PART 5: ~~CHEMICAL AND BIOLOGICAL SUBSTANCES~~ CHEMICAL AGENTS AND BIOLOGICAL AGENTS

Definitions **5.1** In this Part:

"adverse health effect" **means an acute or chronic injury, acute or chronic disease, or death;**

5.1.1 **For the purposes of section 5.2 and sections 6.33 to 6.40, the following biological agents are designated as hazardous substances:**

(a) a liquid or solid material that is contaminated with a prion, virus, bacterium, fungus or other biological agent that has a classification given by the World Health Organization or Health Canada, as amended from time to time, as a Risk Group 2, 3 or 4 human pathogen that causes an adverse health effect;

(b) a biological toxin that causes an adverse health effect.

General information requirement **5.2** If a worker is or may be exposed to a ~~chemical or biological substance~~ **chemical agent, or biological agent designated as a hazardous substance in section 5.1.1,** which could cause an adverse health effect, the employer must ensure that

(a) the identity of the ~~substance~~ **chemical agent or biological agent**, its possible effects on worker health and safety and any precautions required **to protect** ~~for~~ the health and safety of the worker are clearly indicated by labels, MSDSs, ~~placards, signs, tags~~ or other similar means,

(b) the ~~content and meaning of the~~ information required by paragraph (a) is clearly communicated to the worker,

(c) ~~effective~~ written procedures are prepared and implemented to ~~prevent~~ **eliminate or minimize a risk of** exposure **to a chemical agent or biological agent** by any route that could cause an adverse health effect, and to address emergency and cleanup procedures in the event of a spill or release of **a** ~~the substance~~ **chemical agent or biological agent**, and

(d) the supervisor and the worker are trained in and follow the ~~established procedures~~ **measures required in this Part and Part 6 of this Regulation** for **the safe** ~~safely~~ handling, **use** ~~using~~, **storage** ~~storing~~ and **disposal** ~~disposing~~ of the ~~substance~~ **chemical agent or biological agent**, including emergency and spill cleanup procedures.

EXPLANATORY NOTE

Proposed new section 5.1.1 has been added in order to accommodate the amendments proposed to Part 6 covering biological agents, and to emphasize linkage between the *Workers Compensation Act* and the *Occupational Health and Safety Regulation*. "Biological agent", "chemical agent" and physical agent" are subsets of "hazardous substance" as defined in section 106 of the *Workers Compensation Act*. In response to the feedback from the Legislative Counsel Office of the Ministry of the Attorney General, the definition for "biological agent" was revised as newly proposed section 5.1.1 in which the biological agent is *designated* as a hazardous substance in accordance with section 158 (2)(g) of the *Workers Compensation Act*. Proposed definitions for "infectious agent" and "infectious material" under section 6.33 have been replaced with "biological agent" which, as defined in section 5.1.1, is a "liquid or solid material that is contaminated with a prion, virus, bacterium, fungus or other biological agent that is classified by the World Health Organization, as amended from time to time, or Health Canada, as amended

from time to time, as a Risk Group 2, 3 or 4 human pathogen that causes an adverse health effect", or as "a biological toxin that causes an adverse health effect".
The biological agents covered by Part 6 are commonly referred to as "infectious agents" – those agents capable of inducing infections. Section 5.1.1 also includes other substances – specifically "biological toxins" (also known as "biochemical toxins"), some of which can cause toxic effects, allergic reactions or death; i.e., exhibit adverse health effects. Examples include insect toxins, bacterial endotoxins, grain flour allergens, photodermatitis agents (e.g., furanocoumarins), venom, etc.

The inclusion of a definition for "adverse health effect" is a key component to the application of Parts 5 and 6. It is included in order to emphasize that the biological agent, including an infection agent or material and toxin of biological origin is within scope only when they are capable of causing an adverse health effect as defined – that the agent causes an acute or chronic injury, acute or chronic disease, or death. This would exclude, for example, the common cold, seasonal flu or a pollen-induced asthma-like condition commonly experienced by the general public during the pollen season.

Section 5.2 is a general information requirement to ensure the employer is aware of the following:

- hazardous substances, including chemical agents and biological agents to which workers may be exposed during work,
- the identity of the substance or agent,
- the risk of exposure,
- necessary health and safety precautions,
- written procedures, and
- the need to educate workers as to the hazards, safe handling, use, storage and disposal of chemical agents or biological agents, where practicable.

Note that term "chemical substance" as used in section 5.2 has been replaced by "chemical agent", consistent with the hierarchy prescribed by section 106 of the *Workers Compensation Act,* where chemical agent is a subset of hazardous substance. In keeping with this pattern, the title to Part 5 has been revised to read "Chemical Agents and Biological Agents". It is currently entitled "Chemical and Biological Substances".

Based on feedback from the public hearings, the phrase "by any route that could cause an adverse health effect" has been reinserted into subsection 5.2 (c).

PART 6: SUBSTANCE SPECIFIC REQUIREMENTS

~~BIOHAZARDOUS MATERIALS~~ BIOLOGICAL AGENTS

Definitions **6.33** In sections 6.33 to ~~6.41~~ **6.40**:

~~"biohazardous material~~"	~~means a pathogenic organism, including a bloodborne pathogen, which due to its known or reasonably believed ability to cause disease in humans , would be classified as Risk Group II, III or IV as defined by the Medical Research Council of Canada, or any material contaminated with such an organism;~~
"occupational exposure"	~~means reasonably anticipated, harmful contact with blood or other potentially biohazardous material that may result from the performance of a worker's duties;~~
	means reasonably anticipated contact with a biological agent, that is designated as a hazardous substance in section 5.1.1, resulting from the performance of a worker's duties;
"precautionary principle"	**means adopting provisional precautions covering all routes of transmission, based on a higher level of protection, when the identity, aetiology or routes of transmission of the biological agent designated as a hazardous substance in section 5.1.1 have not been established;**
"route of transmission"	**means any route by which an biological agent designated as a hazardous substance in section 5.1.1 may be transmitted including contact, droplet or airborne transmission;**
"standard or routine infection control precautions"	**means safe work practices as defined by the *Practical Guidelines for Infection Control in Health Care Facilities* issued by the World Health Organization, as amended from time to time, and the *Infectious Diseases, Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care* guidelines issued by Health Canada, as amended from time to time;**
"transmission-based precautions"	**means safe work practices based on the route of transmission as defined by the *Practical Guidelines for Infection Control in Health Care Facilities* issued by the World Health Organization, as amended from time to time, and the *Infectious Diseases, Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care* guidelines issued by Health Canada, as amended from time to time.**

Exposure control plan **6.34** ~~The employer must develop and implement an exposure control plan meeting the requirements of section 5.54, if a worker has or may have occupational exposure to a bloodborne pathogen, or to other biohazardous material as specified by the Board.~~

(1) If a worker has or may have occupational exposure, the employer must develop and implement an exposure control plan, based on the precautionary principle, that meets the requirements of section 5.54 and that includes the following:

(a) a risk assessment conducted by a qualified person to determine if there is a potential for occupational exposure by any route of transmission;

(b) a list of all work activities for which there is a potential for occupational exposure;
(c) engineering controls and administrative controls to eliminate or minimize the potential for occupational exposure;
(d) standard or routine infection control precautions and transmission-based precautions for all work activities that have been identified as having a potential for occupational exposure, including
(i) housekeeping practices designed to keep the workplace clean and free from spills, splashes or other accidental contamination,
(ii) work procedures to ensure that contaminated laundry is isolated, bagged and handled as little as possible, and
(iii) work procedures to ensure that laboratory or other samples containing a biological agent designated as a hazardous substance in section 5.1.1 are handled in accordance with the *Laboratory Biosafety Manual* issued by the World Health Organization, as amended from time to time, and the *Laboratory Biosafety Guidelines* issued by Health Canada, as amended from time to time;
(e) a description of personal protective equipment designed to eliminate or minimize occupational exposure;
(f) a program to inform workers about the contents of the exposure control plan and to provide them with adequate education, training and supervision to work safely with, and in proximity to, a biological agent designated as a hazardous substance in section 5.1.1;
(g) a record of all training and education provided to workers in the program described in paragraph (f);
(h) a record of all workers who have been exposed, while performing work activities, to a biological agent designated as a hazardous substance in section 5.1.1.

Risk identification **6.35** ~~The employer must maintain a list of all job classifications and must identify all tasks and procedures in which there is a potential for occupational exposure to a bloodborne pathogen, or to other biohazardous material specified by the Board.~~

Controls **6.36** (1) ~~Engineering controls and work practice controls must be established to eliminate or minimize the potential for occupational exposure to a bloodborne pathogen or other biohazardous material.~~

(1.1) On and after January 1, 2008, a needleless device or safety-engineered hollow bore needle must be used for the following procedures performed to care for or treat a person:

(a) withdrawal of body fluids**;**
(b) accessing a vein or artery;
(c) administration of medications or fluids;
(d) any other procedure involving the potential for an exposure to accidental parenteral contact for which a needleless system or safety-engineered hollow bore needle system is available.

(1.2) On and after October 1, 2008, any medical sharp used to care for or treat a person must be a safety-engineered medical sharp.

(1.3) Subsections (1.1) and (1.2) do not apply if

(a) use of the required device, needle or sharp is not clinically appropriate in the particular circumstances, or

(b) the required device, needle or sharp is not available in commercial markets.

(1.4) If more than one type of safety-engineered hollow bore needle or safety-engineered medical sharp is available in commercial markets, the needle or sharp that provides the highest level of protection from accidental parenteral contact must be used.

(1.5) For purposes of subsection (1.4), an employer must make a determination of the highest level of protection available based on information provided by manufacturers, independent testing agencies, objective product evaluation, or other reliable sources.

(1.6) Safe work procedures and practices relating to the use of safety-engineered hollow bore needles and safety-engineered medical sharps must be developed and implemented before use of these devices.

(2) ~~Personal protective equipment must be worn to shield workers from biohazardous material.~~

(3) ~~Housekeeping practices must be designed to keep the workplace clean and free from spills of biohazardous material.~~

(4) ~~Work procedures must ensure that laundry contaminated with biohazardous material is isolated and bagged, and handled as little as possible.~~

(5) Repealed. [B.C. Reg. 312/2003.]

(6) ~~For bloodborne pathogens, the employer must implement a system of universal precautions for all tasks and procedures identified as having a potential for occupational exposure under section 6.35.~~

Labels and identification

6.37 (1) ~~Except as provided in subsections (2) to (4), a container of known or suspected biohazardous material must have a label affixed which discloses the product identifier, the name of the organism known or suspected to be present, information on the safe handling of the material, or a biohazard symbol, and a reference to an MSDS for the material if one has been prepared.~~

A container holding a known or suspected biological agent designated as a hazardous substance in section 5.1.1 must be clearly identified by the biohazard symbol as described in the *Controlled Products Regulations (Canada)* or by other means that indicates the presence of a biological agent.

(2) ~~A label on a diagnostic specimen of human body fluid or tissue that is known or suspected to contain a biohazardous organism is exempt from subsection (1) if~~

~~(a) the label discloses a sample identifier, and the risk group number of any risk group II, III, or IV organism, as defined by the Medical Research Council of Canada, known or suspected to be present,~~

~~(b) the specimen is identified as biohazardous by use of a biohazard symbol or equivalent means, and~~

~~(c) sufficient information is provided to enable immediate contact with the medical professional providing the sample in the event of an emergency.~~

A laboratory sample of a known or suspected biological agent designated as a hazardous substance in section 5.1.1 must be transported only in accordance with the federal *Transportation of Dangerous Goods Act , 1992 (Canada).*

(3) ~~If a container of known or suspected biohazardous material is too small to be labelled, the employer is exempt from the requirements of subsections (1) and (2) if an equivalent system of hazard communication is developed and implemented.~~

(4) ~~Laundry or waste material that is contaminated with a known or suspected bloodborne pathogen is exempt from subsections (1) and (2) if~~

~~(a) all such material is handled using universal precautions, and~~
~~(b) an alternate and equally effective system of hazard identification, such as distinctive coloured bagging, is used.~~

(5) ~~Known or suspected biohazardous material that is not in a container must be identified, by~~

~~(a) posting a conspicuous and clearly legible placard that discloses the information required in subsection (1), or~~
~~(b) an equivalent means of hazard communication.~~

Education and training **6.38** ~~The employer must inform workers about the contents of the exposure control plan and provide them with adequate education and training to work safely with and in proximity to potentially biohazardous material.~~

Vaccination **6.39** ~~Vaccination against hepatitis B virus must be made available at no cost to the worker, upon request, for all workers who have, or who may have, occupational exposure to hepatitis B virus.~~

(1) An employer must offer vaccination against hepatitis B virus to all workers who are at risk of occupational exposure to that virus.

(2) If the *Communicable Disease Control Immunization Program Manual* issued by the BC Centre for Disease Control, as amended from time to time, lists a vaccine that protects against infection by a biological agent that is designated as a hazardous substance in section 5.1.1, the employer must offer the vaccination to all workers who are at risk of occupational exposure to that biological agent.

(3) Vaccinations offered under subsections (1) and (2) must be provided without cost to workers.

~~Health protection~~ **6.40** ~~(1) A worker potentially exposed, to hepatitis B virus or another bloodborne pathogen in an exposure incident must be advised to seek a medical evaluation at the time of the incident.~~

~~(2) The medical evaluation must be based on an assessment of the risks associated with the incident, and subsequent post-exposure health management, must be provided as necessary.~~

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.**

Records **6.41** ~~A record must be kept of all workers who are exposed to biohazardous or potentially biohazardous material while on the job, and of worker education and training sessions on biohazardous materials.~~

EXPLANATORY NOTE

Sections 6.33 to 6.41 relating to biohazardous materials are proposed to be amended to emphasize that the scope is not limited to blood-borne or body fluid-borne pathogens. The proposed amendments clarify that Part 6 also covers biological agents, commonly known as infectious agents, capable of causing high morbidity and death among workers during the course of employment, such as the agents responsible for SARS, tuberculosis, Legionnaires Disease and an influenza pandemic such as the 1918 "Spanish Flu". Part 6 would not apply to common diseases such as seasonal influenza, the common cold and similar diseases that affect the general population on a periodic basis and considered from the disease perspective as relatively benign.

A number of further revisions have been made to the proposed amendments based on feedback from stakeholders at the public hearings as well as input from Legislative Counsel Office (LCO) of the Ministry of the Attorney General. Specifically, a definition has been provided for the "precautionary principle" in section 6.33, with reference to the precautionary principle in section 6.34 (1). As well, the term "infectious agent" has been replaced by "biological agent" (designated as a hazardous substance in section 5.1.1).

Biological agent definition

Based on feedback from the LCO, the material content contained in the proposed definitions for "infectious agent" and "infectious material" in section 6.33 has been transferred to new section 5.1.1 covering "biological agent". Hence, per section 5.1.1, biological agents designated as hazardous substances include: a) a liquid or solid material that is contaminated with a prion, virus, bacterium, fungus or other biological agent classified by the World Health Organization or Health Canada as a Risk Group 2, 3 or 4 human pathogen that causes an adverse health effect, or b) a biological toxin that causes an adverse health effect.

Risk Groups 2, 3 and 4 is a component of a universally agreed to classification system as adopted by the World Health Organization and Health Canada, among other jurisdictions. This system is based on the biosafety containment classification system developed by the Communicable Diseases Branch of the World Health Organization (WHO), the Office of Laboratory Security of the Public Health Agency of Canada (OLS-PHAC), and the US Dept. of Health and Human Services, Centers for Disease Control and Prevention (DHHS-CDC). Based on feedback received at the public hearings, web links to both the WHO and PHAC will be provided in an accompanying OHS guideline.

The purpose of the proposed amendments is with specific reference to biological agents in Risk Groups 2, 3 and 4 as set forth by the WHO and Health Canada, as specified by proposed section 5.1.1. For the purposes and application of Part 6 covering biological agents, the following groups apply:

- Risk Group 2 agent
    - can cause human disease,
    - is unlikely to spread to the community,
    - may be a hazard to workers, and
    - usually has an effective prophylaxis or treatment available,
    - examples of RG 2 agents include the Hepatitis B and Hepatitis C viruses, *Legionella* spp, and *Staphylococcus aureus*.
- Risk Group 3 agent
    - can cause severe human disease,
    - may spread to the community,
    - may be a serious hazard to workers,
    - usually has an effective prophylaxis or treatment available;

  - examples of RG 3 agents include the human immunodeficiency virus ("HIV"), the Severe Acute Respiratory Disease ("SARS") coronavirus, hanta virus, *Yersinia pestis*, and *Mycobacterium tuberculosis*.
- Risk Group 4 agent
  - causes severe human disease,
  - likely to spread to the community,
  - is a serious hazard to workers, and
  - usually has no effective prophylaxis or treatment available;
  - examples of RG 4 agents include the hemorrhagic fever viruses such as Ebola, Marburg and Lassa.

To clarify questions that arose during public consultation, it is emphasized that Part 6 does not include Risk Group 1 agents that are common to the general community and of low morbidity (e.g., the common cold). These low hazard agents are unlikely to cause occupational disease as determined by decisional parameters described below.

The proposed amendments are linked by key phrases [underlined] as defined/designated in sections 5.1, 5.1.1 and 6.33, in accordance with a paradigm based on the following three criteria:

1. Biological agent
   - Designated as a hazardous substance in section 5.1.1
   - Include 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, designated as a hazardous substance by section 5.1.1,
   - Resulting from the performance of a worker's duties.

A biological agent must meet all three criteria in order to fall within the scope of Part 6. For example, the seasonal influenza virus would not meet all three criteria. Although it is classified in Risk Group 2, it does not cause an adverse health effect, as defined. However, its potentially highly pathogenic counterpart, when it achieves the status as a pandemic influenza virus, would be in scope of Part 6. Similarly, a coronavirus would not fall under Part 6; however, a highly pathogenic form – such as the coronavirus responsible for SARS – is in scope and would require an exposure control plan.

In accordance with section 6.34, there are several ways in which a worker might be exposed to an biological agent at work:

a) exposure as a result of working with a biological agent; e.g., in a microbiology laboratory;
b) exposure as a result of working with, or in close proximity to, an infected individual; e.g., in a hospital or other medical setting;
c) exposure as the result of coming into close contact with an infected individual in a non-medical setting; e.g., serving customers;
d) exposure which does not result from the work itself but is incidental to it, mainly because a biological agent is present as a contaminant; e.g., farming (infected lifestock or poultry, hanta virus), pet stores (infected animals) forestry (tick-borne diseases), archaeology (contaminated material), garbage collection, sewage treatment.

To summarize, revisions to Parts 5 and 6, as proposed, cover worker exposure to biological agents capable of causing high morbidity or death.

Route of transmission definition

A new definition for "route of transmission" is proposed in order to clarify that the risk assessment must consider all potential routes of transmission for the biological agent, including contact, droplet and airborne transmission. Certain biological agents may utilize one, two, or all three routes of transmission. During times of scientific uncertainty – such as during the initial stages of a highly infectious biological agent outbreak, in which the virus has demonstrated effective human-to-human transmission and is causing high morbidity and death – the route of transmission is likely not known. Hence, as a precautionary measure, all routes of transmission must be considered until the aetiology of the agent becomes known (see additional discussion about the precautionary principle below).

In response to a number of requests by stakeholders, what is meant by the proposed new definition for "routes of transmission" is described in more detail as follows. This information will be transferred to an OHS guideline.

1. Contact transmission

Contact transmission is divided into two subgroups, direct-contact and indirect-contact transmission.

- *Direct-contact transmission*
  - Involves a direct body surface-to-body surface contact and physical transfer of agents between a susceptible host and an infected or colonized person or animal, with one serving as the source of the infectious biological agent and the other as a susceptible host. An example is when a health care worker provides care, and is close contact, with an infected patient or when a farm worker is handling infected lifestock.

- *Indirect-contact transmission*
  - Involves contact of a susceptible host with contaminated intermediate objects, usually inanimate, such as door handles and other common items, infected animal tissues, contaminated equipment such as sewage pumps, or contaminated hands that are not washed. In the medical setting it would include gloves that are not changed between patients, contact with contaminated clinical instruments, or other contaminated surfaces such as counters. Also known as fomite transmission.

    Indirect contact transmission also includes introduction of an infectious biological agent into a person's body via a biological "vector". An example of such a vector is a tick harboring the bacterium responsible for Lyme disease.

2. Droplet transmission

A person can be exposed to biological agents contained in droplets present in the air when droplets land on the mucous tissues of the eyes, mouth or outer nasal passages.

For example a large diameter droplet (30 – 50 micrometre [µm] or larger) generated through a cough or sneeze by an infected person can land on the mucous tissues of the eyes, mouth or outer nasal passages.

3. Airborne transmission

Scientific evidence indicates that particles and droplets as large as 100 µm in diameter can be inhaled into the respiratory tract and distributed as follows:

- "*inhalable fraction*": droplets and particles 50 - 100 µm in diameter deposit in the upper tract above the larynx including the inner nasal passages ("nasopharyngeal region");
- *"thoracic fraction"*: droplets and particles in the 10 - 30 µm diameter range deposit below the larynx as far as the terminal bronchi ("tracheobronchial region");
- *"respirable fraction"*: droplets and particles in the 0.1 or less up to 10 µm diameter range deposit in the alveoli ("pulmonary or alveolar region").

Hence, infectious biological agents may be deposited throughout the respiratory tract depending on the droplet size when attached to, or contained in, droplets up to 100 µm in diameter.

Droplets aerosolized as the result of coughing, sneezing or clinical procedures decrease in size within seconds in air due to evaporative losses particularly at typical indoor temperature and relative humidity levels. Some of these droplets (e.g., those less than 5 µm in diameter) may take more than 60 minutes to fall to the floor. As a result, biological agents carried by small droplets (about 10 µm or less in diameter) can be dispersed widely by air currents and may become inhaled into the lower reaches of the respiratory tract of a susceptible host within the same room or over a longer distance from the source or point of generation, depending on biological, environmental and other factors.

Therefore, for the purposes of Part 6,

- Droplet transmission means deposition of droplets or particles onto the mucous tissues of the eyes, mouth or outer nasal passages, and
- Airborne transmission means the deposition of droplets into the respiratory tract.

Standard or routine infection control precautions definition

In response to feedback from stakeholders, the proposed definition for "standard infection control precautions" has been revised to include the term "routine" as it is commonly used in health care throughout BC. This amendment helps to clarify the application of section 6.34 (1) (d). It replaces "universal precautions", a term considered outdated by the infection control community.

Transmission-based precautions and the precautionary principle

A definition for "transmission-based precautions" is being proposed to complement the definition for "route of transmission" since the type of infection control measures that are put in place are specific to the route of transmission. Based on feedback from some stakeholders at the public hearings, this is coupled with the inclusion of the proposed definition for the "precautionary principle" – a concept that is fundamental to occupational health and safety. In essence, the principle means that if one is faced with an unknown hazard, all precautionary measures ought to be considered.

For the purposes of this part this means that if a person is exposed to a more virulent and infectious form of a previously common benign virus and is exhibiting high morbidity, or to an unidentified biological agent for which the route of transmission is not known, the precautionary principle requires that one ought to consider a higher level of protection for the worker. As an example, if an agent is suspected or known to be transmitted through the air (such as the tuberculosis bacillus), airborne precautions apply. Hence, the worker needs to protect his or her respiratory tract and an approved respirator must be prescribed and worn.

If an agent is known to be transmitted solely by droplet means, respiratory protection would not be required. A surgical mask would suffice for droplet protection. However, where the infectious biological agent has not been identified or the agent's aetiology (aetiology can be defined as the science of disease causation and includes knowledge about the agent's life cycle, its biology, infectivity, virulence, among other factors) is unknown, or the route of transmission has not been clearly established, for example the transmission patterns for the influenza virus, and it is unclear whether transmission involves the droplet or airborne route or both, it is expected that the higher level of precautionary measures are implemented during an influenza pandemic. This means prescribing respiratory protection for workers (minimum N95 respirator) potentially exposed to the pandemic influenza virus such as during care of an infectious pandemic flu patient, as described in OHS Guideline G6.34-2.

Hence, it is deemed appropriate that the precautionary principle be considered at the initial stages of an infectious disease outbreak – a time of great uncertainty and a time to take those extra precautions by way of considering all necessary protective measures including the appropriate protective equipment in order to minimize or eliminate potential worker exposure.

Exposure control plan

To ensure consistency with the requirements for an "exposure control plan" as outlined in section 5.54, it is proposed that sections 6.35, 6.36, 6.38, and 6.41 be repealed and included as subsections to section 6.34. Risk identification, controls, education and training, records, among others, are all components of an exposure control plan. Hence,

- existing section 6.35 is proposed to be amended and renumbered as section 6.34 (1) (b),
- existing section 6.36 (1) is proposed to be amended and renumbered as section 6.34 (1) (c),
- existing section 6.36 (2) is proposed to be amended and renumbered as section 6.34 (1) (e),
- existing section 6.36 (3) is proposed to be amended and renumbered as section 6.34 (1) (d) (i),
- existing section 6.36 (4) is proposed to be amended and renumbered as section 6.34 (1) (d) (ii),
- existing section 6.36 (6) is proposed to be amended and renumbered as section 6.34 (1) (d),
- existing section 6.38 is proposed to be amended and renumbered as section 6.34 (1) (g), and
- existing section 6.41 is proposed to be amended and renumbered as sections 6.34 (1) (g) and 6.34 (1) (h).

Proposed new section 6.34 (1) (a), which complements the proposed changes to section 6.34, sets out the requirement for conducting a risk assessment for potential exposure to a biological agent by any route of transmission, and that the risk assessment must be carried out by a qualified person.

Stakeholders requested that a definition for a "qualified person". "Qualified" is defined in section 1.1 as "being knowledgeable of the work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof". In terms of Part 6, it means the person has knowledge of biological agents (microorganisms, infectious agents) microbiology, routes of transmission, infection control principles and experience in conducting hazard evaluations and risk assessments.

Labels and identification

Following feedback from stakeholders, the proposed amendments to section 6.37, "Labels and identification", have undergone further revision in recognition of the current practice of labeling samples with a biohazard symbol common to WHMIS and the *Controlled Products Regulations*. This practice is common to all health care facilities in BC. Furthermore, this means all

biohazardous samples are treated similarly using standard or routine infection control precautionary measures.

Vaccination

Further to feedback received during public consultation, the proposed amendment to section 6.39, “Vaccination”, was revised. This revision clarifies the responsibility of the employer to provide vaccinations for the Hepatitis B virus and any other biological agents for which vaccinations become available, provided that the worker is at risk of occupational exposure to the agent. The key defining terms for this section are “occupational exposure” and “biological agent” in determining the application of this section. Suitable vaccines for occupationally exposed workers are prescribed by the Immunization Program manual issued by the BC Centre for Disease Control and is referenced in a revised subsection (2). This would apply for newly available vaccines.

Medical evaluation

Based on consultation with stakeholders, the proposed amendment to section 6.40 (1), “Health protection” has been revised in order to clarify its application. Accordingly, the call-out has been renamed “Medical evaluation”. It is clarified that the responsibility of the employer is limited to advising the worker who may have been exposed to the human immunodeficiency virus (HIV), hepatitis B virus or any other biological infectious agent to seek immediate medical attention and evaluation. Current section 6.40 (2) is in error and has been deleted. The responsibility for evaluating the risk of exposure and any subsequent preventative or prophylactic treatment lies with the medical practitioner, not the employer.