictate what kind of PPE should be used for a given circumstance – based on the risk assessment. PPE may include, but is not limited to gloves, gowns, lab coats, coveralls and booties, face shields, eye protection, and respirators.

The use of personal protective equipment as the primary means to control exposure is permitted only when:

- substitution, or engineering or administrative controls are not practicable
- additional protection is required because engineering or administrative controls are insufficient.

See [G6.34-2](#) – Risk assessment, engineering and administrative controls, and personal protective equipment.

What is a Mask? Respirator?

Mask (surgical mask)

- Is a barrier not designed to provide a seal with the face.
- Minimizes the spread of contaminants from the wearer's respiratory tract to other persons.



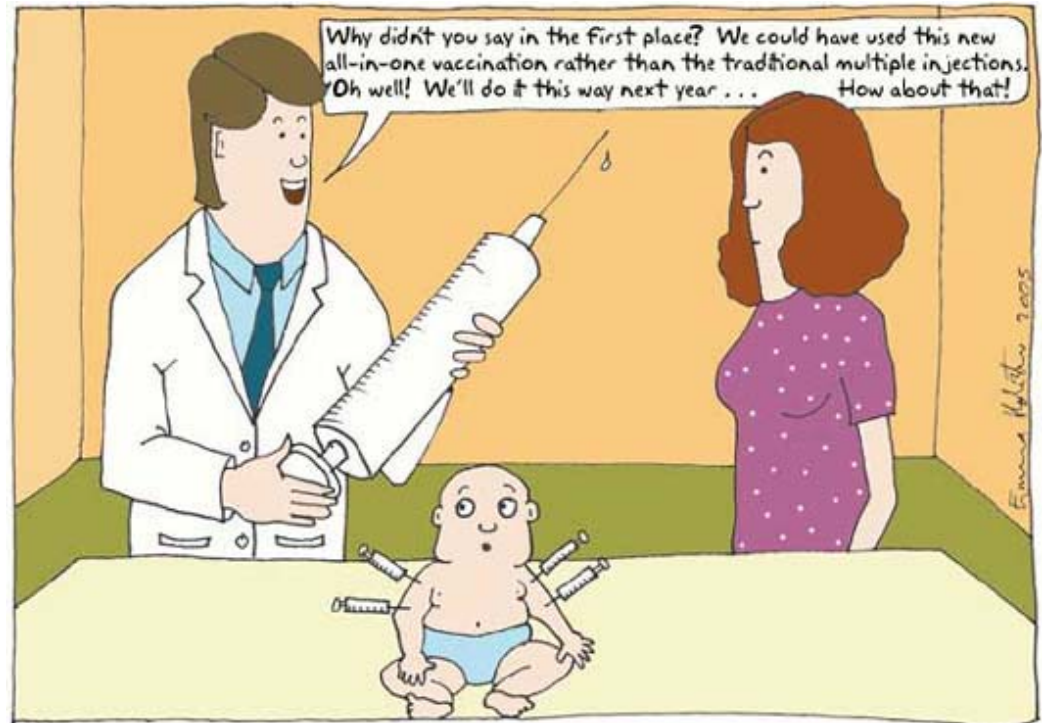
Respirator

- Is a barrier designed to provide a seal with the face.
- Reduce the wearer's risk of inhaling hazardous airborne gases, vapours and aerosols.
- N95 respirator is designed to filter particulates
 - Designed and approved for TB
 - Acceptable for other airborne pathogens – viral, bacterial or fungal.





Vaccination



Vaccination

The employer must offer vaccinations, in addition to hepatitis B, for workers at risk of exposure to biological agents listed in the [Communicable Disease Control Immunization Program Manual](#) (BC CDC).

Medical Evaluation

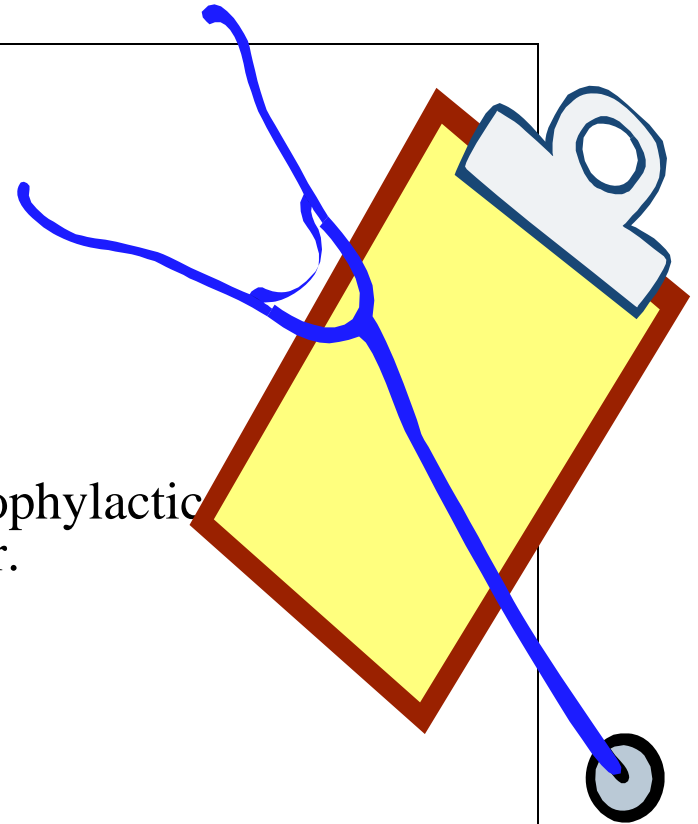
Medical evaluation

If a worker may have been exposed to the human immunodeficiency virus (HIV), hepatitis B virus or any other **biological agent** designated as a hazardous substance in section 5.1.1, the employer must advise the worker to seek immediate medical evaluation.

6.40(1) Post-Exposure Health Protection

If exposed to Hepatitis B virus or other bloodborne pathogen:

- Get first aid immediately
- Seek medical attention immediately (preferably within 2 hours) at nearest hospital emergency room
- The responsibility for any preventative or prophylactic with the medical practitioner, not the employer.

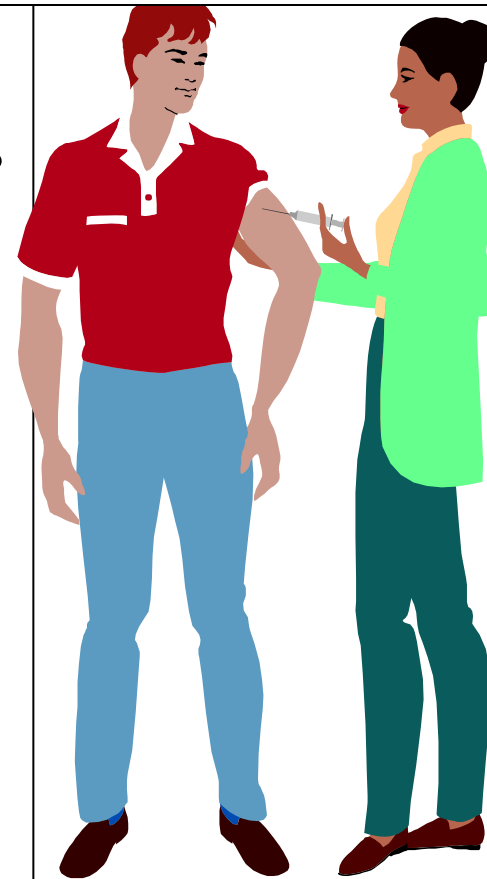


Canadian Immunization Guide 2006 – Vaccinations

- Bacille Calmette-Guérin (BCG) Vaccine
- Cholera Vaccine
- Diphtheria Toxoid
- Haemophilus Vaccine
- Hepatitis A Vaccine
- Hepatitis B Vaccine
- Hepatitis Vaccines Combined
- Influenza Vaccine
- Japanese Encephalitis Vaccine
- Measles Vaccine
- Meningococcal Vaccine
- Mumps Vaccine
- Pertussis Vaccine
- Pneumococcal Vaccine
- Poliomyelitis Vaccine
- Rabies Vaccine
- Rubella Vaccine
- Smallpox Vaccine
- Tetanus Toxoid
- Typhoid Vaccine
- Varicella Vaccine
- Yellow Fever Vaccine

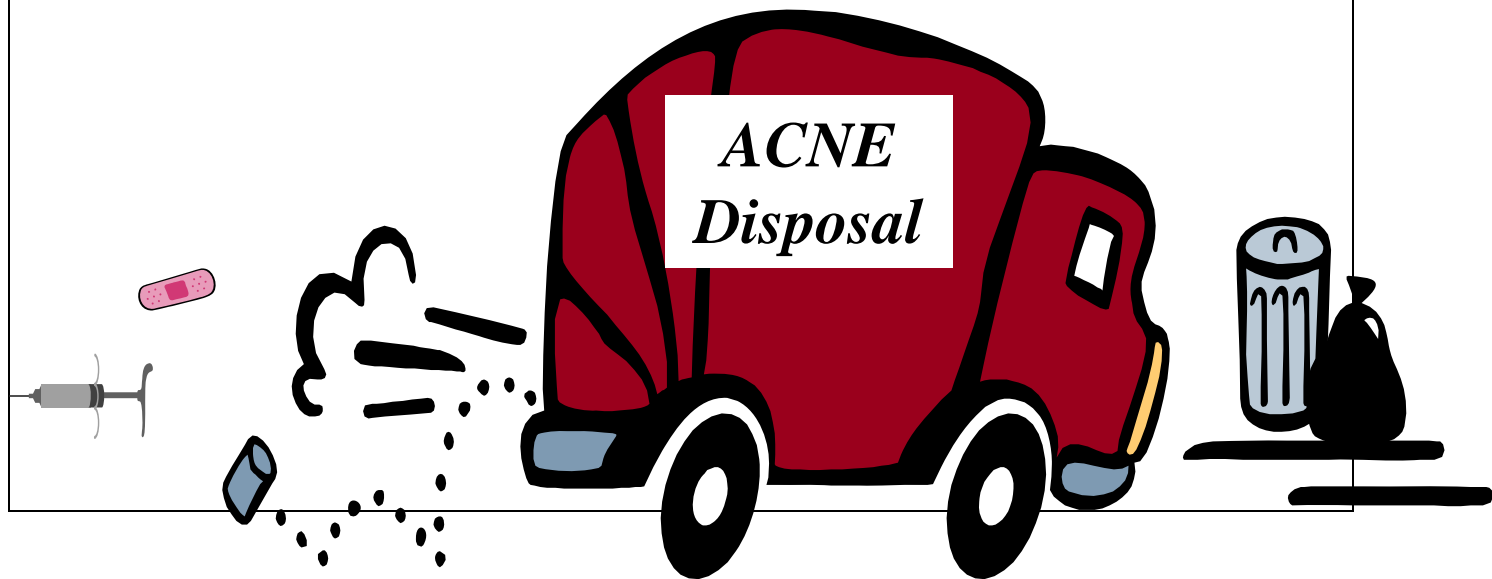
6.39 Hepatitis B Vaccination

- Available on request and at no cost (e.g. for the vaccine, travel costs) to workers
- For workers who have, or may have, occupational exposure to Hepatitis B virus



6.36(5) Regulated Waste

Dispose of biohazardous waste according federal, provincial & local regulations





Questions?

Resources

WorkSafeBC

Toll-free: 1 888 621-7233 (621-SAFE) in B.C.

Web site: WorkSafeBC.com

Occupational Health and Safety Agency for Healthcare (OHSAH) in British Columbia

Toll-free: 1 877 328-7810 in B.C.

Web site: www.ohsah.bc.ca

BC Centre for Disease Control

Phone: 604 660-0584

Web site: www.bccdc.org

Local public health unit (see the blue pages of the telephone directory),