2024
V4.06

HIGH RISK HAZARDS
Field Support Guide

A COPY OF THIS GUIDE IS TO BE PLACED IN EVERY AMBULANCE FOR REFERENCE IF THE AMBULANCE DOES NOT HAVE AN BCEHS IPHONE AND HANDBOOK APP.

BCEHS | BC Emergency Health Services
Provincial Health Services Authority

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CONTENTS

INTRODUCTION

The High Risk Hazard project was started in 2015 as an initiative to inform employees and supervisors of high risk activities that paramedics could be exposed to during the course of their work in the field. It is a result of collaboration among many departments including Patient Care Delivery, Patient Care Communication & Planning, Provincial Programs, Occupational Health and Safety and BCEHS Learning.

The objective is not to use this, or any other document to train workers in safe work procedures, rather to aid responding staff in conducting a risk assessment, identifying high risk activities and hazards, and setting expectation of a safe work environment for all responders. This document is designed to be used as a guide and reference in support of training that will be rolled out to the staff as well as direction for daily operations.

This guide is a living document. Changes will occur as the organization and field staff make recommendations or improvements to the guide and its content that further enhance the safety of responders in the field. Suggested updates, changes, additions, or alterations may be forwarded to your District Occupational Health and Safety Committee, Regional Safety Consultant, or Manager who will review and forward to leadership. All new changes to this document are highlighted in blue.

VERSION HISTORY

4.02 July 13, 2016

4.04 Sept 30, 2019 – Minor Edits, removed references to Technical Advisor or TA and updated with Paramedic Specialist (PS) in definitions and core document. Removed reference to Paramedic Quick Reference Guide as document is not current. Updated definition of a supervisor. Updated all HRH cards with required contact of Paramedic Specialist to include requirement for re-contacting if paramedics at the scene receive direction contrary to operational direction or the direction of the Paramedic Specialist. Updated HRH 27 Toxic gases to include boiling batteries. Added requirement to confirm PPE and Decontamination Protocols with Paramedic Specialist on cards 6, 8, 9, 10, 12, 21, 23 to 27. Added new card HRH 31 Unknown Substances.

4.05 Feb 1, 2024 – Review of all HRH, references to Paramedic Specialists (PS) changed to CliniCall. Definitions updated. All changes to core document are coded in blue.

4.06 Oct 3, 2024 Updated HRH20 with links to the Procedure – Weapons in the Workplace. Updated HRH20 with links to the Special Systems Warning in CAD.

SCOPE

This element of the program applies to all BCEHS employees that operate in the field.

DEFINITIONS

Avalanche Risk Area – Area that has been mapped and defined as having potential for avalanche along with having a hazard level greater than "Green."

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.

D51 "All Hazards" – BCEHS dispatch procedure related to activation of CliniCall and the BCEHS Paramedic Specialist(s).

Depths – Can include trenches, excavations, and holes.

Dynamic Environment – Refers to the potential risk created by the ever changing nature of pre-hospital work. Requires employees to remain aware of their environment during an event and perform continuous scene assessments for risks and hazards.

Evacuation – (inside/outside exclusion zone) Emergency evacuation is the immediate and urgent movement of people away from the threat or actual occurrence of a hazard. In situations involving hazardous materials or possible contamination, evacuees may be decontaminated prior to being transported out of the contaminated area. Crews must always follow directions of the Paramedic Specialist or Incident Command and remain in communication with dispatch . Public Health, Fire Department or local authorities can determine if evacuation is necessary.

- Sierra - Supervisor, Tango - Paramedic Specialist (PS) or Ministry of Health Duty Officer (MoH DO) to determine site of evacuation "Reception Centre" from local Emergency Manager or Emergency Social Services and communicate location. BCEHS crews are to assist staff at center and deal with all medical issues etc., until center can function properly

Excavation – means any cut, cavity, trench, or depression in the earth's surface resulting from rock or soil removal.

Hazard – As per WorkSafeBC, means a thing or condition that may expose a person to a risk of injury or occupational disease.

High Risk Hazard – substance or situation with potential for causing death, significant injury or illness, damage to property, or 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 mobile CAD terminal automatically based on the MPDS assessment or added by the dispatcher based on the circumstances of the response.

IDLH Atmosphere – means an atmosphere containing a substance at a concentration which is immediately dangerous to life or health (IDHL) because the concentration is greater than that from which one could escape without any escape impairing symptoms or irreversible health effects and includes an atmosphere with an unknown concentration with the potential to be immediately dangerous to life or health.

Industrial/Construction Area – Typically an industrial or construction area is restricted to employees only and general public access is denied. This is due to WorkSafeBC regulation along with both worker and public safety.

- **Industry** refers to the commercial production and sale of goods. Industrial companies make tangible items to sell to the public, government, or other entities. They create products where no product existed through manufacturing processes. They build factories to create these products and hire engineers and scientists to design new ones.
- **Construction** includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking underground in a mine.

Lockout – means the use of a lock or locks to render machinery or equipment inoperable or to isolate an energy source in accordance with a written procedure.

Mine – 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;

MOTI – Ministry of Transportation and Infrastructure.

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

Oxygen Deficient – means, in relation to air, a condition in which there is less than 19.5% oxygen by volume, or the partial pressure of oxygen is less than 16.3 kPa (122 mm Hg).

Paramedic Specialist (PS) – Paramedic specialists are based in Vancouver dispatch and provide 24/7 clinical and technical support province-wide. Paramedic specialists provide:

- Clinical expertise to dispatch staff across all three BCEHS dispatch centers
- Clinical support for paramedics on active 911 events where the diagnosis is unclear, there are multiple potential treatments, or there is a significant change in the patient's condition
- Escalation of cases to emergency physicians through the Emergency Physician Online Support (EPOS) program as directed by the treatment guidelines
- On-scene Technical Advisor (TA) expertise for chemical, biological, radiological and nuclear defense (CBRNE), and high-risk hazard (HRH) events

- On-scene support for a variety of 911 calls
- Clinical prioritization of identified calls; upgrades and downgrades
- Reviews of significant and pending event calls
- Support to 911 callers with call backs to patients for further clinical assessment and advice
- Reviews of scheduled inter-facility and non-medical transfers to determine if paramedic care is necessary

To ensure clinical experience is continually being integrated into dispatch, paramedic specialists spend one third of their time in the dispatch center and the balance in Specialized Response Units (SRUs).

Perimeter In Dispatch - The exclusion area established around an event. In dispatch this is accomplished by closing or restricting roads and areas around an event and notifying active units of the event perimeter. At this time CAD perimeters are only visible on dispatch CADs and are not seen by crews on MobileCAD in the ambulance. For many events like gas leaks, fires, bomb threats crews will be staged outside the event perimeter. Once there is a unit on scene the BCEHS Incident Commander is responsible for establishing unified incident command, updating dispatch on perimeter requirements (in consultation with CliniCall and the Paramedic Specialists as required) and directs all BCEHS activity within the perimeter. Dispatch will coordinate and work with the BCEHS Incident Commander for any new service request within the perimeter;

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

Right To Refuse Unsafe Work - The refusal of unsafe work is both a fundamental right and a responsibility held by workers. A worker's refusal of unsafe work is an integral element in ensuring work is carried out safely. Workers who reasonably believe work is unsafe must refuse to perform that work and are entitled to have their employer investigate and, where necessary, correct the hazard.

- **"Undue hazard"** – Any thing or condition that may expose a person to an unwarranted, inappropriate, excessive, or disproportionate risk of injury or occupational disease. Generally, to be understood as a hazard that creates an unacceptable, unreasonable, or unnecessary health and safety risk to a person at the workplace.
- **"Reasonable cause to believe"** – the belief that work will create an undue hazard is therefore more than a generalized concern or feeling of uncomfortableness. The worker must assess the situation as a reasonable person, considering relevant and available information and exercising good faith judgment with respect to the hazard with due regard to the worker's training and experience.

Shelter In Place - means to take immediate shelter where you are—at home, work, school, or in between. It may also mean "seal the room;" in other words, take steps to prevent outside air from coming in. Local authorities may instruct you to "shelter in place" if chemical or radiological contaminants are released into the environment. Crews directed to shelter in place must follow directions of CliniCall or Incident Commander and remain in communication with dispatch at all times. If an order to shelter in place comes into effect crews will be directed to stay at their location until they can be safely moved out of the event area.

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

Staging Zones – A location established where resources can be placed while awaiting a tactical assignment.

- **Cold Zone** – (also referred to as the safe zone) an uncontaminated area where workers and equipment could be assembled without risk of exposure to hazardous conditions.
- **Hot Zone** - (also referred to as the exclusion zone). Is the area where contamination may occur. The primary activities performed in this area are hazard assessment, control of the release or hazard and rescue. Personnel working in the hot zone wear high-level personal protective equipment required for that site.
- **Warm zone** - An area adjacent to a hot zone where decontamination of personnel and equipment takes place.
- **Restricted zone -** The area within which exposure control measures are likely to be needed, based on the results of field monitoring.
- **Buffer/Security Zone** - In a planning context this zone is intended to separate the public and other facilities from the consequences of an incident involving hazardous materials. This zone describes the allowable land uses around a hazardous facility.

Supervisor – a person who instructs, directs, or otherwise controls workers in the performance of their duties. In BCEHS this can include: manager, Dispatch Supervisor, Charge Dispatcher, Unit Chief. Any individuals acting in one of the positions.

Trench – means an excavation less than 3.7 m (12 ft) wide at the bottom, over 1.2 m (4 ft) deep, and of any length.

Underground Working – includes any adit, tunnel, underground excavation, chamber, caisson, raise, shaft, winze, or natural entry.

Water – refers to any body of water where a risk of drowning exists.

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 perform work that 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 guidelines (SOG) , 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.

Paramedic Responsibilities at High Risk Hazard Scenes

a. Based on the information provided by Dispatch, crews will be staged in a safe zone until the scene is determined to be safe. Crews will form unified incident command with other responders and will not proceed until the area is deemed safe.

b. Crews will perform their own independent scene assessment for risks and hazards and will stage in a safe zone as required. Crews are not to engage in rescue activities.

    (i) When performing their scene assessment, if the paramedics determine that the response area is a risk or hazard they will obtain the advice of the Technical Advisor or other subject matter expert (avalanche technician) to determine the safety of the response plan.

Incident Commander Responsibilities

a. A unit (first unit on scene) or a supervisor on scene is the Incident Commander and notifies dispatch that Incident Command (IC) has been established.

b. Reports to Command Post or forms Unified Command with other agencies.

c. Assesses the situation and communicate to Dispatch the hazards, the safe staging area, access/egress

routes, patient numbers, resources required, technical support required, and provide regular status update reports.

d. Confirms with Dispatch the event perimeter size and boundaries around the incident, if required.

e. Provides Dispatch with any restrictions or access issues as well as any known hazards.

f. Manages and directs all resources, patients, EMS activities inside the event perimeter.

    (i) Liaises with other responders and provide for the safety and health of all responders

    (ii) Ensures the safety of all EMS providers working inside the event perimeter.

g. Coordinates and communicates with Dispatch any activities inside the event perimeter.

h. Provides regular updates on the event and needs including changing conditions, progress, crew or responder requirements, operational periods, and anticipated demobilized.

i. Notifies Dispatch of any restrictions/access issues as we demobilize. Provide Dispatch with contact information if Incident Command is remaining in place (ongoing event but EMS is no longer required).

RELATED DOCUMENTS

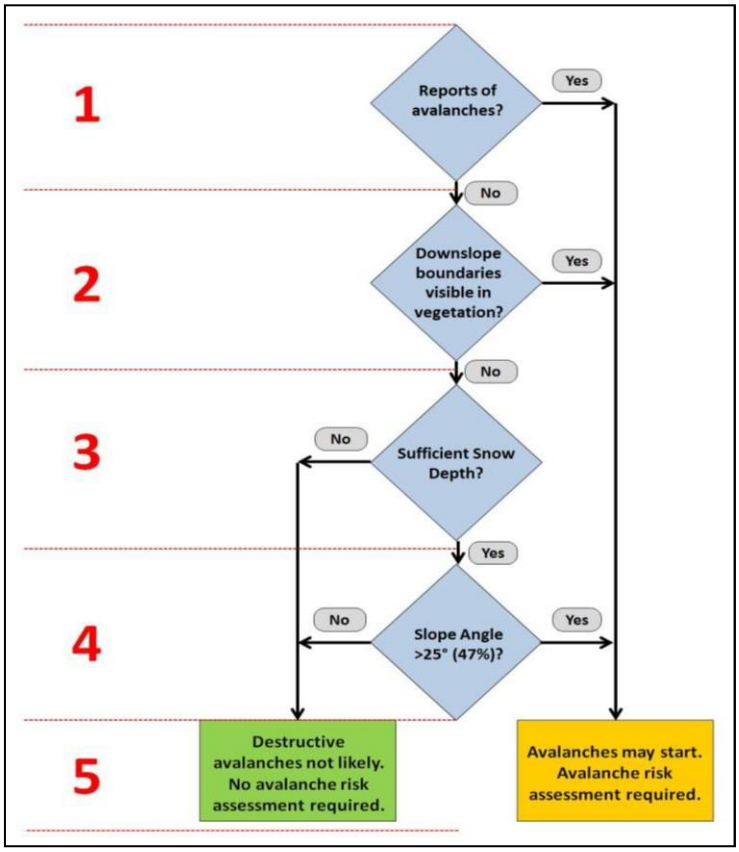
- High Risk Hazards – Field Support Guide for Supervisors
- High Risk Hazards – CAD Messaging
- Exposure Control Plan – part 1
- Exposure Control Plan – part 2
- High Risk Hazards – Dispatch Operations – D51 All Hazards
- BCEHS Standard Operating Guidelines
- Policy – Paramedic Safety at the Scene
- Policy – Search and Rescue Situations

AVALANCHE HAZARD AREAS – HRH 1

Information:

Many areas of British Columbia are exposed to an avalanche hazard when a sufficient snowpack exists. During the avalanche season (typically November-April), there is the risk of responding to areas that may have an avalanche hazard. Avalanche hazards are commonly found in mountainous backcountry terrain and along mountain highways and road systems. An avalanche risk assessment must be completed for worksites where there is, or may be, a risk from an avalanche to the worker. Further information is available on the BCEHS intranet on the BCEHS Avalanche Safety Plan.

The following flow chart is designed as a preliminary assessment tool to recognize avalanche risk areas:



Hazards inside an avalanche zone can be very high. They can include:

- Moving snow and debris
- Confined Spaces
- Heavy Debris
- Cold Temperatures
- Wet Conditions
- Environment (Weather)
- Slope

Risks:

- Being hit, moved, or buried by moving snow and/or debris
- Suffocation/Asphyxiation
- Hypothermia
- Trauma/Injury
- Poor Communications
- Fatality

Figure 1: Flowchart outlining steps for recognizing potential avalanche hazard (adapted fom CAA, 2002[1])

Operational Direction:

- When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not enter an area at risk of avalanche unless an assessment has been undertaken and you are doing so under the guidance of a qualified avalanche technician.
- Do not stop in areas designated by "Avalanche No Stopping Zone" signage until a risk assessment has been completed.
- Do not engage in rescue activities.

1 Canadian Avalanche Association. 2002. Land Managers Guide to Snow Avalanche Hazards in Canada.

WORKING AROUND ENERGIZED MACHINERY/EQUIPMENT – HRH 2

Information:
Many hazards exist when working around energized machinery and equipment. Energized machinery and equipment can include:

- Moving conveyor belts/production equipment.
- Energized handheld or stand-alone machinery.
- Working around de-energized equipment and machinery that may still be under other forces.

If the unexpected energization 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.

The owner/operator or qualified personnel must verify **lockout** (a device used to ensure that machines remain inoperable while repairs or adjustments are made) & **de-energization** (to disconnect from source of power) through written documentation.

Hazards:

- Noise
- Impaired vision
- Odor
- Vibration
- Rotating shafts
- In-running nip points
- Shearing parts
- Reciprocating parts
- Punching action
- Impact hazards
- Flying debris
- Abrasive surfaces
- Electrical hazards
- Hot/toxic fluids
- Vapours
- Emissions
- Radiation
- Fuels

Risks:

- Being struck by/caught in/pinched by equipment
- Not having proper PPE
- Entanglement
- Crush injuries
- Trauma/Injury
- Carbon Monoxide or other toxic atmospheres
- Electrocution
- Poor Communication
- Burns
- Fatality

Operational Direction:

- For **UNCONTROLLED SITES, Machinery or Equipment**, stage in a safe zone
- Have the patient brought to a safe staging area. You may need to request assistance through dispatch.
- When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not work around machinery or equipment unless it is verified through documentation that qualified personnel have de-energized the machinery/equipment.
- Do not engage in rescue activities.

WORKING AROUND MOVING VEHICLES AND EQUIPMENT – HRH 3

Information:

While responding to emergencies or unplanned events on highways, roadways, parking areas and worksites, BCEHS employees are at risk of being injured as a result of traffic hazards while in the vicinity of moving vehicles. Moving vehicles include cars, trucks, trains, buses, aircraft, industrial/construction vehicles and/or equipment, ATV/off road recreational vehicles, or snowmobiles.

Hazards:

- Excessive noise
- Vibration
- Fuel
- Toxic atmosphere (i.e., CO)
- Pinch points
- Vapours
- Hot/toxic fluids
- Undeployed airbags
- Odor
- Moving vehicles
- Electrical hazards

Risk:

- Being struck by/caught in equipment
- Being struck by a vehicle
- Trauma/injury
- Poor communication
- Burns
- Fatality

Operational Direction:

- Wear high visibility apparel that meets or exceeds WorkSafeBC requirements.
- In the event the patient cannot be brought to the ambulance in workplaces, and in non-public sites, you must be escorted to the patient by site personnel or the owner/operator using a safe route.
- For public sites/roads you can be escorted or assisted by RCMP/Municipal Police Force or someone in charge of traffic control.
- Direct the stoppage of vehicles and equipment to provide scene safety through the use of cones/flares/and vehicle positioning. You are not to provide traffic control (flagging).
- When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- You are not to ride on any mobile equipment, machinery or vehicle that is <u>not</u> one of the following:
    - BCEHS property
    - Subcontracted by BCEHS for the purpose of transporting a patient
    - Health Authority Transportation vehicles
    - Coast Guard
    - BC Ferries, MOTI Inland Ferries, or Water Taxis
    - Police, fire, or corrections (you must be orientated to the vehicle in case of emergency where practicable).
    - Public transportation (sky train/ gondola/ taxi/ train/ planes/ buses)
    - Any exceptions will require a SOO (e.g., SAR Rescue vehicle, Hartley Bay Gator, Private Ambulance, etc.).
- Do not engage in search and rescue activities.

WORKING AROUND OR OVER WATER – HRH 4

Information:

Working over and around water, as well as natural ice over water, may be dangerous. Safe work practices exist to reduce the risk of drowning to employees responding to locations over or near water where a risk of drowning is present or if the crew is not certain if a risk of drowning exists. For the purpose of this document, water refers to both standing or flowing water where a risk of drowning or harm to the employee exists.

Hazards:

- Dynamic environment
- Boats/vessels
- Tides
- Currents
- Waves
- Cold temperatures
- Environment (weather)
- Contaminated water
- Swift water
- Floating debris
- Docks/wharfs/bridges

Risks:

- Being struck by, falling in, or being immersed/submersed in water
- Drowning
- Trauma/injury
- Poor communication
- Struck by, cut and/or trapped by or under floating debris
- Hypothermia
- Health hazards
- Fatality

Operational Direction:

- Where there is a risk of drowning when working near water where guardrails are not in place, you must wear a personal floatation device (PFD). This will include any unmonitored pool or aquatic areas.
- You are not to enter the water or natural ice over water surfaces to rescue patients/victims.
- When you identify unmanaged risks, are requested to accompany operators of various vehicles or have unmitigated scene safety concerns, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not engage in rescue activities.

FLOODING – HRH 5

Information:

Floods can be caused by intense rainfall and atmospheric rivers, melt-off from heavier than normal winter snowfall, landslide dams on rivers, and tsunamis. They may be precipitated by an earthquake and, in turn, may precipitate landslides.

There may be sufficient advance warning to permit evacuation prior to the event; possibly enough advance warning to permit flood-proofing to protect one's home. The effects of flooding can be localized or widespread. All of BC is subject to the risk of flooding.

Hazards:

- Swift water
- Floating Debris
- Unstable banks
- Electrical (downed powerlines)
- Contaminated water
- Tides
- Currents
- Waves
- Wind
- Cold
- Environment (weather)
- Pollution
- Chemicals
- Fertilizer/pesticides
- Wildlife
- Domestic animals
- Sewage
- Oil and/or chemical waste

Risks:

- Being struck by/falling in/immersed or submersed in water
- 60 cm (2ft) of moving water can cause a vehicle to be swept away
- Chemical burns
- Infection
- Hypothermia
- Trauma/injury
- Struck by/cut and/or trapped by floating debris
- 15 cm (.5ft) of water can cause unstable footing
- Electrocution
- Drowning
- Stagnant water (bacteria and/or mould)
- fatality

Operational Direction:

- You are not to engage in rescue activities.
    - Heavy Urban Search and Rescue (HUSAR) trained staff are exempted from this direction if they are responding as part of Canada Task Force 1 (CANTF1).
- You are not to perform rescues of any nature. This includes, but is not limited to swift water rescue, or traversing over flooded plains. You should not stop on bridges or linger near slide areas or riverbanks that are experiencing high flows.
- If you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor for guidance, directly or through dispatch.
- You must wear an appropriate PFD and PPE as indicated.
- When the stability of roadways is or may be compromised, ensure you are escorted for entry/traversing (i.e., MOTI).
- Prior to entering an area under evacuation order or alert, refer to established standard operating guidelines specific to the event.

CONFINED SPACES – HRH 6

Information:

A confined space 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.

Confined spaces include 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.

Hazards of Confined Space:

- Toxic atmospheres (CO, Methane, Ammonia, H_2S, Chlorine)
- Low/no oxygen
- Fire Hazards: explosive or flammable atmospheres
- Biological Hazards
- Physical hazards: noise, heat, cold, radiation, vibration, electrical, inadequate lighting
- Asphyxiants (CO, Methane, H_2S)
- Safety Hazards: moving parts of equipment, structural hazards, engulfment, entanglement, slips, or falls
- Burns

Risks:

- Exposure of toxic gases/biological hazards
- Hyperthermia
- Suffocation/Asphyxiation
- Trauma/injury
- Hypothermia
- Poor communication
- Fatality

Operational Direction:

- You are not to enter a confined space.
- Do not send the lone responder – consider staging only until other response agencies are on scene and have confirmed the scene is safe and/or secured.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response:
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
    - When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor for guidance, directly or through dispatch.
- Stage in a safe location and have patients brought to you.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not to engage in rescue activities.

WORKING AT HEIGHTS – HRH 7

Information:
There are a variety of jobs that require employees to work from heights. This type of work poses some very unique risks and significant danger. Falls from heights remain one of the main causes of work related injuries, disabilities, and death.

Because of the risk involved, any worker who works from a height of 3m (10ft) or more must have adequate training and certification in addition to properly maintained equipment, engineered anchors, and, if required, a fall protection plan. BCEHS paramedics do not receive training in fall protection and do not engage in search or rescue.

Hazards:
- Fall/height: areas or structures at a height above the ground including buildings, machinery, ladders, scaffolding, bridges, wharfs, stairwells, escalators, stages, back decks, patios, balconies, observation platforms, fences, suspended scaffolds, and scissor lifts.

Risks:
- Falling from a height
- Loss of balance
- Weight
- Number of people
- Weight
- Trauma/injury
- Restricted access/egress
- Unstable platform/walkway
- Not having proper PPE or fall protection
- Poor communication
- Swing fall

Operational Direction:
- You are not permitted to work above 3m (10ft) unless a fall protection system is in place (i.e., guardrails).
- If the situation requires the use of fall arrest or fall restraint system, you are to contact CliniCall/Dispatch and Supervisor to request rescue support.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- If working on a flat roof or unguarded surface, remain 2m (6.5ft) from the leading edge. Industrial and Construction sites will have a posted written fall protection plan, specific to the site.
- You are not to engage in rescue activities.

WORKING AROUND BLASTING AND EXPLOSIONS – HRH 8

Information:
Blasting operations include preparing, placing, firing a charge, handling a misfire, and destroying or disposing of explosive materials.

Hazards:

- Blasts/explosions
- Noise
- Vapours
- Odor
- Vibration
- Vision limitations (sightlines)
- Emissions
- Radiation
- Fire

Risks:

- Contact with blast/explosive devices
- Being hit/struck by debris due to blasting/explosion
- Poor communication
- Buried by debris
- Fatality
- Concussive impact of blasts/explosions
- Atmosphere
- Inhalation of debris/toxins
- Trauma/injury (burns/blast injury)

Operational Direction:

- Do not enter an area where blasting and/or demolition is taking place.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response:
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not engage in fire suppression or rescue activities.

PRESSURE WASHING & ABRASIVE BLASTING – HRH 9

Information:
Abrasive blasting or high-pressure washing can release lead dust or other toxic substances into the air. Crews may encounter these activities in industrial sites or renovation projects. Be aware of these hazards and avoid exposure to them.

Note for paramedics: An N95 or Elastomeric Half face respirator is ***not*** adequate protection. Consult with CliniCall and/or the Safety Consultant for your region.

Hazards:

- Hazardous and/or toxic atmosphere
- Excessive noise
- Limited visibility
- Wet/slippery surfaces
- Slip / Fall
- Electricity
- Glass shards

Risks:

- Trauma/Injury/Penetrating injury
- Carbon Monoxide or other toxic atmospheres
- Electrocution
- Exposure to debris and physical forces
- Poor Communication
- Inhalation of toxins/debris

Operational Direction:

- Crews are ***not*** to enter a scene until all work procedures have stopped and crews have confirmed with qualified personnel that hazard is controlled.
- No employee is to enter an area where pressure washing and/or abrasive blasting is taking place, or where a system is under pressure (not de-energized). Lockout ***must*** be verified by qualified personnel.
- Situation requires contact with CliniCall (via dispatch or directly by all responding paramedics and supervisors) and/or the Regional Safety Consultant for continued safety of response; their specific training provides best practice instruction for complete scene-patient risk management and scene risk management. Paramedics and Supervisors will comply with the direction provided by CliniCall and/or the Regional Safety Consultant regarding safety.
- Confirm PPE and decontamination Protocols with CliniCall.
- If you receive secondary instructions from another agency or anyone else that contravene standard operational directions and/or the instructions of CliniCall and/or the Regional Safety Consultant (e.g., need to decontaminate patient), you must immediately contact CliniCall and/or the Regional Safety Consultant to advise them of the situation. CliniCall and/or the Regional Safety Consultant will then contact the agency and/or party to ensure the secondary instructions are safe to follow.
- When employees identify unmanaged risks or are unsure of scene safety, they are to contact a supervisor, directly or through dispatch, for guidance.
- Crews are not to engage in rescue activities.

WORKING IN EXCAVATIONS OR TRENCHES – HRH 10

Information:
Workers can be critically injured or die in an excavation or trench. Excavations are defined as any cut, cavity, trench, or depression in the earth's surface resulting from rock or soil removal. A trench is defined as any excavation that is less than 3.7 m (12ft) wide at the bottom, over 1.2 m (4ft) deep, and of any length.

Most cave-ins occur on small, short-duration jobs like water, gas, electrical and sewer connections. Be aware that environmental factors can also affect the stability of an excavation site.

Hazards:

- Fire
- Physical forces
- Excessive noise
- Limited vision
- Entrapment
- Mobile equipment
- Hot/toxic fluids
- Vapours
- Emissions
- Hazardous/toxic atmosphere
- Electrical hazards
- Height
- Engulfment
- Biological exposure
- Explosive/ignitable atmosphere
- Vibration
- Water

Risks:

- Being trapped in/crushed
- Drowning
- Fatality
- Electrocution
- Fall from height
- Exposure
- Poor communication

Operational Direction:

- Employees are not permitted to enter or work in excavations over 1.2m (4ft) in depth.
  Note: large construction site digs with proper access/egress may only be entered with escort and in coordination with the site superintendent.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response:
  - Comply with direction provided by CliniCall around safety.
  - Confirm PPE and Decontamination Protocols with CliniCall.
  - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at scene for PPE requirements & wear PPE as indicated.
  Note: work stoppages may mitigate risks and hazards and may change the need for PPE, consult with CliniCall (e.g., hearing protection).
- Employees are not to enter a scene until all work procedures have stopped and employees have confirmed with the contractor/site superintendent, owner, or employer that Paramedics will not be exposed to a hazard. Mitigation measures (sloping and/or shoring must be verified by a qualified individual.
- When employees identify unmanaged risks or are unsure of scene safety, they are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not engage in rescue activities.

WORKING AROUND WILDFIRE, FIRE, FLAMES, AND LIGHTNING – HRH 11

Information:

As part of BCEHS activities within Incident Management Procedures, BCEHS crews may provide injury coverage for suppression activities. BCEHS may establish an operational plan for the event, such as Wildfire Operational Plan Guideline.

Hazards:

- Dynamic and/or unpredictable environment
- Explosions
- Excessive noise
- Open flame
- Hazardous air pollutants (e.g., acrolein, benzene and formaldehyde)
- Asphyxiants (e.g., CO)
- Heat
- Toxic gases
- Electrical Hazards (e.g., electrical fire)
- Entrapment
- Engulfment
- Secondary explosion

Risks:

- Heat stress and/or strain (e.g., hyperthermia)
- Being hit/struck by sparks/flames/debris
- Injury/trauma, asphyxiation, burns or fatality
- Smoke inhalation
- Electrocution
- Being trapped in burning areas
- Exposure to fumes or substances

Operational Direction:

- Intentional and unintentional fires – stage in a safe location and contact CliniCall.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response:
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - Contact CliniCall for any decontamination requirements and/or procedures, for patients and/or paramedics, prior to loading and transporting.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- If established, follow the operational plan for the event.
- For Fire at a BCEHS facility, follow the facility's evacuation plan.
- When crews identify unmanaged risks or are unsure of scene safety, they are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do **not** to enter the perimeter of an evacuation order(s) unless in exceptional circumstances and in consultation with CliniCall and the Incident Commander responsible for the order (see MEMO: 2021 Wildfire Response Guidelines and Planning, under responding to calls in Evacuation Order Zones).

WORKING NEAR OIL AND GAS INDUSTRY – HRH 12

Information:

The oil and gas industry is, as per WorkSafeBC, applicable to exploration for oil, gas, crude bitumen, geothermal energy, drilling, operating and servicing a well, producing, distributing and refining oil, gas crude bitumen or geothermal energy from a well and any ancillary processes associated with these activities. The Oil and Gas industry produces and uses many chemical products on its worksites. Workers exposed to chemicals produced and used in the industry may develop occupational diseases of the lungs, skin, and other organs, depending on the amount and length of time of exposures.

Hazards:

- Fire
- Multiple Chemical, Hydrocarbon products
- Multiple methods of exposure, atmosphere, dermal, inhalation
- Explosion
- Dynamic Environment
- Excessive noise
- Vapours
- Emissions
- Environment (Weather)
- Toxic Gases
- Poor to no ventilation
- Engulfment
- Explosive or ignitable atmosphere
- Confined Spaces and associated hazards

Risks:

- Burns
- Asphyxiation
- Trauma / Injury
- Exposure
- Poor Communication
- Not having proper PPE
- Fatality

Operational Direction:

- Do not enter a scene until work procedures have stopped and employees have confirmed with the contractor, site superintendent, owner, or employer that employees will not be exposed to a hazard.
- Do not work around machinery/equipment unless it is verified that the machinery/equipment is de-energized by a qualified person.
- On sites requiring specific training or PPE (i.e., H_2S, rescue respirators), stage in a safe area and do not enter the site. Note any PPE signage on approach and conduct a scene assessment.
- Confirm PPE and decontamination Protocols with CliniCall.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response:
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- When the patient cannot be brought to the ambulance, have appropriate personnel escort you to the patient using the safest route possible.
- When you identify unmanaged risks or are unsure of scene safety, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not engage in rescue activities.

WORKING AROUND INSECTS, ANIMALS AND WILDLIFE – HRH 13

Information:

While working as a paramedic, encounters with animals and wildlife can be frequent. Animals can sometimes carry harmful germs that can spread to people and cause illness – these are known as zoonotic diseases or zoonoses. Zoonotic diseases are caused by harmful germs like viruses, bacterial, parasites, and fungi. These germs can cause many different types of illnesses in people and animals, ranging from mild to serious illness and even death. Animals can sometimes appear healthy even when they are carrying germs that can make people sick, depending upon the zoonotic disease.

Hazards:

- Wildlife (domestic, rural of backcountry)
- Envenomation (i.e., snake bite/insect)
- Indirect contact with areas where animals live/roam, or objects/surfaces that have been contaminated with germs (e.g., pet habitats, barns, plants, soils, pet food and water dishes
- Wildlife – hit by vehicles
- Direct contact with saliva, blood, urine, mucous, feces or other body fluids of an infected animal
- Vector-borne: being bitten by a tick, or an insect like a mosquito or a flea

Risks:

- Being bitten, struck, stung, or attacked by animals
- Exposure to zoonotic diseases (e.g., viruses, bacterial, parasites, and fungi)
- Allergic reactions
- Trauma/injury

Operational Direction:

- See SOG: Working Around Domestic and Guide Animals
- Domestic Animals:
  - Request family members to secure all domestic animals and/or pets that may be present at the scene.
  - Take reasonable steps to accommodate certified Guide and/or Service dogs. If the Guide and/or Service dog is disruptive, request that the dog be removed or secured.
- Wildlife:
  - Do not proceed into back country or areas of the attack – have the patient brought to you.
  - If wildlife is suspected, contact dispatch to request a conservation officer, animal control or police presence at the scene.
- Insects:
  - Do not proceed into back country or areas of the attack (bees, hornets etc)– have the patient brought to a safe area.
- If unique or unknown situations arise, contact CliniCall and/or your supervisor.

WORKING AROUND AIRCRAFT – HRH 14

Information:
Working at airports, airfields, or landing zones (LZ) exposes paramedics to a wide range of hazards, many of which are unique to this area of emergency work. There are many things which need to be considered to maintain the safety of all workers. Paramedics are to receive an orientation before boarding the aircraft. This is because there are safe operating procedures that will vary between aircraft.

Hazards:

- Moving or stationary aircraft, vehicles, or machinery
- Dynamic environment
- Pinch point/lifting
- Vibration
- Emissions
- Super cooled or heated surfaces
- Unfamiliar equipment
- External time restraint pressures (i.e., pilot timing out, family pressures/flight restrictions)
- Fuel, chemical exposures
- Excessive noise
- Vapours
- Environment (weather)
- Spatial restrictions/limitations

Risks:

- Contact with aircraft propeller or engines
- Flying debris and dust
- Poor communication
- Fatality
- Being exposed to substances
- Inhalation
- Being hit or struck by aircraft, vehicles, or mobile machinery

Operational Direction:

- NO – Hot loading/unloading (unless specifically exempted).
- Refer to BCEHS Handbook: Helicopter Landing Zone Checklist.
- Hi-Visibility apparel required.
- When driving airside, you must use emergency lighting
- When stationary, emergency lighting and headlights are to be turned off.
- Comply with airside airport procedures (i.e., not operating on active taxiways, parking ambulances in designated aircraft zones, operating on airside grass areas or aviation markers/lights).
- Do not to approach a running aircraft, until engines are off, rotors/props/jets have stopped spinning, and a member of the flight or onboard medical crew directs approach.
- Avoid touching aircraft surfaces which may be super cooled or heated to prevent injury.
- If you identify unmanaged risks or are unsure the scene is safe, you are to work with the local airport authority, the pilot of the aircraft, contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

WORKING AROUND MINES OR UNDERGROUND WORKINGS - HRH 15

Information:

A **mine** includes:

- 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.
- All cleared areas, machinery, and equipment for use in servicing a mine.
- All activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation.
- Closed and abandoned mines.
- A place designated by the chief inspector as a mine.

An **underground working** includes any adit, tunnel, underground excavation, chamber, caisson, raise, shaft, winze, or natural entry.

Hazards:

- Vision
- Hydrogen Sulfide (H_2S)
- Noise
- Poor or no ventilation
- Biological exposures
- Fire
- Explosive and ignitable atmosphere
- Odour
- Physical forces
- Emissions
- Entrapment
- Toxic gases
- Unplanned explosion
- Other hazardous conditions
- Vibration
- Vapours
- Radiation
- Engulfment
- Hot/toxic fluids
- Oxygen deficient atmosphere
- Natural or man-made structures below ground level

Risks:

- Loose/unstable/slippery surfaces
- Cave-ins
- Confined space hazards
- Exposure
- Insufficient or improper PPE
- Mobile machinery/equipment hazards
- Trauma/Injury
- Caught in between objects
- Blasting hazards
- Poor communication
- Struck by object
- Carbon Monoxide/other toxic atmospheres
- Falling objects/trip hazards
- Fatality

Operational Direction:

- Area Dispatch Operations Centre will contact the BC Mine Emergency Line.
- Prior to accessing any mine site, you must contact CliniCall.
- Liaise with site personnel to ensure the route and activity is safe.
- If an underground response is required, obtain approval, and not involve a rescue activity.
- Do not send the lone responder – consider staging only until other response agencies are on scene and have confirmed the scene is safe and/or secured.
- Refer to: BCEHS OHS 100.1 Responding to Incidents at Mine Sites
- You must have the proper PPE and be escorted to the patient's side and escorted back out of the mine site or underground working.

- Crews will not enter the scene until operations have stopped and have confirmed with the contractor, site superintendent, owner, or employer that there will not be exposure to a hazard.
- You must wear hi-visibility apparel and hard hat/safety helmet when entering a mine site or underground working
- Use the following equipment if available: mobile CAD and communication devices (cell phone/SAT phone/portable radio).
- Do not enter a confined space (refer to HRH 6 – Confined Space).
- If you identify unmanaged risks or are unsure of scene safety, you are to contact Clinicall and/or your supervisor, directly or through dispatch, for guidance.
- You are not to engage in rescue activities.

WORKING AROUND ELECTRICITY – HRH 16

Information:
Injuries to paramedics from exposure to electrical hazards can be very serious or fatal. It is vital that electrical hazards are identified and managed appropriately as required.

Hazards:

- Power lines, power sources, power plants and/or underground services
- Generators
- Transmission lines
- Fire
- Falling hazards
- Unseen power lines
- Electricity – charged particles, static or dynamic or accumulated
- Power poles
- Transformers
- Explosion
- Contact with a line
- Transit/trolley/trains with energized rails and/or systems

Risks:

- Trauma/injury
- Burns
- Fatality
- Electrocution
- Poor or limited communication

Operational Direction:

- A 10m (33ft) perimeter must not be entered around all power lines/types involved in incidents – this includes vehicles that have contacted a power line or connected broken lines.
- Stage in a safe zone until a representative of a local electricity provider (BC Hydro, FortisBC, BC Transit or other Transit provider) 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.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Refer to Standard Operating Guidelines SOG: Working Around Electricity
- Do not to engage in rescue activities

WORKING AROUND FALLING HAZARDS – HRH 17

Information:
The most common injuries workers sustain from falling objects are concussions, bruises, fractures, strains, and sprains. The objects that commonly fall range from large items such as roof trusses and steel beams to small items such as fasteners and small hand tools.

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.

Hazards:
- Natural and manmade objects including trees, rocks, tools, and equipment.

Risks:
- Being hit/stuck by falling debris
- Poor or limited communication
- Trauma/injury
- Being caught in/between moving objects
- Insufficient or improper PPE
- Fatality

Operational Direction:
- Wear safety headgear in any work area where there is a danger of head injury from falling, flying, or thrown objects, or other harmful contacts.
- If the patient cannot be brought to you in a safe area, you must be escorted on site. In the event this happens you must don all appropriate PPE for the hazards present (hi-vis vest, safety headgear, safety glasses, hearing protection, etc.).
- You are to perform a continuous risk assessment while on scene.
- Do not enter a work area where an unmanaged risk of falling object hazard has been identified.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

RESOURCE OR ACCESS ROADS – HRH 18

Information:
BCEHS employees may be required to drive or stop on resource roads when responding to events. **Travel on active access roadways is acceptable if NOT stopping in an avalanche zone, slide and/or falling rock zone, area under evacuation order, or any area deemed high risk**. It is important to know and understand the local signage, have the proper radio frequencies, and radio protocols when using these roads. *Crew safety is first and foremost.*

Early consultation with CliniCall is warranted in all situations where paramedics are working in areas where Evacuation Alerts and Evacuation Orders have been issued as these environments present a range of challenges and risks which require a consistent and risk-focused approach to ensure paramedic safety. Refer to HRH 11 – Working Around Fire, Flames and Lightning.

Paramedics can be prepared by knowing the risks they may be exposed to due to weather conditions and ensuring personal planning and that the vehicle is stocked with items that will assist in reducing exposure, e.g., stocked with ice grips, extra blankets, grit, tire chains, and a survival kit in winter months.

Hazards:

- Unpaved, degraded, or compromised roads
- Recreational vehicle use
- Moving vehicles and equipment (i.e., logging trucks, excavation equipment)
- Terrain issues (i.e., washboard/cross ditching, deactivated roadway)
- Hunters
- Environment
- Serious weather conditions
- Dangerous trees, loose rocks, stumps, or other unstable materials
- Limited sightlines (brush, foliage, debris limiting view by vehicle operator at/or a distance)

Risks:

- Hit by/struck by moving vehicle/equipment
- Wildlife
- Flash flood
- Road washout
- Becoming lost
- Running out of fuel
- Extreme temperature exposures
- Loss of control of the vehicle
- Avalanche/mudslide/fire
- Bridge damage/washout
- Poor or total loss of communication
- Vehicle breakdown in isolated area
- Lack of available food/water
- Trauma/injury

Operational Direction:

- *Do **NOT** to enter the perimeter of an Evacuation Order(s) unless in exceptional circumstances in consultation with CliniCall and the incident commander responsible for the Order.*
- You will perform a scene assessment upon arrival including assessing terrain for avalanche or debris slide risk and if necessary, stage in a safe/cold zone until it has been determined that the risk level is acceptable.
- If roadways are degraded, compromised, arrange for escort.
- At events where you are unable to drive to scene, walk to the patient, Search and Rescue is required. Stage in safe/cold zone and wait for Search and Rescue to bring the patient to you.

- Do not perform search and rescue operations.

- You are also not permitted to ride on any mobile equipment, machinery or a vehicle that is ***not*** one of the following:
    - BCEHS property or,
    - Subcontracted by BCEHS for the purpose of transporting a patient or,
    - Health Authority Transportation vehicles.
    - Coast Guard,
    - BC Ferries, MOTI Inland Ferries, or Water Taxis
    - Police, fire or, corrections (employee must be orientated to the vehicle in case of emergency where practicable).
    - Public transportation (sky train/ gondola/ taxi/ train/ planes/ buses)
    - Any exceptions will require a SOP (ex. SAR Rescue vehicle, Hartley Bay Gator, Private Ambulance, etc.)
- When crews identify unmanaged risks or are unsure of scene safety, they are to contact a supervisor, directly or through dispatch, for guidance.
- Refer to SOG: Travelling on Resource Roads and SOG: Closed and Impassible Roads.
- ***NOTE:*** You are to maintain communications with Dispatch or have procedures for check-ins when working/traversing dead zones and awareness of applicable frequencies being utilized (refer: BCEHS Communication in Dead Zones Procedure).

SIGNAGE	Description
	**Name of Resource Road**
	**Road Entry Signage Includes**: • Road Channel • When and how to call in the direction travelled
	**Standard MUST CALL sign** Paramedics must call on the portable radio when they come upon these signs.
	**MUST CALL JUNCTION SIGN** Paramedics must call the direction they are traveling as posted on the signage present.
	**Kilometer Board**
	**Radio Channel Tab**

BACK COUNTRY RESPONSE – HRH 19

Information:
Backcountry responses entail risks, even if participants do not intend to place themselves in harm's way. In some circumstances, such as being in remote locations or in extreme weather conditions, even a minor accident may create a dangerous situation that requires survival skills.

Based on BCEHS Equipment and Training, events where crew are unable to drive to the scene or walk to a patient safely require SEARCH AND RESCUE (SAR).

Hazards:

- Limited sightlines (brush, foliage, debris limiting view by vehicle operator or at a distance)
- Sudden and extreme changes in terrain
- Wildlife
- Avalanche/slide/fire
- Slips/trips/falls
- No food and/or water
- Dangerous trees, loose rocks, stumps, or other unstable materials
- Environment
- Weather
- Flash flood
- Poor or no communication

Risks:

- Being bitten/struck or attacked by wildlife
- Dehydration
- Trauma/injury
- Exposure to diseases animals may carry
- Exposure to elements
- Becoming lost

Operational Direction:

- Stage in a safe/cold zone until it has been determined that the risk level is acceptable.
- Assess avalanche risks in winter and rock/mud slides year-round.
- You are to stage in a safe zone and await for patient to be brought to you.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not to engage in search and rescue activities.
- If your vehicle breaks down, you are to stay with your vehicle until transport arrives.
- Refer to: SOG – Travelling on Resource Roads

VIOLENCE & WEAPONS IN THE WORKPLACE – HRH 20

Information:

Paramedics may be exposed to aggressive individuals, or scenes that may expose them to the discovery or presence of a weapon. Depending on the degree of violence and/or weapon(s) involved, these individuals pose a risk for all those involved, including themselves. The assessment and management of violence and weapons are complex tasks demanding different skills from paramedics that need to be applied in a coordinated manner.

Hazards:

- Violent individuals (i.e., patient/bystander/family members, those with criminal intent)
- Firearms (i.e., guns, rifles, BB gun, paint gun)
- Prohibited weapons (i.e., switchblade, brass knuckles, unsheathed religious/ceremonial sword, others as defined by the Criminal Code of Canada)
- Improvised weapons (i.e., everyday objects, tools, pocketknives, or equipment)

Risks:

- Physical assault and/or injury (i.e., hit/struck/slashed/stabbed/impaled/shot)
- Exposure to violent incidents such as psychological, verbal, or physical (written, posturing, harassing, bullying, intimidation, threatening of violence)
- Inability to self-extricate from situation and/or environment
- Poor or lack of communication combined with an escalation of conflict
- Physical environment (i.e., rural vs. urban, stairwell, elevator or other secluded or isolated areas
- Fatality

Operational Direction:

- If the crew identifies a risk or safety issue, they are to remove themselves from the situation/scene. Then stage in a safe location and notify dispatch of the situation.
- Upon identifying a potential life-threatening safety situation that warrants an immediate response declare a Code 33
- Request police assistance if you believe there is criminal activity and/or public or personal safety concerns and/or risks (provide as much detail as possible to dispatch).
- Discovery of a potential weapon(s) (i.e., pocketknife, bear spray/mace, sharps, etc), should not be transported with the patient (leave at home). If the situation (public street, children in the home) does not allow for leaving the item, then secure in a patient possession bag with other patient items (separate from the patient) during transport. Ensure you advise the receiving facility (hospital) of any items of risk
- Refer to Procedure – Weapons in the Workplace for additional operational direction regarding weapons and potential weapons.
- Report to a supervisor any violent or improper behavior witnessed or involved in and that they believe could result in a threat to their own safety or the safety of another individual.
- Report to a supervisor any incidents of violence, which may involve the discovery, presence or threatened use of weapons.
- Consider completing and submitting a NETCAD Service Request form so a location can be flagged in the CAD system to identify risks for future responders.

TUNNELS – HRH 21

Information:

Tunnels/snow sheds pose unique challenges for paramedics tasked with responding to events located inside these structures. In addition to the hazards presented by the scope of the emergency, the tunnel environment itself can also pose extraordinary risks to those entering the space to manage the problem.

Hazards:

- Man-made or natural tunnels and/or underground workings
- Toxic atmospheres (CO, Methane, Ammonia, H_2S, Chlorine)
- Poor to no ventilation
- Poor and/or limited vision
- Odor
- Vapours
- Noise
- Entrapment
- Explosive/ignitable atmosphere
- Emissions
- Dynamic environment
- Vibration
- No or Low oxygen
- Access/egress
- Moving vehicles
- Electrical

Risks:

- Being trapped in confined spaces
- Poor or limited communication
- Explosion
- Hazardous materials
- Trauma/fire
- Being hit/struck by falling objects
- Fire
- Electrical exposure
- Toxic atmospheric poisoning via inhalation

Operational Direction:

- Stage in a safe location outside of the tunnel.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- If applicable, have patients brought from the tunnel to you.
- In the event you need to enter the tunnel because the patient cannot be brought to you; the tunnel must be secured by qualified traffic control and cleared by the fire department or authorized authority (i.e., Parks Canada) to ensure there is no risk of fire or exposure to toxic gases or smoke.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance
- Do not engage in search and rescue activities.

SLOPES AND INCLINES – HRH 22

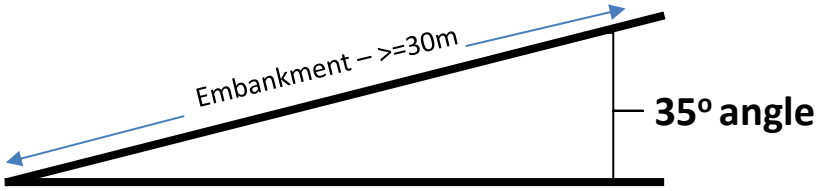
Information:
Steep slopes, hills, inclines, and riverbanks may be hazardous and have increased risk for slips, trips, and falls due to the angle and terrain of the slope. The risk of falling while navigating a slope is further increased while trying to carry gear up or down the slope. Slopes may also have uneven, loose, unstable, or wet surfaces that affect traction. Care must be taken when walking or working on such surfaces.

When considering the slope during assessment remember that high angle rescue is defined by a slope greater than 45^{o} and at that point rescuers or patients are dependent on a life safety rope and not a fixed surface of support such as the ground. Slopes less than 45^{o} are low angle operations where rescuers depend on the ground for their primary support with a roper serving as a secondary means of support. At a slope of 35^{o} and less with stable ground the slope becomes safer for field staff to navigate without additional aid.

Hazards:
- Slippery surfaces
- Environment
- Dynamic environment
- Flash floods
- Rocky terrain
- Weather
- Landslides
- Limited sightlines (brush, foliage, debris)
- Dangerous trees, loose rocks, stumps, or other unstable materials

Risks:
- Slip/trip/falls
- Poor or lack of communication
- Trauma/injury
- Not having proper PPE
- Lack of access/egress in emergency

Operational Direction:
- You may work in and around slopes after considering your safety under the following conditions:
    - The slope is less than 35^{o} (degrees) and also related to the embankment 30m or less.



    - There is no risk of falling (or tumbling) greater than 10 feet (3m).
    - If Slope is greater than 35^{o} there is a walkway present designed for human traffic
    - Terrain is walkable – no boulders, ice, or soil saturated with water
    - Must not require the assistance of ropes for workers to descend or ascend.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Do not to engage in rescue activities.

COMMERCIAL CARGO (TANKERS/TRANSPORTS/COURIERS) – HRH 23

Information:
As a paramedic you may be called to attend the scene of a transportation incident involving dangerous goods. For example, a vehicle has struck a tanker trailer or courier van/truck carrying a dangerous good and the dangerous good may be leaking. In situations like this, paramedics must be able to recognize hazards quickly and take the appropriate action to protect themselves and others.

Hazards:

- Fire
- Explosion
- Toxic Gas/Fumes
- Biological specimens
- Exposure to chemical gases
- Dynamic environment
- Vibration
- Vapours emissions
- Engulfment
- Explosive atmosphere

Risks:

- Being trapped in burning areas
- Biohazard exposures
- Smoke inhalation
- Fatality
- Exposure to fumes of burning substances
- Being hit/struck by debris
- Asphyxiation

Operational Direction:

- Determine if Dangerous Goods are involved (i.e., placard seen on vehicle, communication with other responding agencies, driver of vehicle)
- Stage in a safe location as required.
- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- If a patient is brought to a staging area or has been exposed, consult with CliniCall on a decontamination process.
- If ongoing risk is present, you should have the patient brought to the safe zone.
- When you identify unmanaged risks or are unsure of scene safety, you should contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

CHEMICAL RESPONSES – HRH 24

Information:

Paramedics can be exposed to chemical hazards when responding to a call(s). Chemical hazards may be solids, liquids, or gases; they may be naturally occurring, manufactured as a single substance or mixture, or can be a by-product of an industrial process. These substances often generate vapours, fumes, dusts, and mists. Examples include a wide range of industrial, laboratory and agricultural chemicals.

Hazards:

- Blister agents (vesicants) (e.g., nitrogen mustard, sulfur mustard)
- Nerve agents (e.g., sarin, soman, tabun, VX)
- Blood agents (asphyxiants) (e.g., CO, cyanide)
- Metals (e.g., arsenic, barium, mercury, thallium)
- Toxic alcohols (e.g., ethylene glycol)
- Safety hazards: moving parts of equipment, structural hazards, engulfment, entanglement, slips, trips and/or falls
- Caustics (acids, corrosive agents) (e.g., oven cleaners, caustic soda)
- Choking/lung agents (pulmonary) (e.g., ammonia, bromine, chlorine, phosphine)
- Biotoxins (e.g., digitalis, nicotine, ricin, strychnine)
- Incapacitating agents
- Riot control agents
- Flammable metals and liquids
- Physical hazards: explosives, noise, heat, cold, radiation, vibrations, electrical, inadequate lighting
- Designated Substances (e.g., carcinogens)

Risks:

- Serious health hazard (which includes carcinogens, mutagens, and reproductive toxins (e.g., asbestos, silica dust, diesel fumes)
- Exposure to hazardous substances via inhalation, dermal contact, ocular or ingestion
- Exposure due to PPE being incorrectly worn, incorrect fit/design/classification or No PPE
- Not aware of exposure
- Poor or no communication
- Exposure to chemicals causing severe blisters, irritation or swelling in the eyes, skin, mucus membranes and lungs (respiratory tract)
- Exposure to blood borne body fluids via secondary exposure (vomit/hazardous drugs)
- Allergic reaction affecting the skin or respiratory system (i.e., sensitization) (e.g., isocyanate paints)
- Undetected hazardous chemicals

Operational Direction:

- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at the scene for PPE requirements & wear appropriate PPE as indicated.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

BIOLOGICAL RESPONSES – HRH 25

Information:

Paramedics can be exposed to biological hazards when responding to call(s). Exposure to biological hazards can occur in any work activities involving contact with humans or human-related products, animals or animal products, and biological waste, plants, and food. Examples include food production plants, agriculture, forestry, horticulture, animal food and fodder production, fishing, healthcare and community services, labs, refuse-disposal plants sewage purification installations and zoos.

Hazards:

- Any liquid or solid material contaminated with a prion, virus, bacterium, fungus, biological toxins (i.e., disease producing agents (pathogens)
- Blood and body fluids
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead)
- HIV, HBV, or HCV containing cell, tissue or organ cultures, culture medium or other solutions
- Laboratory cultures, stocks, or specimens of microorganisms, live or attenuated vaccines, human or animal cell cultures used in research
- Biological hazardous waste
- Open skin lesions/wounds/incisions and their secretions
- Blood, tissue, or organs from experimental animals infected with HIV, HBV, or HCV
- Mold and pathogens found in bird and rodent droppings, grain dust, spores, and dander

Risks:

- Exposure to biological hazards via inhalation, dermal and mucus membrane contacts, ocular, ingestion, and injection
- Can cause illness such as food poisoning, tetanus, respiratory infections, or parasite infection
- Lack of inadequate or inappropriate ventilation
- Not aware of exposure
- Acute or chronic health conditions ranging from skin irritation and allergies to infections (e.g., TB, AIDS, cancer etc.)
- Exposure due to PPE being incorrectly worn, incorrect fit/design/classification or No PPE
- Poor or no communication
- Illness and/or fatality

Operational Direction:

- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at scene for PPE requirements & wear your PPE as indicated.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

RADIOLOGICAL RESPONSES - HRH 26

Information:

Paramedics can be exposed to radioactive materials when responding to call(s). Radioactive sources can be found in hospitals, educations institutes, nuclear medicine plans, beverage manufacturing plants, courier trucks & commercial carrier transporting radiological equipment. Shipments involving significant amounts of radioactive material are required to have documentation, labels, and placards identifying their cargo as radioactive. Paramedics should watch for placards when suspect that radioactive material might be present.

Hazards:

- Cytotropic drugs/spills within 24 hours
- Noise (acoustical radiation) (e.g., ultrasound)
- Ionizing radiation: high energy ultraviolent radiation, X-ray, gamma rays, alpha particles, beta particles (electrons), neutrons (e.g., X-ray machines, CT scanners, mammography, particle accelerators, baggage X-ray screening devices, industrial devices used for scientific research and measurement,

Risks:

- Exposure to radiation via inhalation, dermal contact, ingestion, and injection
- Contamination such as: internal, external or combination of both
- Can cause emotional and psychological distress
- Fatality
- Acute radiation syndrome may include nausea, vomiting, headache, and diarrhea
- With exposure to high doses of radiation – greater risk of developing cancer later in life
- Exposure due to PPE being incorrectly worn/fit/design/classification or no PPE
-

Operational Direction:

- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at scene for PPE requirements & wear PPE as indicated.
- Refer to BCEHS Exposure Control Plan – part 1.
- When crews identify unmanaged risks or are unsure of scene safety, they are to contact CliniCall and/or their supervisor, directly or through dispatch, for guidance.

TOXIC GASES – HRH 27

Information:
Under many circumstances, gases and vapors have harmful effects on workers exposed to them by inhalation, absorption, or ingestion. Many toxic substances are dangerous to health in either large or small concentrations. Gaseous toxic substances are especially dangerous because they are often invisible and/or odorless. Their physical behavior is not always predictable: ambient temperature, pressure and ventilation patterns significantly influence the behavior of a gas.

Some sources of toxic gases can include motor vehicles, burning fossil fuels such as gas, diesel, coal or oil, fire, decaying organic matter such as compost, cleaning chemicals, boiling batteries (rotten egg smell), chlorine gas, and many others.

Hazards:

- Flammable/explosive/ignitable gases/atmosphere
- Corrosive gases
- Asphyxiation (e.g., low/no oxygen)
- Dangerous concentrations as little as 1ppm
- Can be released as a secondary hazard (by-products) (e.g., blasting operations – CO and NOx)

Risks:

- Delayed to extremely rapid onset of signs and symptoms
- Poor or no communication
- Exposures via inhalation, contact with skin or eyes
- Nervous system problem(s)
- Illness, respiratory irritation/impairment
- Delayed pulmonary edema
- Fatality
- Exposure due to PPE incorrectly worn/fit/design/classification or no PPE
- Airflow obstruction
- No detection equipment/not aware of exposure
- Reproductive adverse effects
- Olfactory impairment
- Acute upper airway inflammation
- Trauma/injury

Operational Direction:

- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at scene for PPE requirements & wear PPE as indicated.
- Refer to BCEHS Exposure Control Plan – part 1
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

ENVIRONMENTAL EXPOSURES – COLD – HRH 28

Information:

Exposure to cold temperatures below -7°C can result in cold injuries such as frostbite and hypothermia. Hypothermia (literally "low heat") is a condition marked by an abnormally low internal body temperature. It develops when body heat is lost to a cool or cold environment faster than it can be replaced. Temperatures do not have to be below freezing for hypothermia to occur.

Certain conditions can cause your core body temperature to drop below 35° C and thus lead to cold stress. Health problems that can result from cold stress include hypothermia and frostbite.

Hazards:

- Cold can increase the effects of some exposures
- Insufficient PPE/appropriate clothing
- Water/dampness
- Decreased temperature in working environment
- Workers not accustomed to working conditions

Risks:

- Cold stress
- Hypothermia
- Fatality
- Frostbite
- Increased risk of MSI

Operational Direction:

- You should dress and be prepared for the weather/environment
- Assess the environment and ensure access to (rewarming shelter) the ambulance.
- Refer to BCEHS Cold Exposure Risk Assessment and Response Plan and the BCEHS Cold Exposure Risk Assessment and Response Plan
- Monitor weather conditions, assess risk exposures, and follow the BCEHS recommended response plan
- If you are not equipped to safely respond, notify dispatch and request assistance
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

ENVIRONMENTAL EXPOSURES – HEAT – HRH 29

Information:

Human bodies naturally maintain temperatures between 36°C and 38°C. When the body temperature rises above this range, the body will get rid of the excess heat. However, if the body continues to gain heat faster than it can get rid of it, the body temperature increases and the person experiences heat stress. The body can generate heat itself or it can absorb it from the environment. These conditions may result in heat stress.

Hazards:

- High environmental temperatures
- Workers not accustomed to working conditions

Risks:

- Heat stress
- Dehydration
- Heat stroke
- Sunburn
- Heat exhaustion
- Heat stroke

Operational Direction:

- You should dress and be prepared for the weather/environment
- Refer to BCEHS Heat Exposure Risk Assessment and Response and the BCEHS Heat Exposure Risk Assessment and Response
- Monitor weather conditions, assess the risk exposure, and follow the BCEHS recommended response plan.
- If you is not equipped to safely respond, notify dispatch and request assistance
- When you identify unmanaged risks or are unsure of scene safety, you should contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

NOISE/VIBRATION – HRH 30

Information:

Noise is defined as unwanted sound and can exist in different forms: continuous, intermittent, or impulsive. Continuous noise remains constant and stable over a given time period while intermittent noise varies between quiet and noisy. Impulsive noise is a burst of loud noise which remains for less than 1 second.
Prolonged exposure to noise over 85db can begin to cause permanent damage.

Vibration of an object is the mechanical oscillation around an equilibrium point. Vibration exposures transmit between objects when objects are in contact with one another.

Hazards:

- Compressed air
- Pneumatic tools
- Aircraft
- Health effects – delayed or immediate
- Vacuum sources and ventilation systems
- Engines/outboard motors
- Mechanical equipment/tools

Risks:

- Non-auditory effects/psychological effects
- Hand-arm vibration syndrome
- Auditory effects: acoustic trauma, tinnitus, temporary or permanent hearing loss
- Poor of lack of communication
- Whole body exposure

Operational Direction:

- If possible, to control and mitigate exposure risk, you are ***to consider not*** entering the scene until all work procedures have stopped.
- If you suspect that this hazard may be present, then confirmation with the contractor, site superintendent, employer, or building owner that you will not be exposed to excessive noise and/or vibration is required.
- You should don BCEHS provided hearing protection (CSA approved) prior to entering the scene.
- Watch for signage at scene for PPE requirements.
- When you identify unmanaged risks or are unsure of scene safety, you should contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.

UNKNOWN SUBSTANCE RESPONSES – HRH 31

Information:
Every day there is a risk of paramedics responding to calls for patients exposed to unknown substances) that can be introduced deliberately or accidentally into the environment. Calls for Unknown Substance events are the most dangerous to respond to and manage as the hazards and risks are completely unknown. All HRH Chemical, Biological, Radioactive, Nuclear, Explosive and Toxic Gases can be labeled as an Unknown Substance until the substance has been identified.

An Unknown Substance exposure event should never be underestimated, under assessed or under managed because patients are presenting with mild to few symptoms or other response agencies have cleared the event. Given the exposure is "unknown" the onset can be seconds, minutes, hours, days, or weeks. The agent can be transmittable by any method (vapour, inhalation, direct contact, indirect contact, etc.).

Responders need to manage these events using the highest level of diligence;

- Properly staging
- Contacting the Paramedic Specialist
- Not become complacent in their assessment and management of the scene despite what other agencies may be doing
- Protecting ourselves from exposure (safe area/up wind/up ground)
- Assuming the worst case and having appropriate decontamination completed prior to any patient assessment, treatment, and transportation.

The paramedic environment is different from other agencies as we need to assess and treat patients through direct contact and close interaction, transporting in an enclosed environment, and transitioning care to a facility which may put those workers or other patients at risk depending on the unknown substance. Confirmed early identification of the unknown substance can aid in narrowing down the hazards and risks to paramedics and other workers along with treatments for the patients.

Hazards:

- Fire
- Ignitable atmosphere
- Emissions
- Entrapment
- Dissemination/dispersal
- Cytotoxic and hazardous drugs
- Delayed to extreme rapid onset of signs and symptoms
- Dynamic environment
- Excessive noise
- Environment (weather)
- Engulfment
-
- Multiple methods of exposure: atmosphere, inhalation, dermal
- Any amount of unknown substances found at scene or on patient i.e., white powder on clothes
- Explosive atmosphere
- Gases and/or vapours
- Poor to no ventilation
- Explosion
- Illegal/legal drugs
- Multiple chemicals, hydrocarbon products

Risks:

- Trauma/injury
- Poor of limited communication
- Unknown biologicals
- Exposure
- Psychological symptom presentation
- Not having proper PPE
- Unknown chemicals
- Mixtures
- Not aware of exposure
- Delayed onset of signs and symptoms

- Undetected hazardous chemicals
- Unknown gases and vapours
- Exposure due to PPE being incorrectly worn or of inappropriate design or classification

Operational Direction:

- Contact CliniCall (via dispatch or directly by all responding paramedics and supervisors) for continued safety of response;
    - Comply with direction provided by CliniCall around safety.
    - Confirm PPE and Decontamination Protocols with CliniCall.
    - If you receive instructions from another agency or anyone else that is contrary to standard operational directions, advise CliniCall of the situation. CliniCall will then contact the party to ensure instructions are safe to follow.
- Watch for signage at the scene for PPE requirements and wear appropriate PPE as indicated.
- When you identify unmanaged risks or are unsure of scene safety, you are to contact CliniCall and/or your supervisor, directly or through dispatch, for guidance.
- Refer to Controlled Substances Program

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