

# HIGH RISK HAZARDS

## FIELD SUPPORT GUIDE - SUPERVISORS

BCEHS PATIENT CARE DELIVERY



# *HIGH RISK HAZARDS – FIELD SUPPORT GUIDE FOR SUPERVISORS*

## INTRODUCTION

This document was created to help BCEHS Supervisory staff work with crew members to identify and protect themselves from hazards that have been identified as high risk activities. The objective is not to use this, or any other document to train workers in safe work procedures, rather to aid supervisors and paramedics in identifying high risk activities and abstain from engaging in them. This document is designed to be used in conjunction with the High Risk Hazards – Field Support Guide and notification procedures outlined in the Duty Supervisor & District Manager Notification Matrix. The document does provide the current organizational direction that is expected when supervisors, dispatchers or crew have completed an assessment and have identified a potential unmanaged High Risk Hazard.

This guide is a living document. Changes will occur as dynamic operations make adjustments throughout the organization. Suggested updates, changes, additions, or alterations may be forwarded to your DOSH Committee, Regional Safety Officer, or Manager who will pass your comments along for consideration in future guide updates.

## VERSION HISTORY

- 4.02     June 17, 2016
- 4.03     Jan 9, 2018 – Corrected HRH4 Impact statement to reflect past and current practice of “Two PFDs have been provided on every ambulance” from prior version error stating “three”.

# SAFETY SUPERVISION

## PURPOSE

To ensure work is carried out as expected by maintaining positive supervision over the work activities. Employees are kept up to date of management decisions and action plans through periodic staff meetings, memos and internal e-mail. All employees are expected to work according to established written instruction. The supervisor and/or manager will immediately rectify any unsafe actions in accordance with proper corrective procedures.

## SCOPE

This element of the program applies to all BCEHS employees that have a supervisory role in the organization.

## RESPONSIBILITIES

### **Managers and Supervisors:**

- Are directly responsible for ensuring supervision is fair and unbiased;
- Ensure all policies, procedures and guidelines related to this section of the program are communicated and followed;
- Not expose workers to unmanaged high risk hazards;
- Ensure that workers are instructed in safe practices at the time they are given assignments and as the work progresses;
- Ensure that workers are able to demonstrate standard operating procedures;
- The required personal protective equipment (PPE) is supplied and the use of equipment is enforced, as required;
- Established safety policies, safety rules and job procedures are enforced and disciplinary action is taken where indicated, in accordance with provisions of the Collective Agreement;
- Risk assessments are conducted, and control measures are developed for identified hazards;
- Ensure that employees understand their roles and responsibilities under the OSH Program and are able to fulfill them effectively;
- Compliance with the WSBC OHS Regulation and Workers Compensation Act, as well as any other Acts, policies or regulations pertaining to BCEHS;
- The public is protected from the potential dangers of work being undertaken by BCEHS;
- Ensure resources to support supervision of employees are provided;
- Ensure that a safe and healthy work environment is promoted among the employees in the unit/department;

- Coach employees by establishing goals, action plans and time lines; and, mentor employees as needed

#### **Workers (Paramedics & Dispatchers)**

- Comply with operational direction in regards to High Risk Hazards;
- Conduct a proper scene assessment evaluating hazards, taking appropriate measures to ensure the safety of all emergency personnel and bystanders;
- Notify appropriate supervisor as directed in the Duty Supervisor & District Manager Notification matrix; or when unmanaged risks are identified;
- Take reasonable care to protect their health and safety and the health and safety of other persons – bystanders and other responders – who may be affected by their work;
- Use protective equipment, devices and clothing as required;
- Refuse to do work if they have reasonable cause to believe the work would create an undue hazard to the safety or health of any person;
- Report any incidents (injuries, contact/ exposures to an infectious agent, incident with the potential for causing serious injury) to their supervisor and the Workplace Health Call Centre (WHCC);
- Report unsafe conditions, equipment and acts to supervisors or management;
- Take an active role in protecting and promoting their own health and safety;
- Carry out their work in accordance with established standard operating procedures, and Exposure Control Plans;
- Refrain from activities which may jeopardize their own health and safety as well as the health and safety of others;
- Cooperate with the Workers' Compensation Board;
- set a good example for safety

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#### **APPLICABLE REGULATIONS AND STANDARDS**

##### **Workers Compensation Act Part 115 (1): General duties of employers**

*Every employer must ensure the health and safety of all workers working for that employer, and any other workers present at a workplace at which that employer's work is being carried out, and comply with this Part, the regulations and any applicable orders. An employer must provide to the employer's workers the information, instruction, training and supervision necessary to ensure the health and safety of those workers in carrying out their work and to ensure the health and safety of other workers at the workplace*

Additional regulations:

- Workers' Compensation Act Part 3 Division 3 115 (2) (e) General Duties of employers
- Workers' Compensation Act Part 3 Division 12 191 (3) (b) Enforcement
- WorkSafeBC Regulation 3.3 Contents of Program

- WorkSafeBC Regulation 6.34 (1) (f) Exposure Control Plan
- WorkSafeBC Regulation 6.51 Supervision
- WorkSafeBC Regulation 9.7 Supervision
- WorkSafeBC Regulation 16.4 (2) Competency of operators

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## DEFINITIONS

**Supervisor** – a person who instructs, directs or otherwise controls workers in the performance of their duties. In BCEHS this can include: Excluded Manager, Duty Supervisor, Dispatch Supervisor/Charge Dispatcher, Dispatch Officer, Unit Chief, Technical Advisor, ETP/PRP (EPOS), instructor, and preceptor or anyone in an Acting position.

**Hazard** – An unsafe condition or practice that creates a risk of injury or illness to an employee.

**D5 “All Hazards”** – BCEHS procedure related the management of hazards and to the activation of the BCEHS Technical Advisor.

**CBRNE TA** – BCEHS Technical Advisor program provides real-time technical information to on-site supervisors and crews regarding hazardous substance and chemical, biological radioactive, nuclear and explosive (CBRNE) responses throughout the province. Working in conjunction with each Dispatch Centre, the technical advisors and supervisors provide a solid 'first line of defence' towards protecting personnel and first receiver sites.

**High Risk Hazard** – substance or situation whose potential for causing injury or illness, damage to property and damage to the workplace environment is especially acute.

**High Risk Hazard CAD Message** – Pre-scripted messages designed to convey information related to employees' activity near high risk hazards. These messages might be delivered to the mobileCAD terminal automatically based on the MPDS assessment, or added by the dispatcher based on the circumstances of the response.

**Industrial Area** – Areas allocated for industry within a town-planning scheme or environmental plan. The range of industries accommodated in a plan may include: light industry, service industry, general industry, hazardous, noxious or offensive industry, waterfront industry, extractive industry. Many hazards exist within industrial areas so standards are usually defined relating to access and roads, drainage, car parking, aesthetics, landscaping, buffer zones, noise levels, and air and water pollution. Typically, an industrial area is restricted to employees only and general public access is denied.

**Avalanche Risk Area** – Area that has been mapped and defined as having potential for avalanche by an Avalanche Technician or is recognized as potential avalanche terrain.

**Confined Space** – A confined space is an enclosed or partially enclosed area that is big enough for a worker to enter. It is not designed for someone to work in regularly, but workers may need to enter the confined space for tasks such as inspection, cleaning, maintenance, and repair. A small opening, a high opening, or a layout with obstructions can make entry and exit difficult and can complicate rescue procedures.

Entry into confined spaces can be very hazardous. Workers must not be allowed to enter such spaces unless proper training, equipment, and procedures are in place. Significant risk exists to workers entering a confined space without appropriate training and PPE.

**Mine Site – includes**

- a) a place where mechanical disturbance of the ground or any excavation is made to explore for or to produce coal, mineral bearing substances, placer minerals, rock, limestone, earth, clay, sand or gravel,
- b) all cleared areas, machinery and equipment for use in servicing a mine or for use in connection with a mine and buildings other than bunkhouses, cook houses and related residential facilities,
- c) all activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation,
- d) closed and abandoned mines, and
- e) a place designated by the chief inspector as a mine;

**MPDS** – Medical Priority Dispatch System – The tool that dispatch uses to assess incoming requests for service

**Poor Communications** – Refers to the risk that is created through lack of communication. This can be between partners, agencies, crew and dispatch and others.

**Dynamic Environment** – Refers to the potential risk created by the ever changing nature of pre-hospital work. Requires employees to remain aware of the evolving environment.

**Depths** – Can include trenches, excavations, holes

**Slopes & Inclines** – Can include ditches, banks of rivers or highways

**Water** - refers to any body of water where a risk of drowning exists

## HRH1 - RISK OF AVALANCHE

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Moving snow/debris</li> <li>• Confined Space</li> <li>• Heavy Debris</li> <li>• Cold</li> <li>• Wet</li> <li>• Environment (Weather)</li> <li>• Slope</li> </ul>	<ul style="list-style-type: none"> <li>• Being hit/moved/ buried by moving snow/debris</li> <li>• Suffocation / Asphyxiation</li> <li>• Hypothermia</li> <li>• Trauma/ Injury</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>Before a person carries out work ... the employer must ensure that written safe work procedures are in place to minimize the risks associated with an avalanche, and the person understands the risks associated with an avalanche, and is trained in the procedures.</p> <p>Part 4. Buildings, Structures, Equipment and Site Conditions</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/part4.asp#SectionNumber:4.1.1">http://www2.worksafebc.com/Publications/OHSRegulation/part4.asp#SectionNumber:4.1.1</a></p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/part4.asp#SectionNumber:4.1.2">http://www2.worksafebc.com/Publications/OHSRegulation/part4.asp#SectionNumber:4.1.2</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/c/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/c/complete/statreg/96492_03</a></p>	<p>No employee is to enter an area at risk of avalanche unless an assessment has been undertaken and they are doing so under the guidance of an avalanche technician.</p> <p>Crews are not to engage in rescue activities.</p> <p>If risk is identified in call taking procedure Dispatch to stage crews until clearance is received from an avalanche technician.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p> <p>Support Documentation:</p> <p>Winter Preparation</p> <p>BCEHS Avalanche Safety – Interim Procedures</p> <p><a href="https://intranet.bcas.ca/programs/winter-prep/">https://intranet.bcas.ca/programs/winter-prep/</a></p>	<p>Delays in responding to patients side if the MVI or event is inside an MOTI “avalanche no stopping zone” or there is a risk of avalanche along any resource roads.</p> <p>Delays in accessing patients on any event involving an avalanche or area at risk of avalanche</p> <p>An Avalanche technician will need to assess the risk prior to BCEHS staff working in the zone. An avalanche response plan will need to be in place.</p> <p>Delays in Patient care and transport.</p> <p>Crews will not know individual worksite rescue protocols</p> <p>BCEHS RESPONSE if avalanche technician not available, or SAR/FR not able to respond</p> <p>Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p><i>No change in back country response.</i></p>



## HRH2 - WORKING AROUND POWERED MACHINERY & EQUIPMENT

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Moving conveyor belts/production equipment</li> <li>• Powered hand held or stand-alone machinery</li> <li>• Working around de-energized equipment and machinery that may still be under other forces</li> <li>• Noise</li> <li>• Vision</li> <li>• Odor</li> <li>• Vibration</li> <li>• rotating shafts</li> <li>• in-running nip points</li> <li>• shearing parts</li> <li>• reciprocating parts</li> <li>• punching action</li> <li>• impact hazards</li> <li>• flying debris</li> <li>• abrasive surfaces</li> <li>• Electrical hazards</li> <li>• Hot/toxic fluids</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Radiation</li> <li>• Fuels</li> </ul>	<ul style="list-style-type: none"> <li>• Being struck by/caught in equipment</li> <li>• Not having proper PPE</li> <li>• Entanglement</li> <li>• Trauma/ Injury</li> <li>• Carbon Monoxide or other Atmosphere</li> <li>• Electrocutation</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>If the unexpected energisation or start-up of machinery or equipment or the unexpected release of an energy source could cause injury, the energy source must be isolated and effectively controlled.</p> <p>Part 10. De-energize and Lockout</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part10.asp#SectionNumber:10.2">http://www2.worksafebc.com/Publications/OHSRegulation/Part10.asp#SectionNumber:10.2</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p> <p><a href="http://www.worksafebc.com/publications/health_and_safety/by_topic/equipment_and_machinery/default.asp?_ga=1.244856197.1290533697.1457802504">http://www.worksafebc.com/publications/health_and_safety/by_topic/equipment_and_machinery/default.asp?_ga=1.244856197.1290533697.1457802504</a></p>	<p>Employees are not permitted to work around machinery/ equipment unless it is verified that the machinery/ equipment is de-energised.</p> <p>Verification of de-energisation must be provided by the owner/operator or rescue.</p> <p>Crews are not to engage in rescue activities.</p> <p><i>UNCONTROLLED SITES/Machinery/Equipment</i></p> <p>Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. Crews will need to request assistance (Owner/Operator/Fire/Recue/etc.) through dispatch.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side while machinery/equipment is being de-energised.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>Delays in Patient care and transport.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p>

## HRH3 - WORKING AROUND MOVING VEHICLES & EQUIPMENT

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Moving vehicles including but not limited to cars, trucks, trains, buses, aircraft, forklifts, ATV's, snowmobiles etc.</li> <li>• Noise</li> <li>• Vision</li> <li>• Odor</li> <li>• Vibration</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Radiation</li> <li>• Fuels</li> </ul>	<ul style="list-style-type: none"> <li>• Being struck by/caught in equipment</li> <li>• Being struck by a vehicle</li> <li>• Trauma/ Injury</li> <li>• Carbon Monoxide or other Atmosphere</li> <li>• Poor Communication</li> <li>• Burns</li> <li>• Fatality</li> </ul>	<p>A worker exposed to the hazards of vehicles travelling at speeds in excess of 30 km/h (20 mph) must wear high visibility apparel meeting the Type 1 or Type 2 criteria of WCB Standard Personal Protective Equipment Standard 2-1997, High Visibility Garment. A worker whose duties on the work site result in exposure to the hazards of mobile equipment must wear high visibility apparel meeting at least the Type 3 criteria of WCB Standard Personal Protective Equipment Standard 2-1997, High Visibility Garment.</p> <p>Part 8 Personal Protective Clothing and Equipment</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.24">http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.24</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p> <p>Canada Labour Code, Canada Occupational Health and Safety Regulations, Part xii.</p> <p>Protection against Moving Vehicles</p> <p>12.13 Where an employee is regularly exposed to contact with moving vehicles</p>	<p>All employees working around moving vehicles to wear high visibility apparel.</p> <p>In the event the patient cannot be brought to the ambulance in workplaces and non public sites, paramedics must be escorted to the patient by:</p> <ul style="list-style-type: none"> <li>• Industry site personnel or owner/operator using the safest route possible.</li> <li>• For public sites/roads crews can be escorted by RCMP or someone in charge of traffic control.</li> </ul> <p>Employees may direct the stoppage of vehicles and equipment to provide scene safety but are not to provide traffic control (flagging).</p> <p>Crews are not to engage in rescue activities.</p> <p>Employees are not permitted to perform search and rescue operations. In addition, employees are also not permitted to ride on any mobile equipment, machinery or a vehicle that is <u>not</u> one of the following:</p> <ul style="list-style-type: none"> <li>• BCEHS property or,</li> <li>• Subcontracted by BCEHS for the purpose of transporting a</li> </ul>	<p>Delay in responding to patient's side while traffic control or equipment measures need to be implemented.</p> <p>BCEHS RESPONSE – if Police/Rescue/Fire/SAR/FR/site Operators are not able to respond or are delayed and if crews are not able to ensure scene safety Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Delays in patient care maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p>

		<p>during his work, he shall</p> <p>(a) wear a high-visibility vest or other similar clothing, or</p> <p>(b) be protected by a barricade that is readily visible under all conditions of use.</p>	<p>patient or,</p> <ul style="list-style-type: none"><li>• NHA Transportation Bus</li><li>• Coast Guard or,</li><li>• BC Ferries or, Water Taxis</li><li>• Police, fire or, corrections vehicle (employee must be orientated to the vehicle in case of emergency where practicable).</li><li>• Public transportation (sky train/ gondola/ taxi/ train/ planes/ buses)</li></ul> <p>Any exceptions will require an SOP (ex. Sicamous Rescue boat, Hartly Bay Gator, Private Ambulance, etc.)</p>	
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## HRH4 - WORKING AROUND WATER

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Dynamic Environment</li> <li>• Boats, Vessels</li> <li>• Tides</li> <li>• Currents</li> <li>• Waves</li> <li>• Cold</li> <li>• Environment (Weather)</li> <li>• Contaminated water</li> <li>• Swift water</li> <li>• Floating Debris</li> <li>• Docks/Wharfs</li> </ul>	<ul style="list-style-type: none"> <li>• Being struck by or fall in or immersed/submersed in water</li> <li>• Struck by, cut and/or trapped by floating debris</li> <li>• Drowning</li> <li>• Hypothermia</li> <li>• Trauma / injury</li> <li>• Health hazards</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>A worker who is employed under conditions which involve a risk of drowning must wear a personal flotation device (PFD) or lifejacket with sufficient buoyancy to keep the worker's head above water.</p> <p>A personal flotation device need not be worn when a personal fall protection system, guardrail or safety net is being used in accordance with the relevant requirements in Part 11 (Fall Protection) to prevent a fall into the water.</p> <p>Part 8 Personal Protective Clothing and Equipment</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.27">http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.27</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Any employee working near water where guardrails are not in place must wear a personal floatation device.</p> <p>Employees are not to enter the water or water ice surfaces to rescue patients/victims.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Two PFDs have been provided on every ambulance.</p> <p>BCEHS RESPONSE – if Police/Rescue/Fire/SAR/FR/site Operators/Coast Guard/etc. are not able to respond or are delayed. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Delays in patient care maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH5 - FLOODING

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Swift water</li> <li>• Floating Debris</li> <li>• Unstable banks</li> <li>• Electrical – downed power lines</li> <li>• Contaminated water</li> <li>• Tides</li> <li>• Currents</li> <li>• Waves</li> <li>• Wind</li> <li>• Cold</li> <li>• Environment (Weather)</li> <li>• Swift water</li> <li>• Pollution</li> <li>• Chemicals</li> <li>• Fertilizer/ Pesticides</li> <li>• Wildlife</li> <li>• Domestic Animals</li> <li>• Sewage</li> <li>• Oil or chemical waste.</li> </ul>	<ul style="list-style-type: none"> <li>• Being struck by or fall in or immersed/submersed in water</li> <li>• Struck by, cut and/or trapped by floating debris</li> <li>• Electrocutation</li> <li>• Health hazards</li> <li>• Drowning</li> <li>• Hypothermia</li> <li>• Trauma / injury</li> <li>• Poor Communication</li> <li>• Fatality</li> <li>• Chemical Burns</li> <li>• 60 centimeters (2 feet) of moving water can cause a vehicle to be swept away.</li> <li>• 15 centimeters of water can cause unstable footing.</li> <li>• Stagnant Water</li> <li>• (bacteria and mold).</li> </ul>	<p>Rescue entails: Training and regular re-training of workers; proper equipment and PPE; maintenance and equipment inspections and replacements; record keeping; and regular drills.</p> <p>BCEHS Crews are <i>not</i> to perform rescues of any nature.</p> <p>Part 32 <a href="#">Evacuation and Rescue</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews are not to engage in rescue activities.</p> <p>HUSAR trained staff are exempted from this direction if they are responding as part of CANDF1.</p> <p>Crews are <i>not</i> to perform rescues of any nature. This includes but is not limited to swift water rescue, traversing over flooded plains. Crews should not stop on bridges or linger near slide areas or riverbanks that are experiencing high flows</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p> <p>Crews must wear PFD and PPE as indicated</p>	<p>Delays in Patient care and transport.</p> <p>BCEHS RESPONSE – if Police/Rescue/Fire/SAR/FR/site Operators/Coast Guard/etc. are not able to respond or are delayed. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Delays in patient care maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH6 - CONFINED SPACES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Confined spaces including but not limited to silos, vats, hoppers, utility vaults, tanks, sewers, pipes, access shafts, truck or rail tank cars, aircraft wings, boilers, manholes, manure pits, storage bins, ditches and trenches. Any enclosed area that work does not normally take place.</li> <li>Carbon Dioxide</li> <li>Carbon Monoxide</li> <li>Methane</li> <li>Ammonia</li> <li>Hydrogen Sulfide</li> <li>Poor to no ventilation</li> <li>No oxygen</li> <li>Entrapment</li> <li>Engulfment</li> <li>Biological exposure</li> <li>Explosive atmosphere</li> <li>Ignitable Atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>Being trapped in confined spaces</li> <li>Being exposed to substances within confined spaces</li> <li>Trauma/ Injury</li> <li>Carbon Monoxide or other Atmosphere</li> <li>Suffocation / Asphyxiation</li> <li>Exposure</li> <li>Hypothermia</li> <li>Hyperthermia</li> <li>Poor Communication</li> <li>Fatality</li> </ul>	<p>"confined space", except as otherwise determined by the Board, means an area, other than an underground working, that is enclosed or partially enclosed, is not designed or intended for continuous human occupancy, has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue or other emergency response service, and is large enough and so configured that a worker could enter to perform assigned work.</p> <p>Before a worker is required or permitted to enter a confined space, the employer must prepare and implement a written confined space entry program. BCEHS does not have a program for confined space.</p> <p>Part 9. Confined Spaces</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part9.asp#SectionNumber:9.4">http://www2.worksafebc.com/Publications/OHSRegulation/Part9.asp#SectionNumber:9.4</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>No employee is permitted to enter a confined space.</p> <p>Crews to stage in a safe location and have patients brought to them.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Crews are not to engage in rescue activities.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delays in Patient care and transport.</p> <p>BCEHS RESPONSE – if Rescue/Fire/SAR/FR/site Operators/etc. are not able to respond or are delayed. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Delays in patient care maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>



## HRH7 - WORKING AT HEIGHTS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Areas or structures at a height above the ground including but not limited to buildings, machinery, ladders, scaffolding, bridges, wharfs ,</li> <li>Stairwells, escalators, stages, back decks, patios, balconies, observation platforms, fences, suspended scaffolds, scissor lifts.</li> </ul>	<ul style="list-style-type: none"> <li>Falling from a height</li> <li>Trauma/ Injury</li> <li>Loss of balance / unstable platform</li> <li>Weight</li> <li>Access / Egress</li> <li>Not having proper PPE or fall protection</li> <li># of people</li> <li>Poor Communication</li> </ul>	<p>An employer must ensure that a fall protection system is used when work is being done at a place from which a fall of 3 m (10 ft.) or more may occur, or where a fall from a height of less than 3 m involves a risk of injury greater than the risk of injury from the impact on a flat surface.</p> <p>Part 11. Fall Protection</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part11.asp#SectionNumber:11.2">http://www2.worksafebc.com/Publications/OHSRegulation/Part11.asp#SectionNumber:11.2</a></p> <p>Part 13 Ladders, Scaffolds and Temporary Work Platforms</p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews are not to engage in rescue activities.</p> <p>Crews to stage in a safe location and have patients brought to them.</p> <p>Employees are not permitted to work at heights above 4ft unless the area is enclosed by permanent guardrails. Employees are not permitted to work above 10ft unless a fall protection system is in place – which includes permanent guardrails. If working on a flat roof employees must remain 6.5ft from the edge. Employees are not permitted to access ladders, scaffolds or temporary work platforms.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>



## HRH8 - WORKING AROUND BLASTING & EXPLOSIONS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Blasts or explosions</li> <li>• Noise</li> <li>• Vision</li> <li>• Odor</li> <li>• Vibration</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Radiation</li> </ul>	<ul style="list-style-type: none"> <li>• Contact with blast/explosive devices</li> <li>• Concussive impact of blasts/explosions</li> <li>• Being hit or stuck by debris as a result of blasts/explosions</li> <li>• Buried by debris</li> <li>• Trauma/ Injury / Burns / Overpressure</li> <li>• Atmosphere</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p><i>"blasting operation"</i> includes preparing, placing, and firing a charge, handling a misfire, and destroying or disposing of explosive materials;</p> <p>Part 20 Construction, Excavation and Demolition</p> <p>Part 21 <a href="#">Blasting Operations</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews are not to engage in rescue activities.</p> <p>No employee is to enter an area where blasting or demolition is taking place.</p> <p>Crews to stage in a safe location and have patients brought to them.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH9 - PRESSURE WASHING & BLASTING

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Pressure blasting tools such as, but not limited to high pressure washers, sand blasting, etc...</li> <li>Inhalation</li> <li>Noise</li> <li>Vision</li> <li>Cables / Hoses</li> <li>Wet surfaces</li> <li>Slip / Fall</li> <li>Electricity</li> <li>Glass</li> <li>Signage</li> <li>Fuels</li> <li>N95 respirator is not adequate protection</li> </ul>	<ul style="list-style-type: none"> <li>Trauma/ Injury</li> <li>Carbon Monoxide or other Atmosphere</li> <li>Electrocution</li> <li>Exposure to debris/physical forces</li> <li>Poor Communication</li> </ul>	<ul style="list-style-type: none"> <li>Safety eyewear with side protectors should be used when there is a hazard from flying objects</li> </ul> <p>Part 12 Tools, Machinery and Equipment (sections 12.97-12.111)</p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Do not enter a scene until these procedures have stopped and you have confirmed with the contractor, owner or employer that you will not be exposed to a hazard. (ECP – Part 1).</p> <p>Crews are not to engage in rescue activities.</p> <p>No employee is to enter an area where pressure washing/blasting is taking place or the system is under pressure.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH10 - WORKING AT DEPTHS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Natural or man-made structures below ground level</li> <li>• fire</li> <li>• physical forces</li> <li>• Noise</li> <li>• Vision</li> <li>• Vibration</li> <li>• Electrical hazards</li> <li>• Hot/toxic fluids</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Carbon Monoxide</li> <li>• Methane</li> <li>• Ammonia</li> <li>• Hydrogen Sulfide</li> <li>• Poor to no ventilation</li> <li>• No oxygen</li> <li>• Entrapment</li> <li>• Engulfment</li> <li>• Biological exposure</li> <li>• Explosive atmosphere</li> <li>• Ignitable Atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>• Being trapped in/crushed</li> <li>• Being exposed to substances</li> <li>• Struck by, cut and/or trapped</li> <li>• Electrocution</li> <li>• Health hazards</li> <li>• Exposure</li> <li>• Trauma / injury</li> <li>• Inhalation</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>Before a worker enters any excavation over 1.2 m (4 ft.) in depth or, while in the excavation, approaches closer to the side or bank than a distance equal to the depth of the excavation, the employer must ensure that the sides of the excavation are sloped, benched and supported.</p> <p>Part 20 Construction, Excavation and Demolition</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part20.asp#SectionNumber:20.81">http://www2.worksafebc.com/Publications/OHSRegulation/Part20.asp#SectionNumber:20.81</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Employees are not permitted to enter or work in excavations over 1.2m/4ft in depth.</p> <p>Crews are not to engage in rescue activities.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Do not enter a scene until these procedures have stopped and you have confirmed with the contractor, owner or employer that you will not be exposed to a hazard. (ECP – Part 1).</p> <p>Sloping/ Shoring and other mitigation measures must be in place to ensure the hazard has been addressed. (see educational bulleting for Excavation)</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH11 - WORKING AROUND FIRE, FLAMES, AND LIGHTNING

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Dynamic Environment</li> <li>• Explosions</li> <li>• Noise</li> <li>• Electricity</li> <li>• Vapours Emissions</li> <li>• Environment (Weather)</li> <li>• Heat</li> <li>• Poor to no ventilation</li> <li>• No oxygen</li> <li>• Entrapment</li> <li>• Engulfment</li> <li>• Secondary Explosion</li> </ul>	<ul style="list-style-type: none"> <li>• Being exposed to excessive heat</li> <li>• Being hit or struck by sparks/flames</li> <li>• Being trapped in burning areas</li> <li>• Being hit or struck by debris</li> <li>• Being exposed to fumes of burning substances</li> <li>• Smoke inhalation</li> <li>• Electrocutation</li> <li>• Trauma / Injury / Burns</li> <li>• Hyperthermia</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>31.6 Rest and rehabilitation</p> <p>The incident commander must make suitable provision for rest and rehabilitation for firefighters at an emergency incident.</p> <p>Part 31 <a href="#">Firefighting</a></p> <p>Part 32 <a href="#">Evacuation and Rescue</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Intentional and unintentional fires – stage in a safe location and contact TA</p> <p>Fire Standby</p> <p>Workers are to ensure that in the event they are dispatched to a fire (to provide Rest and Rehydration to Fire Crews) or on standby to assist during Wildfire season they remember to rehydrate frequently.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH12 - WORKING NEAR OIL & GAS PIPELINES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<p>The major risks with any oil &amp; gas emergency are:</p> <ul style="list-style-type: none"> <li>• Fire</li> <li>• Multiple Chemical, Hydrocarbon products</li> <li>• Multiple methods of exposure, Atmosphere, dermal, inhalation</li> <li>• Explosion Asphyxiation</li> <li>• Dynamic Environment</li> <li>• Noise</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Environment</li> <li>• (Weather)</li> <li>• Carbon Monoxide</li> <li>• Methane</li> <li>• Ammonia</li> <li>• Hydrogen Sulfide</li> <li>• Poor to no ventilation</li> <li>• Engulfment</li> <li>• Explosive atmosphere</li> <li>• Ignitable Atmosphere</li> <li>• Confined Spaces and associated hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure to:</li> <li>• Fire</li> <li>• Toxic gas</li> <li>• Trauma / Injury</li> <li>• Exposure</li> <li>• Poor Communication</li> <li>• Not having proper PPE</li> <li>• Carbon Monoxide or other Atmosphere</li> <li>• Fatality</li> </ul>	<p>The employer must analyze the risks arising out of the work activities or circumstances identified and implement safe work procedures if the activities or circumstances create a hazard.</p> <p>Part 23 <a href="#">Oil and Gas</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>4.18 <a href="#">Notification of utility service providers</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Do not enter a scene until these procedures have stopped and you have confirmed with the contractor, owner or employer that you will not be exposed to a hazard. (ECP – Part 1).</p> <p>Sites requiring specific training or PPE (ex. H<sub>2</sub>S) crews will be staged in a safe area and will not enter the site. Watch for PPE signage during your scene assessment.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH13 – WORKING AROUND ANIMALS & WILDLIFE

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Wildlife in domestic, rural or backcountry settings</li> <li>Wildlife hit by vehicles</li> <li>Domestic animals</li> <li>Blood and body fluids (BBF)</li> <li>Zoonotic transmission</li> </ul>	<ul style="list-style-type: none"> <li>Being bitten, struck or attacked by animals</li> <li>Being exposed to diseases animals may carry</li> <li>Trauma / Injury</li> <li>Exposure</li> <li>Inhalation</li> <li>Rabies (Bats)</li> <li>Poor Communication</li> </ul>	<p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Domestic Animals:</p> <p>DISPATCH – request animals be locked up or secured prior to crews arrival if you know or suspect an animal is present.</p> <p>Crews should ensure they request family members to lock up and or secure all domestic animals that may be present in the home so they may assess the patient.</p> <p>Wildlife:</p> <p>Do not proceed into back country or areas of the attack – have patient brought to you. If wildlife is suspected ensure you contact dispatch to request conservation officer, animal control or RCMP presence.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/wildlife or animal control is not available. Crews will need to be stage in safe zone until the animal/wildlife concern has been managed or the patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p>

## HRH14 - WORKING AROUND AIRCRAFT

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Moving or stationary aircraft, vehicles or machinery</li> <li>• Dynamic Environment</li> <li>• Fuel</li> <li>• Noise</li> <li>• Vibration</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Environment</li> <li>• (Weather)</li> </ul>	<ul style="list-style-type: none"> <li>• Contact with aircraft propeller or engines</li> <li>• Being hit or stuck by aircraft, vehicles or mobile machinery</li> <li>• Being exposed to substances</li> <li>• Flying debris and dust</li> <li>• Trauma / Injury</li> <li>• Inhalation</li> <li>• Poor Communication</li> </ul>	<p>The employer must provide written safe work procedures for workers who are exposed to hazards from aircraft operations, ensure that workers are provided with adequate pre-job instruction and that the instruction is documented, and ensure that workers can demonstrate the ability to safely perform their tasks as required.</p> <ul style="list-style-type: none"> <li>• Safety eyewear with side protectors should be used when there is a hazard from flying objects</li> <li>• Hi Vis Apparel</li> </ul> <p>Part 29 Aircraft Operations</p> <p><a href="http://www2.worksafebc.com/publications/OHSRegulation/Part29.asp#SectionNumber:29.3">http://www2.worksafebc.com/publications/OHSRegulation/Part29.asp#SectionNumber:29.3</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>NO – Hot debarking (unless specifically exempted)</p> <p>Hi- Vis required</p> <p>Crews are not to approach a running aircraft. **this direction requires further review**</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to work with the local airport authority or contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Training for both air and ground crews is required.</p> <p>If only currently trained staff (Air crews) responding there will be delays in patient care and transport.</p> <p>Need to affirm who is responsible for crews on the air side and ensure that proper protocols are in place.</p>

## HRH15 - WORKING AROUND MINES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Natural or man-made structures below ground level</li> <li>• fire, unplanned explosion, hazardous atmosphere or other hazardous condition</li> <li>• Physical forces</li> <li>• Noise</li> <li>• Vision</li> <li>• Odor</li> <li>• Vibration</li> <li>• Hot/toxic fluids</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Radiation</li> <li>• Carbon Dioxide</li> <li>• Methane</li> <li>• Ammonia</li> <li>• Hydrogen Sulfide</li> <li>• Poor to no ventilation</li> <li>• No oxygen</li> <li>• Entrapment</li> <li>• Engulfment</li> <li>• Biological exposure</li> <li>• Explosive atmosphere</li> <li>• Ignitable Atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>• Struck by object hazards,</li> <li>• Loose/ unstable/ slippery surfaces;</li> <li>• Caught in between objects;</li> <li>• Cave ins, blasting hazards,</li> <li>• Confined space hazards,</li> <li>• Mobile machinery and equipment hazards, falling objects, trip hazards, dust, etc. . .</li> <li>• Trauma / Injury</li> <li>• Poor Communication</li> <li>• Exposure</li> <li>• Not having proper PPE</li> <li>• Carbon Monoxide or other Atmosphere</li> <li>• Fatality</li> </ul>	<p>"mine" includes</p> <p>(a) a place where mechanical disturbance of the ground or any excavation is made to explore for or to produce coal, mineral bearing substances, placer minerals, rock, limestone, earth, clay, sand or gravel,</p> <p>(b) all cleared areas, machinery and equipment for use in servicing a mine</p> <p>(c) all activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation,</p> <p>(d) closed and abandoned mines, and</p> <p>(e) a place designated by the chief inspector as a mine;</p> <p>Part 22 Underground Workings</p> <p>Mines Act  <a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96293_01">http://www.bclaws.ca/civix/document/id/complete/statreg/96293_01</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)  <a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>No employee is permitted to enter a confined space.</p> <p>Crews are not to engage in rescue activities.</p> <p>Crews will not enter the scene until mining operations have stopped and have confirmed with the contractor, owner or employer that there will not be exposure to a hazard.</p> <p>Prior to accessing any mine site crews must contact the TA and liaise with site personnel to ensure the route and activity is safe. Crew have the proper PPE and will be escorted to the patient side and escorted back out of the mine site</p> <p>Crews must wear hi-vis apparel and hard hat when entering a mine site.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>



## HRH16 - WORKING AROUND ELECTRICITY

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Power lines, power sources, power plants, underground services</li> <li>Electricity</li> <li>Power poles</li> <li>Transmission lines</li> <li>Transformers</li> <li>Fire</li> <li>Explosion</li> <li>Falling hazards</li> <li>Lines down</li> <li>Contact with a line</li> <li>Unseen power lines</li> </ul>	<ul style="list-style-type: none"> <li>Contact with electrical sources resulting in burns/electrocution</li> <li>Trauma / Injury / Burns / Electrocution</li> <li>Exposure</li> <li>Poor Communication</li> </ul>	<p>A worker must be informed of the potential electrical hazards before being permitted to do work in proximity to energized electrical conductors or equipment.</p> <p>Workers should know the Limits of Approach (LOA)</p> <p>Part 19 Electrical Safety</p> <p><a href="http://www2.worksafebc.com/publications/OHSRegulation/Part19.asp#SectionNumber:19.5">http://www2.worksafebc.com/publications/OHSRegulation/Part19.asp#SectionNumber:19.5</a></p> <p>4.18 <a href="#">Notification of utility service providers</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p> <p>19.24.1 Minimum approach distance when working close to exposed electrical equipment and conductors</p> <p>19.24.2 Minimum clearance distance when passing under exposed electrical equipment and conductors</p>	<p>A 10-meter perimeter must not be entered around all power lines involved in incidents – this includes vehicles that have contacted a power line – and must be maintained until a BC Hydro crew arrives on scene and provides a face-to-face confirmation to the incident commander that it is safe for responders to enter that safety perimeter.</p> <p>Crews are not to engage in rescue activities.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/Hydro/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue or electrical lockout safety protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>



## HRH 17 - WORKING AROUND FALLING HAZARDS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Natural and manmade objects including but not limited to trees, rocks, tools</li> </ul>	<ul style="list-style-type: none"> <li>Being hit/stuck by falling objects</li> <li>Being caught in between moving objects</li> <li>Trauma / Injury</li> <li>Not having proper PPE</li> <li>Poor Communication</li> </ul>	<p>Safety headgear must be worn by a worker in any work area where there is a danger of head injury from falling, flying or thrown objects, or other harmful contacts.</p> <p>Part 8 Personal Protective Clothing and Equipment</p> <p><a href="http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.11">http://www2.worksafebc.com/Publications/OHSRegulation/Part8.asp#SectionNumber:8.11</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Most areas where there is a risk of being struck or hit by a falling/ moving or flying object the workspace will have signage to indicate what PPE is to be worn. If the patient cannot be brought to you in a safe area, crews may be escorted on site. In the event this happens the crew must don all appropriate PPE available to them with regards to the hazards present (hi-vis vest; safety headgear; safety glasses etc...). Crews are to perform a continuous risk assessment while on scene.</p> <p>Crews will not enter a work area where an unmanaged risk of falling object hazard has been identified.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH18 - WORKING ON RESOURCE OR ACCESS ROADS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Moving vehicles and equipment including but not limited to logging trucks and excavation equipment</li> <li>• Unpaved roads</li> <li>• Dangerous trees, loose rocks, stumps, or other unstable materials that are hazardous to road users.</li> <li>• Brush, foliage or debris which prevents an adequate view by a vehicle operator and other hazards created by limited sight distance.</li> <li>• Environment</li> <li>• Serious weather conditions</li> <li>• See linkages i.e. Working in and around Slopes or Inclines</li> </ul>	<ul style="list-style-type: none"> <li>• Being hit or struck by moving vehicles and equipment</li> <li>• Loss of control of vehicle</li> <li>• Wildlife</li> <li>• Avalanche/ slide/fire</li> <li>• Flash flood</li> <li>• Bridge damage</li> <li>• Bridge washout</li> <li>• Road washout</li> <li>• Poor Communication</li> <li>• Trauma / Injury</li> <li>• Lost</li> <li>• Vehicle Breakdown</li> <li>• Fuel</li> <li>• Food, water</li> <li>• Wildlife</li> </ul>	<p>Workers should be made aware of the hazards and communication requirements when travelling or accessing resource roads.</p> <p>OHSR Sections</p> <p>26.82 Roadside hazards</p> <p>26.83 Traffic control systems</p> <p>26.83.1 Radio traffic control</p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Travel on active roadway is acceptable if NOT stopping in avalanche area/zone/ terrain.</p> <p>Crews will perform a scene assessment upon arrival and if necessary stage in a safe/cold zone until it has been determined that the risk level is acceptable.</p> <p>Assess terrain for avalanche or debris slide risk.</p> <p>Events where crew is unable to drive to scene or walk to the patient - cannot access patient safely require SEARCH AND RESCUE - Crews to stage in cold zone and await the patient to be brought to them.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/ /etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Communications – may be an issue depending on environmental conditions</p> <p>Wildlife encounters</p>

## HRH19 - BACK COUNTRY RESPONSE

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Dangerous trees, loose rocks, stumps, or other unstable materials that are hazardous to walk on.</li> <li>• Brush, foliage or debris which prevents an adequate view of other hazards created by limited sight distance.</li> <li>• Environment</li> <li>• Weather</li> <li>• Avalanche/ slide/fire</li> <li>• Flash flood</li> <li>• Wildlife</li> <li>• No food or water</li> <li>• Slips/ Trips/falls</li> </ul>	<ul style="list-style-type: none"> <li>• Being bitten, struck or attacked by animals</li> <li>• Being exposed to diseases animals may carry</li> <li>• Trauma / Injury</li> <li>• Exposure to Elements</li> <li>• Rabies (Bats)</li> <li>• Poor Communication</li> <li>• Dehydration/ Malnutrition</li> <li>• Hypothermia</li> <li>• Cuts/bruise</li> <li>• MSI</li> </ul>	<p>Workers should be made aware of the hazards and risks of responding to Back country events.</p> <p>Crews are not trained nor equipped for back country rescue situations.</p> <p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers should be aware of any policies, procedures and regulatory requirements with regards to these types of tasks.</p> <p>Supervision for workers.</p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Stage in a safe/cold zone until it has been determined that the risk level is acceptable.</p> <p>Remember to assess for Avalanche risks.</p> <p>Crews are not to engage in search and rescue activities.</p> <p><b>Events where crew is unable to drive to scene or walk to the patient safely based on your BCEHS Equipment and Training will require SEARCH AND RESCUE - Crews to stage in cold zone and await the patient to be brought to them.</b></p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Communications – may be an issue depending on environmental conditions</p> <p>Wildlife encounters</p> <p>Delay in responding to patient's side.</p> <p>BCEHS RESPONSE</p> <p>Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p>

## HRH20 - WORKING AROUND WEAPONS OR AGITATED OR VIOLENT PERSONS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Violent or aggressive people</li> <li>• Purpose built or improvised weapons</li> </ul>	<ul style="list-style-type: none"> <li>• Being hit, struck, slashed, stabbed, impaled or shot or verbally abused</li> <li>• Including but not limited to verbal and physical threats, such as hitting, biting, spitting, kicking</li> <li>• Trauma / Injury</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>If a risk of injury to workers from violence is identified by an assessment the employer must establish procedures, policies and work environment arrangements to eliminate the risk to workers from violence, and if elimination of the risk to workers is not possible, establish procedures, policies and work environment arrangements to minimize the risk to workers.</p> <p><a href="http://www2.worksafebc.com/publications/OHSRegulation/Part4.asp#SectionNumber:4.28">http://www2.worksafebc.com/publications/OHSRegulation/Part4.asp#SectionNumber:4.28</a></p> <p>OHSR Section 4.27 – 4.31</p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>If crew identify unmanaged risk or safety issues they are to remove themselves from the situation/scene. Then Stage in a safe location and notify dispatch of the situation.</p> <p>If in an institution notify the appropriate care givers/supervisors.</p> <p>Request police assistance if they believe that an act of violence or a potential act of violence is a serious threat to their own safety or to the safety of another individual; and report to a supervisor any violent or improper behaviour they witness or are involved in and that they believe could result in a threat to their own safety or the safety of another individual.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Police are not available. Crews will need to be stage in safe zone and patient may need to be brought to the safe staging area or wait until scene is safe. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH21 - WORKING IN AND AROUND TUNNELS

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Man-made or natural tunnels and underground workings</li> <li>Access, Egress</li> <li>Carbon Monoxide or other Atmosphere</li> <li>Moving vehicles</li> <li>Dynamic Environment</li> <li>Noise</li> <li>Vision</li> <li>Odor</li> <li>Vibration</li> <li>Vapors</li> <li>Emissions</li> <li>Poor to no ventilation</li> <li>No oxygen</li> <li>Entrapment</li> <li>Engulfment</li> <li>Explosive atmosphere</li> <li>Ignitable Atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>Being trapped in confined spaces</li> <li>Being exposed to substances within confined spaces</li> <li>Being hit/stuck by falling objects</li> <li>Poor Communication</li> <li>Trauma / Injury</li> <li>Exposure</li> <li>Fire</li> <li>Explosion</li> <li>Carbon Monoxide or other Atmosphere</li> <li>Hazardous Materials</li> </ul>	<p>Hi vis apparel must be worn</p> <p>Flash lights must be given to workers</p> <p>Traffic control must be put in place</p> <p>All equipment or vehicles must be shut off and de-energized.</p> <p>Tunnel must be cleared by fire department to ensure no hazardous levels of CO or CO2 are present.</p> <p>G22.2(2) Application of Part 22 (Underground workings)</p> <p><a href="#">Part 9 (Confined Spaces)</a></p> <p>4.14 <a href="#">Emergency procedures</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews should stage in a safe location outside of the tunnel.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Try to have patient brought to you.</p> <p>In the event crews need to enter the tunnel because the patient cannot be brought to them; the tunnel must be secured by traffic control and cleared by the fire department to ensure there is no risk of fire or exposure to toxic gases or smoke.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delays in Patient care and transport.</p> <p>May need to await assistance depending on tunnel length and access. (also may have exposure issues)</p> <p>BCEHS RESPONSE if qualified assistance (MOTI/SAR) is not available. Crews will need to be stage in safe zone and patient may need to be brought to the safe staging area or wait until scene is safe. (Risk of delays in patient care or transport maybe hours)</p>

## HRH22 - WORKING AROUND SLOPES & INCLINES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Slippery surfaces</li> <li>Rocky terrain</li> <li>loose rocks, stumps, or other unstable materials (sand/ mud/ rocks)</li> <li>Brush, foliage or tree branches/ stumps</li> <li>Environment</li> <li>(Weather)</li> <li>Dynamic Environment</li> <li>Landslides</li> <li>Flash floods</li> </ul>	<ul style="list-style-type: none"> <li>Inability to access/egress in an emergency</li> <li>Slip, trip or fall</li> <li>Trauma / Injury</li> <li>Not having proper PPE</li> <li>Poor Communication</li> </ul>	<p>Rescue entails: Training and regular re-training of workers; proper equipment and PPE; maintenance and equipment inspections and replacements; record keeping; and regular drills.</p> <p>BCEHS Crews are <i>not</i> to perform rescues of any nature.</p> <p>Part 32 <a href="#">Evacuation and Rescue</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews are <i>not</i> to perform rescues of any nature.</p> <p>Crews may work in and around slopes under the following conditions:</p> <ul style="list-style-type: none"> <li>Slope is less than 35° **and also related to the embankment 30m or less.</li> <li>There is no risk of falling greater than 10 feet (3m).</li> <li>If Slope is greater than 35° there is a walkway present for human traffic</li> <li>Terrain is walkable – ex) no boulders; ice</li> <li>Does not require the assistance of ropes to descend or ascend.</li> </ul> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Owner/Operator/Fire/Rescue/SAR/Parks/etc. is not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>



## HRH23 - COMMERCIAL CARGO (TANKERS/TRANSPORTS/COURIERS)

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Fire</li> <li>• Explosion</li> <li>• Toxic Gas/Fumes</li> <li>• Exposure to Chemical Gases</li> <li>• Dynamic Environment</li> <li>• Noise</li> <li>• Vibration</li> <li>• Vapours Emissions</li> <li>• Environment (Weather)</li> <li>• Heat</li> <li>• Cold</li> <li>• Entrapment</li> <li>• Engulfment</li> <li>• Explosive atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>• Cut/ Bruise</li> <li>• MSI</li> <li>• Exposure to toxic fumes and gases</li> <li>• Burns</li> <li>• Being exposed to excessive heat</li> <li>• Being hit or struck by sparks/flames</li> <li>• Being trapped in burning areas</li> <li>• Being hit or struck by debris</li> <li>• Being exposed to fumes of burning substances</li> <li>• Smoke inhalation</li> <li>• Trauma / Injury / Burns</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies, procedures and regulatory requirements with regards to these tasks.</p> <p>Supervision for workers.</p> <p>Part 31 <a href="#">Firefighting</a></p> <p>Part 32 <a href="#">Evacuation and Rescue</a></p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Crews should stage in a safe location.</p> <p>If ongoing risk is present crews should have the patient brought to the cold zone.</p> <p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Additional consultation with TA on decontamination process if patient is brought to staging area or has been exposed.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/Canutec/ Hazmat are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH24 - CHEMICAL RESPONSES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Fire</li> <li>• Multiple Chemical, Hydrocarbon products</li> <li>• Multiple methods of exposure, Atmosphere, dermal, inhalation,</li> <li>• Explosion</li> <li>• Dissemination / Dispersal</li> <li>• Asphyxiation</li> <li>• Dynamic Environment</li> <li>• Noise</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Environment</li> <li>• (Weather)</li> <li>• Poor to no ventilation</li> <li>• Entrapment</li> <li>• Engulfment</li> <li>• Explosive atmosphere</li> <li>• Ignitable Atmosphere</li> <li>• Cytotoxic and Hazardous Drugs</li> <li>• Delayed to extremely rapid onset of signs and symptoms</li> <li>• Affinity for body's areas of moisture</li> </ul>	<ul style="list-style-type: none"> <li>• Trauma / Injury</li> <li>• Not having proper PPE</li> <li>• Poor Communication</li> <li>• Unknown Chemicals</li> <li>• Unknown Powders, materials, liquids.</li> <li>• Mixtures</li> <li>• Exposure</li> <li>• Not aware of exposure</li> <li>• Delayed onset of signs and symptoms</li> <li>• No detection equipment</li> </ul>	<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies, procedures and regulatory requirements with regards to these tasks.</p> <p>Supervision for workers.</p> <p><b>OHSR Part 5: Chemical Agents &amp; Biological Agents</b></p>	<p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p> <p>Watch for signage at scene for PPE requirements and wear appropriate PPE as indicated</p> <p>Refer to Exposure Control Plan</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/Canutec/ Hazmat are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Long calls, crews tied up for entire shifts or CISD post response.</p>



## HRH25 - BIOLOGICAL RESPONSES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Multiple methods of exposure</li> <li>Contact</li> <li>Droplet</li> <li>Airborne (small droplet &lt;5microns)</li> <li>Explosion</li> <li>Vapours</li> <li>Emissions</li> <li>Entrapment</li> <li>Engulfment</li> <li>Unknown powders, liquids or other materials (or a mix of these)</li> <li>Environment</li> <li>(Weather)</li> <li>Poor to no ventilation</li> <li>Delayed onset of signs and symptoms</li> <li>Bio hazardous wastes</li> <li>Lab cultures</li> <li>Animal products</li> <li>Animal urine/faeces</li> <li>Living Animals</li> <li>Human Bodily matter</li> <li>Hoarders</li> <li>Waste Depots (Dumps)</li> <li>Mold</li> </ul>	<ul style="list-style-type: none"> <li>Unavailable or inappropriate PPE for the exposure</li> <li>Poor communication</li> <li>Lack of, inadequate or inappropriate ventilation</li> <li>Lack of warning</li> <li>Not aware of exposure</li> <li>Delayed onset of signs and symptoms</li> <li>No detection equipment</li> </ul>	<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies and regulatory requirements with regards to these unique tasks.</p> <p>Supervision for workers.</p> <p><b>OHSR Part 5: Chemical Agents &amp; Biological Agents</b></p>	<p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Watch for signage at scene for PPE requirements and wear appropriate PPE as indicated</p> <p>Refer to Exposure Control Plan</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/Canutec/ Hazmat are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Long calls, crews tied up for entire shifts or CISD post response.</p>

## HRH26 - RADIOLOGICAL RESPONSES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>Multiple methods of exposure, Atmosphere, dermal, inhalation</li> <li>Explosion</li> <li>Radiation</li> <li>Delayed onset of signs and symptoms</li> </ul>	<ul style="list-style-type: none"> <li>Trauma / Injury</li> <li>Not having proper PPE</li> <li>Poor Communication</li> <li>Unknown Powders, materials, liquids.</li> <li>Mixtures</li> <li>Not aware of exposure</li> <li>Delayed onset of signs and symptoms</li> <li>Long Term consequences</li> </ul>	<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies, procedures and regulatory requirements with regards to these tasks.</p> <p>Supervision for workers.</p> <p><b>OHSR Section 7.17 – 7.25</b></p>	<p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>Watch for signage at scene for PPE requirements.</p> <p>Wear PPE as indicated.</p> <p>Refer to Exposure Control Plan</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/Canutec/ Hazmat are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Long calls, crews tied up for entire shifts or CISD post response.</p>

## HRH27 - TOXIC GASES

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Fire</li> <li>• Asphyxiation</li> <li>• Explosive atmosphere</li> <li>• Ignitable Atmosphere</li> <li>• Delayed to extremely rapid onset of signs and symptoms</li> <li>• Affinity for body's areas of moisture</li> <li>• Dangerous in concentrations as little as 1ppm</li> </ul>	<ul style="list-style-type: none"> <li>• Trauma / Injury</li> <li>• Not having proper PPE</li> <li>• Poor Communication</li> <li>• Unknown substance</li> <li>• Mixtures</li> <li>• Exposure</li> <li>• Not aware of exposure</li> <li>• Delayed onset of signs and symptoms</li> <li>• No detection equipment</li> <li>• Suffocation / Asphyxiation</li> </ul>	<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies, procedures and regulatory requirements with regards to these tasks.</p> <p>Supervision for workers.</p> <p><b>OHSR Part 5: Chemical Agents &amp; Biological Agents</b></p>	<p>Situation requires contact with the CBRNE TA (by or via dispatch or directly by the crew) for continued safety of response; their specific training in CBRNE provides best practice instruction for complete scene-patient risk management. Crews will comply with direction provided by the TA.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p> <p>Watch for signage at scene for PPE requirements and wear appropriate PPE as indicated</p> <p>Refer to Exposure Control Plan</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/Canutec/ Hazmat are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p> <p>Long calls, crews tied up for entire shifts or CISD post response.</p>

## HRH28 - ENVIRONMENTAL EXPOSURES – COLD

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• <b>Cold Stress</b></li> <li>• Cold can increase the effects of some exposures such as vibration.</li> <li>• frostbite</li> <li>• hypothermia</li> <li>• Increased risk of MSI</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure to cold temperatures below -7°C can result in cold injuries. Temperatures do not have to be below freezing for hypothermia to occur.</li> <li>• Certain conditions can cause your core body temperature to drop below 36 °C and thus lead to cold stress. Health problems that can result from cold stress.</li> <li>• Poor Communication</li> </ul>	<p><i>Engineering Controls:</i> The ambulance serves as a heated shelter (OHSR 7.65) during the majority of calls. Ambulances (and other emergency vehicles on scene) can also be placed when practicable to act as a barrier against wind chill.</p> <p><i>Administrative Controls:</i> Partners are required to monitor each other for cold exposure. Workers should follow the warm up schedule provided in the event of a lengthy exposure to the cold (see Appendix A). Remember to loosen clothing or remove layers while warming up to allow perspiration to escape and reduce the chance of being trapped by clothing next to the skin.</p> <p><i>Personal Protective Equipment:</i> Wear warm clothing. Instead of tight clothing, wear several loose, warm layers. Wear a hat or balaclava to avoid significant heat loss through your head and neck. Stay dry. Moisture from perspiration, rain, or melting snow can seriously reduce or destroy the insulating value of clothing because water conducts body heat over 25 times faster than air.</p> <p>Survival kits have been provided in vehicles for crews who may be asked to participate in an airevac response or to respond in a</p>	<p>Paramedics should dress for the weather/environment</p> <p>Assess the environment and risk and ongoing access to (rewarming shelter) the ambulance.</p> <p>Monitor for cold exposure</p> <p>If the crew is not equipped to safely respond notify dispatch request assistance</p> <p>Refer to Exposure Control Plan</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

		<p>situation in which they may be stranded for up to 24 hours.</p> <p>In the event a worker shows signs or symptoms remove worker from the cold environment to a warm shelter (ambulance) and try to rehydrate and re-warm the worker. Any workers showing signs or symptoms should seek medical attention as soon as possible.</p> <p><b><i>OHSR Sections 7.33- 7.38</i></b></p>		
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## HRH29 - ENVIRONMENTAL EXPOSURES – HEAT

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• High Environmental temperatures</li> <li>• Workers not accustomed to working conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Heat Stress</li> <li>• Sunburns</li> <li>• Dehydrations</li> <li>• Heat Exhaustion</li> <li>• Heat Stroke</li> </ul>	<p><i>Engineering Controls:</i> The ambulance serves as a shelter during the majority of calls. All ambulances are equipped with air conditioning and can be kept relatively cool during hot conditions. Ambulances (and other emergency vehicles on scene) can also be placed when practicable to provide some shade from radiant heat.</p> <p><i>Administrative Controls:</i> Partners are required to monitor each other for heat exposure. Transfers should be arranged for first thing in the morning when practicable to reduce the risk of exposure to mid-day heat. Take frequent breaks, especially during the hottest part of the day, to allow you time to cool down. Remember to loosening clothing or removing layers will also help you to cool down.</p> <p>Survival kits have been provided in vehicles for crews that may be stranded for up to 24 hours.</p> <p>Keep as cool as possible. Keep hydrated – Do not wait until you are thirsty to have a drink. Loose fitting, lightweight clothing is more comfortable in hot weather. Avoid hot foods and heavy meals as they add heat to your body.</p>	<p>Paramedics should dress for the weather/environment</p> <p>Monitor for heat exposure</p> <p>If the crew is not equipped to safely respond notify dispatch request assistance</p> <p>Refer to Exposure Control Plan</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

## HRH30 - ENVIRONMENTAL EXPOSURE - NOISE/VIBRATION

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>SOURCES: compressed air vacuum sources and ventilation systems; pneumatic tools; compressors; engines/ outboard motors</li> </ul>	<ul style="list-style-type: none"> <li>Exposure to noise can cause non-auditory effects (e.g. stress, annoyance, psychological effects) and auditory health effects. Auditory outcomes include: acoustic trauma (sudden hearing damage following an impulsive noise), tinnitus (ringing or buzzing), and temporary or permanent hearing loss.</li> <li>The slow progressing health effects associated with hand-arm vibration include tingling, numbness and pain. With continual exposure, Hand-Arm Vibration Syndrome can lead to the damage to blood vessels and nerves. This can cause the appearance of white fingers and may present symptoms such as a loss of grip and a loss of sensitivity to touch. The short-term health effects associated with whole-body vibration exposure include fatigue, headache, and insomnia. Long-term exposures to whole-body vibration may contribute to disorders of the digestive, musculoskeletal, circulatory and nervous systems.</li> <li>Poor Communication</li> </ul>	<p><b>NOISE - OHSR Sections 7.1 – 7.9</b></p> <p>An employer must ensure that a worker is not exposed to noise levels above either of the following exposure limits:</p> <ul style="list-style-type: none"> <li>(a) 85 dBA Lex daily noise exposure level;</li> <li>(b) 140 dBC peak sound level.</li> </ul> <p><b>Vibration - OHSR Sections 7.10 – 7.16</b></p> <p>An employer must ensure, to the extent practicable, that workers are not exposed to vibration in excess of the limits specified in</p> <ul style="list-style-type: none"> <li>(a) for hand-arm vibration, the American Conference of Governmental Industrial Hygienists publication entitled <i>Threshold Limit Values and Biological Exposure Indices</i>, dated 2003, as amended from time to time;</li> <li>(b) for whole-body vibration, <i>ANSI Standard S3.18-2002/ISO 2631-1-1997, Mechanical Vibration and Shock - Evaluation of Human Exposure to Whole Body Vibration - Part 1: General Requirements</i>, as amended from time</li> </ul>	<p>If crews suspect that this hazard may be present, then confirmation with the contractor, employer, or building owner that the crews will not be overexposed to noise and vibration.</p> <p>Paramedics should don appropriate hearing protection prior to entering the scene.</p> <p>Watch for signage at scene for PPE requirements.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance</p>	<p>Delay in responding to patient's side.</p> <p>Risk of no first responder or qualified assistance in parts of the province or sites.</p> <p>BCEHS RESPONSE if Fire/Rescue/ are not available. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Risk of delays in patient care or transport maybe hours)</p> <p>Crews will need to be trained and informed on expectations that will create conflict with their desire to assist or put themselves at risk.</p>

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## INFORMATION- TRAFFIC CONTROL

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
<ul style="list-style-type: none"> <li>• Uncontrolled traffic</li> <li>• Dynamic Environment</li> <li>• Noise</li> <li>• Vision</li> <li>• Odor</li> <li>• Vibration</li> <li>• Vapours</li> <li>• Emissions</li> <li>• Radiation</li> <li>• Fuels</li> </ul>	<ul style="list-style-type: none"> <li>• Being struck by a vehicle</li> <li>• Trauma/ Injury</li> <li>• Carbon Monoxide or other Atmosphere</li> <li>• Poor Communication</li> <li>• Fatality</li> </ul>	<p>A traffic control person may be used only during emergency or brief duration work if it is not practicable to control traffic with signs and other devices and procedures.</p> <p>A traffic control person must:</p> <p>(a) Stand in a safe position, preferably on the driver's side of the lane under the TCP's control, be clearly visible, and have an unobstructed view of approaching traffic, and</p> <p>(b) Be positioned at least 25 m (80 ft.) away from the work area unless circumstances or space requirements, such as working at or near an intersection, dictate otherwise.</p> <p>c) Wear hi-vis apparel</p> <p>Part 18 <a href="#">Traffic Control</a></p> <p>OHSR Sections 18.9 - 18.14</p> <p>Figure 18-1: Arm signals between traffic control persons</p> <p>Figure 18-2: Arm signals for traffic control</p> <p>Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>BCEHS personal are not trained or equipped to provide traffic control.</p> <p>Personal are not to engage in traffic control activities.</p> <p>Employees may direct the stoppage of vehicles and equipment to provide scene safety but are not to provide traffic control (flagging). The use of the Ambulance with emergency lighting is permitted to provide for scene safety (e.g. Block lane of traffic).</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side while traffic control measures need to be implemented.</p> <p>BCEHS RESPONSE – if Police/Rescue/Fire/SAR/FR/highways contractor/site Operators are not able to respond or are delayed and if crews are not able to ensure scene safety. Crews will need to be stage in safe zone and patient will need to be brought to the safe staging area. (Delays in patient care maybe hours)</p> <p>Crews will not know individual worksite rescue protocols</p>

## INFORMATION- UNIQUE PHYSICAL RISKS TO A RESPONSE AREA

Hazards	Risks	Regulatory Requirement	Operational Direction	Operational Impact
		<p>Workers will require information specific to hazards they may encounter during the course of their work.</p> <p>Workers are to be trained in tasks and other mitigation strategies to reduce the risk of injury and illness with regards to tasks they complete for work.</p> <p>Workers should be aware of any policies and regulatory requirements with regards to these unique tasks.</p> <p>Supervision for workers. Part 3 Division 3 Section 115 (2)(b)(i)</p> <p><a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03">http://www.bclaws.ca/civix/document/id/complete/statreg/96492_03</a></p>	<p>Stations will perform an inventory of unique hazards to their area and consult with Workplace Health and SOP will be developed and direction approved as specific response issues are identified.</p> <p>DOSH to participate in assisting with SOP and identification of area specific physical risks.</p> <p>.</p> <p>If crew identify unmanaged risks or are unsure the scene is safe they are to contact dispatch and request a supervisor to contact them for guidance.</p>	<p>Delay in responding to patient's side.</p>