WorkSafeBC

Basic First Aid

Participant Guide

Basic First Aid

Basic first aid is a seven-hour program (excluding breaks) designed to provide lifesaving first aid skills to workers in industry.

Prerequisites

Candidates must be able to understand and perform the first aid skills required to complete the learning tasks. No previous first aid training is required.

Certification

To qualify for certification the candidate must participate in a minimum of seven hours of training and successfully complete the course objectives as taught and evaluated by a person authorized by the Workers' Compensation Board of B.C. (WorkSafeBC). Certification is valid for three years from the date of completion of the basic training course.

To renew a basic certificate a candidate must successfully retake the basic course.

Intention

Instructors and course participants are encouraged to assist in improving pre-hospital care of injured workers by promoting:

- Workplace compliance with the first aid regulation
- Effective interactions between employers, supervisors, workers, and attendants
- Efficient co-operation with higher levels of medical care, such as the advanced first aid attendant, BC Ambulance Service, and hospital emergency personnel

Certification of first aid attendants

Training and examination

To qualify for a basic certificate or a certificate endorsement, a candidate must successfully complete the training course as taught and evaluated by a person authorized by WorkSafeBC. The basic and the transportation endorsement courses are each seven hours in length, excluding breaks. The intermediate course is 14 hours in length, excluding breaks.

To qualify for an initial advanced certificate, a candidate must successfully complete an advanced training course and achieve a grade of at least 70% on each of the written, oral, and practical portions of the examination conducted by a person authorized by WorkSafeBC. The advanced course is 70 hours in length, excluding breaks.

Candidates who fail to complete a full course of instruction when required must, without undue delay and at the discretion of the training agency, complete all missed components of the course prior to being eligible for an examination. Eligible candidates who fail any part of the written, oral, or practical examination must redo the failed portion of the examination again in its entirety (written, oral, or practical).

Failure of the written, oral, or practical examination may be remediated at the discretion of an approved training agency. Candidates will be required to repeat the failed segment of the examination in its entirety (written, oral, or practical). Passing grades obtained in various segments of the first examination may be carried forward to the second examination.

Candidates may attempt a second examination no sooner than 24 hours after the first failed examination. Candidates who choose not to attempt a second examination within 60 days of the first examination will be required to repeat the entire course of instruction prior to being eligible for another examination. Should the second examination also result in failure, the candidate must undergo a full course of instruction to be eligible for another examination.

Duration of certificates

First aid certificates and certificate endorsements are valid for three years from the date of completion of a training course or examination.

Extensions of the duration of certificates are not permitted.

Renewal of certificates

To renew a basic certificate, intermediate certificate, or certificate endorsement, a candidate must meet the same training and examination requirements as for initial certificates through the completion of a full basic course.

A candidate for renewal of an advanced certificate may challenge the examination without retaking the initial certification course provided the candidate possesses a valid (unexpired) advanced certificate and a CPR/AED certificate that was issued not more than six months prior to the examination date. An advanced examination leading to a certification decision consists of the final 14 hours of the advanced course. Another option for advanced attendants is to take a 35-hour refresher course.

Terms and conditions of certification

The attendant must

- Follow the principles of first aid treatment as outlined in WorkSafeBC's first aid training programs that are provided to the attendant when they participate in the training program,

- Comply with the Occupational Health and Safety Regulation (OHS Regulation), and the other responsibilities of attendants in this training program, and
- Comply with any other terms and conditions provided to the attendant by the training agency when granted certification or provided to the attendant by WorkSafeBC at any other time.

Inappropriate conduct

A first aid certificate issued to a first aid attendant may be suspended, cancelled, or have conditions placed upon its use where the first aid attendant engages in inappropriate conduct, including:

- Smoking while assessing or treating an injured or ill worker and/or while handling oxygen therapy equipment, or permitting others to do so
- Failing to use the assessment and injury treatment techniques outlined in first aid training courses unless conditions precluded them
- Engaging in conduct that poses an unreasonable threat to the safety and well-being of other workers or the public
- Removing themselves from being able to see or hear any summons for first aid at a workplace
- Abandoning an injured worker after beginning assessment or treatment
- Refusing to treat an injured worker when acting as the designated attendant
- Treating or transporting an injured worker while impaired or under the influence of drugs or alcohol

Failure to comply with requirements

If WorkSafeBC has reasonable grounds for believing that a person who holds a first aid certificate has breached a term or condition of the certificate or has otherwise contravened a provision of the *Workers Compensation Act* or the OHS Regulation, WorkSafeBC may, under section 96 of the Act,

a. cancel or suspend the certificate, or

b. place a condition on the use of that certificate that WorkSafeBC considers is necessary in the circumstances.

WorkSafeBC will consider the nature of the violation, the circumstances surrounding the incident, and the past history of the attendant in determining the action to be taken. In order of severity, the possible actions that may be taken are:

a. a warning is issued,

b. a condition is placed on the use of the certificate,

c. the certificate is suspended for a period that ends before the normal expiry of the certificate, or

d. the certificate is cancelled.

In addition to or instead of these actions, WorkSafeBC may direct that applications of the attendant to renew the existing certificate or obtain a different certificate be subject to a condition or be denied for a period of time.

Reviews and appeals

An order to cancel or suspend a certificate may be appealed. Section 268(1)(a) of the Act provides that a person may request a review officer to review "a Board order respecting an occupational health or safety matter under the OHS provisions, a refusal to make such an order or a variation or cancellation of such an order."

An attendant may, within 90 calendar days of the order issue date, in writing, request the Review Division of the Workers' Compensation Board to conduct a review of the order.

A final decision made by a review officer in a review under section 268(1)(a), pertaining to an order made under section 96 to cancel or suspend a certificate, may be appealed to the Workers' Compensation Appeal Tribunal.

An attendant may, within 30 calendar days of the final decision of the Review Division, in writing, request the Workers' Compensation Appeal Tribunal to conduct a review.

Identification

Candidates for basic certification will be required to produce one piece of acceptable, valid, photographic identification to the instructor at the time of the course.

Acceptable valid photographic identification:

- Valid Canadian or U.S. driver's licence
- Valid passport
- Valid B.C. student identification card issued for the current school year
- Employee picture identification card
- Native status picture identification card
- B.C. photo identification (digital) issued November 1996 or after
- Canadian government-issued photo identification

If a candidate does not possess valid photographic identification as listed, they must present one primary and two pieces of secondary identification.

The following will be considered acceptable:

Primary identification	Secondary identification
• Birth certificate • Canadian citizenship I.D. • Canadian record of landing • Canadian student visa • Canadian work visa • Returning resident permit • Canadian armed forces I.D. — with a photo if is a Canadian government I.D. • Nexus	• Naturalization certificate • Marriage certificate • Change of name certificate • Parole certificate • Correctional service conditional release card • Valid credit card (if name is on card) • Bank card (if name is on card) • Vehicle registration • Firearms acquisition certificate • Social insurance card (if offered by the candidate) • B.C. Services Card (if offered by the candidate) • Basic, intermediate, or advanced first aid certificate or transportation endorsement

If a candidate cannot produce appropriate identification, compliance may be achieved if they produce one of the following:

- A letter from the candidate's employer typed on the firm's letterhead and signed by an official of the company. This letter must state that the employee is who they claim to be.
- If the candidate is not employed and is being sponsored by a government or other agency the same would apply, only the letter must be from the sponsoring agency.

Candidates have the right to refuse to disclose any identification information. However, candidates refusing or failing to provide appropriate identification will not be issued certification.

Safety

Agencies are required to maintain a safe work environment. Instructors are responsible for safety in the classroom. All instructors are required to perform a simple risk assessment of the classroom. This will include assessing for risks such as:

- Patient movement (lifting, rolling etc.) — this will include asking participants about any pre-existing conditions that could be impacted by activities in class
- Tripping hazards (i.e., equipment or students)
- Training facility housekeeping and emergency procedures
- Communicable disease plan or processes (COVID-19, etc.)

Safety alerts are included in the introduction to all first aid courses with further reminders where required by lesson.

Instructors are expected to discuss safety issues with the class and provide reminders throughout the course. Instructors must monitor all students and immediately stop and correct any unsafe behaviour in the classroom. In the event of an incident, it is important that the instructor follow agency policy and ensure accurate documentation of the occurrence.

Accommodation

If a student requires accommodation, it is important to document:

- Why the student requires accommodation
- What the accommodation consists of
- How long is accommodation necessary

Accommodation for all students and conditions is not always possible in first aid classes. These courses are physically demanding and will require prolonged kneeling, working in stooped positions, and rolling patients. Each class participant is required to function as attendant, helper, and patient. Depending on the level and length of the course, these physical demands can become rigorous.

Accommodation may be made for participants who indicate a problem with some of the aforementioned activities. Excusing a participant from being a patient in some practice sessions may be possible. Participants may also be permitted to adopt "comfort" positions on the floor to avoid kneeling or stooping for prolonged periods, even though the positions may not facilitate optimum patient care.

Regardless of accommodations made during the class, participants will be required to demonstrate specific skills according to an accepted standard before certification is issued. It is essential for the instructor to document any accommodation.

Basic level first aid kits

For a complete list of First Aid kits applicable for Basic Level, please refer to:

https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-03-rights-and-responsibilities#Schedule3A

Basic course outline

Module 1

A competent first aid attendant will be able to:

- Apply the priority action approach
- Reposition an injured worker
- Describe the roles and responsibilities of a designated first aid attendant
- Conduct a modified primary survey
- Assess soft tissue injuries
- Make appropriate medical referral decisions
- Explain the WorkSafeBC regulatory requirement for first aid record keeping

The procedures will follow the guidelines described in this guide.

Learning tasks:

Priority action approach

Roles and responsibilities of the first aid attendant

Scene assessment

- Scene assessment
- Hazard considerations
- Mechanism of injury (what happened)
- Number of injured workers (victims)

Primary survey

- Purpose of the primary survey
- Components of the primary survey
- Critical interventions

Transport decision

- Medical aid or return to work
- BCEHS (ambulance), emergency transport vehicle (ETV), company vehicle, taxi
    - Information required by ambulance dispatch
    - Information for ETV (remote workplace)
    - Airway breathing circulation (ABC) reassessments

Secondary survey

- Vital signs
- Medical history
- Head-to-toe assessment

Conduct a priority action approach

- A responsive worker
- An unresponsive worker

Repositioning a worker

- Face down (prone) to face up (supine) roll
- Face up (supine) to recovery (¾-prone) position

Priority action approach for the walk-in worker

- Modified primary survey

Wound assessment and treatment

- Examining wounds
- Cleansing wounds
- Dressing and bandaging
- Providing worker handout sheets
- Discussing the first aid record

Decisions on referral to medical aid

- Wounds that must be referred to medical aid
- Mode of transport (for workers who must be transported) — BCEHS (ambulance), ETV, company vehicle, or taxi

Module 2

A competent first aid attendant will be able to:

- Identify breathing emergencies

- Identify a mild (partial) obstructed airway
- Identify a severe (complete) obstructed airway
- Clear an obstructed airway
- Use a pocket mask
- Perform CPR and use an AED

Learning tasks:

The respiratory and circulatory system

Airway obstruction management

- A responsive worker with a mild (partial) airway obstruction
- A responsive worker with a severe (complete) airway obstruction

CPR and AEDs

- Chest pain
- An unresponsive worker in cardiac arrest

Respiratory and cardiac arrest management

Module 3

A competent first aid attendant will be able to:

- Manage bleeding
- Identify the signs of anaphylaxis
- Reposition an injured worker
- Identify common medical emergencies
- Manage common medical emergencies

Learning tasks:

Shock

- Identification
- Management

Position a worker from sitting to lying (supine) position

Severe bleeding management

Identification and management of medical conditions

- Stroke
- Diabetic emergencies
- Seizures
- Fainting

Burns

- Degrees of burns
- Thermal burn management

Module 4

Practical scenarios

If time is left over on completion of the material review lessons can be conducted to assist in competency decision.

Module 5

Completion of the written examination, check identification

Course methodology

Activity	Topic
Course registration	Not included in class time
Module 1	
Discussion	Classroom introduction and management
Discussion	Roles and responsibility
Discussion	Barriers to communication
Intro, video	How the body works
Discussion, video	Priority action approach
Discussion	Secondary survey
Video, demo 1-01	Primary survey responsive worker

Activity	Topic
Practice 1-01	Primary survey responsive worker
Video, demo 1-02	Reposition an injured worker
Practice 1-02	Reposition an injured worker
Demo 1-03	Primary survey unresponsive worker
Practice 1-03	Primary survey unresponsive worker
Video, demo 1-04	Reposition an injured worker
Practice 1-04	Reposition an injured worker
Discussion	Priority action approach walk in worker
Video, demo 1-05	Priority action approach to the walk-in worker
Practice 1-05	Priority action approach to the walk-in worker
Demo 1-06	Priority action approach walk in worker laceration
Practice 1-06	Priority action approach walk in worker laceration
Discussion	Wounds referred to medical aid
Video	Shoulder injury: Strain
Video	Back strain
Module 2	
Discussion	Airway and breathing emergencies
Instructor demo 2-01	Partial airway obstruction — responsive worker
Practice 2-01	Partial airway obstruction — responsive worker

Activity	Topic
Instructor demo 2-02	Complete airway obstruction — responsive worker
Practice 2-02	Complete airway obstruction — responsive worker
Discussion	Circulation system
Video	Chest pain
Discussion	Unresponsive worker
Skill-only practice 2-03	Ventilating a mannequin with a pocket mask
Instructor demo 2-04	CPR respiratory and/or cardiac arrest
Practice 2-04	CPR respiratory and/or cardiac arrest
Instructor demo 2-05	CPR respiratory and/or cardiac arrest with AED
Practice 2-05	CPR respiratory and/or cardiac arrest with AED
Discussion	Medical conditions
Video	Asthma
Video	Anaphylaxis
Video	Epinephrine
Module 3	
Lecture, discussion	Shock and bleeding
Instructor demo 3-01	Internal bleeding — unresponsive lying face up
Practice 3-01	Internal bleeding — unresponsive lying face up
Guided practice 3-02	Loop tie, pressure bandage, elastic Velcro strap

Activity	Topic
Instructor demo 3-03	External bleeding — responsive sitting
Practice 3-03	External bleeding — responsive sitting
Guided practice 3-04	Tourniquet
Lecture, discussion	Medical conditions
Module 4	
Review lesson	Practical scenarios
Module 5	
Written test	25 multiple-choice questions
Wrap up	Issue certificates to successful students

Evaluation: Determining competency for the basic first aid candidate

The instructor is solely responsible for ensuring that only reasonably competent candidates are certified as basic first aid attendants. These certified attendants may be responsible for the lives of injured workers at their worksite.

To achieve this, the instructor must compare the candidates' performance against a standard. The standard the instructor uses to determine competency is described in the steps listed in the instructor and participant guides.

The purpose of the practical evaluation component of the basic course is to determine the extent to which the candidate meets each objective, as outlined in the instructor guide for each module. Competency must be achieved in any objective defined as lifesaving. There is no time available in the basic course for the instructor to administer a one-on-one practice session to determine competency for each candidate.

Module 1 consists of all new skills that are practised in the military drill format where the instructor tells the participants the next step in the procedure and ensures correctness at each step. This method does not afford the instructor an opportunity to judge if the candidate is

competent in the protocol or skill without the candidate having outside influence (from other candidates).

In modules 2 and 3, participants practise numerous lifesaving skills more independently (Participant Practice) and time is allotted for participants to practise skills more than once. This is the primary portion of the course for the instructor to determine the competency of the candidates.

Module 4 consists of time for additional participant practice.

If doubt exists as to the competency of a particular candidate, the instructor may repeat the appropriate practical exercise or run the appropriate priority action drill. Priority action drills are located in Module 4 of this guide.

The answers to the following questions, while observing the candidate practising the protocols, should help the instructor judge the candidate's level of competency and determine if the candidate warrants certification:

- Is the candidate able to determine the next step in the protocol without prompting from the instructor in situations where the procedure was practised earlier?
- Does the candidate look around the room at other groups for confirmation before performing the skill?
- How hesitant is the candidate in performing the skill?
- Does the candidate perform each task in the sequence demonstrated or if the tasks are performed out of demonstrated order, would the objective still be achieved?

The following is a list of the lifesaving skills in which the candidate must demonstrate a reasonable level of competency before certification is issued:

- Conduct a scene assessment
- Activate the workplace emergency response procedures (send for an ambulance or ETV)
- Maintain support of the head and neck — initially and with a co-worker
- Open the airway with an airway opening manoeuvre (head-tilt chin-lift)
- Maintain an airway opening manoeuvre, instruct, and have a co-worker maintain (hold the head-tilt chin-lift)
- Assess for breathing
- Clear an obstructed airway
- Breath for a worker with a pocket mask
- Perform CPR
- Deploy an AED

- Assess skin condition — recognize shock
- Conduct a rapid body survey (RBS)
- Control bleeding with direct pressure
- Control bleeding with dressings and bandages
- Control bleeding with a tourniquet

Skill #	Skill	Performance measures
1.	Conduct a scene assessment	Candidate assesses: • Danger to self and worker • What happened • How many injured
2.	Activate workplace emergency response procedures	Candidate sends someone to emergency response procedures; the designated person or position will call an ambulance or send for the ETV, with general details of the incident and tell them to report back to attendant.
3.	Maintain support of the head and neck — initially and with a co-worker	For the responsive worker, the candidate: • Supports the head and neck with elbows secured • Hands off support to a co-worker with a minimal movement of the head and neck
4.	Open the airway with an airway opening manoeuvre (head-tilt chin-lift)	Candidate performs an airway opening manoeuvre (head-tilt chin-lift) for an unresponsive worker: • Hands are in the correct position. • Head-tilt chin-lift is sufficient to open the airway.
5.	Maintain an open airway by having a co-worker maintain airway opening manoeuvre (head-tilt chin-lift)	Candidate instructs a co-worker to kneel on the opposite side of the worker and maintain airway opening maneuver (hold the head-tilt chin-lift).
6.	Assess for breathing	Candidate checks for breathing for 5–10 seconds.

Skill #	Skill	Performance measures
7.	Clear an obstructed airway	Candidate administers up to five back blows and abdominal thrusts for the responsive worker with a severe (complete) obstruction and repeats as necessary: • Hand position is midline on the abdomen just above the navel and below the ribs. Candidate looks in the mouth, removes any object with a finger sweep. Candidate attempts to breath for the worker.
8.	Breathe for a worker with a pocket mask	Candidate holds the pocket mask on the mannequin's face while maintaining the head-tilt and achieves a good seal against the face. The mannequin's chest wall rises with each breath.
9.	Perform CPR	Candidate administers 30 chest compressions and 2 breaths (ventilations): • Hand position is in the centre of the chest between the nipples. • Chest is compressed at least 5 cm. • Chest compressions are at a rate of 100–120 per minute. • Chest wall rises with each ventilation. • Full recoil of chest after chest compression. • Chest returns to normal position after chest compressions.
10.	Deploy an AED	Candidate uses the AED as soon as it is available. Candidate follows the AED voice prompts. AED pads are generally in the correct position.

Skill #	Skill	Performance measures
11.	Assess skin condition — recognize shock	Candidate assesses the skin for colour, temperature, and moisture as part of the primary survey. Candidate recognizes that a worker in shock requires urgent medical care and keeps the worker warm.
12.	Conduct an RBS	Candidate conducts a thorough RBS for severe bleeding and major injuries.
13.	Control bleeding with direct pressure	Candidate applies direct pressure to severe bleeding during the primary survey. Candidate directs a helper to maintain direct pressure.
14.	Control bleeding with dressing and bandages	Candidate applies dressings and bandages to severe bleeding at the end of the primary survey: • Bandages are tight enough to control the bleeding.
15.	Control bleeding with the use of a tourniquet	Candidate applies tourniquet to themselves: • Correct position • Tight enough to stop bleeding

The following lists the specific skills that the instructor has an opportunity to assess for candidate competency during the practice sessions in Modules 2 and 3.

Practice session #	Practice session name	Skills eligible for assessment
2-01	Mild (partial) airway obstruction conscious worker	Skill 1, 2, 6
2-02	Severe (complete) airway obstruction conscious worker	Skill 1, 2, 6, 7
2-04	Respiratory/cardiac arrest	Skill 1, 2, 4, 6, 8, 9
2-05	Respiratory/cardiac arrest — AED	Skill 1, 2, 4, 6, 8, 9, 10
3-01	Internal bleeding — unresponsive laying face up	Skill 1, 2, 3, 4, 5, 6, 11, 12
3-02	External bleeding — responsive sitting	Skill 1, 2, 3, 6, 11, 12, 13, 14

For the written portion of the competency evaluation, each candidate must achieve 70%, or 18 questions correct out of 25. If a candidate has performed well in the practical aspect of the course but does not achieve 70% on the written examination because of a learning disability, English as a second language or low levels of literacy, the training agency has a policy how to proceed.

Module 1

Module 1

Objective

A competent first aid attendant will be able to:

- Apply the priority action approach
- Reposition an injured worker
- Describe the roles and responsibilities of a designated first aid attendant
- Conduct a modified primary survey
- Assess soft tissue injuries
- Make appropriate medical referral decisions
- Explain the WorkSafeBC regulatory requirement for first aid record keeping

Module outline

Assess	Activity
Discussion	Classroom introduction and management
Discussion	Roles and responsibilities
Discussion	Barriers to communication
Intro, video	How the body works
Discussion, video	Priority action approach
Discussion	Secondary survey
Video, demo 1-01	Primary survey responsive worker
Practice 1-01	Primary survey responsive worker
Demo 1-02	Reposition an injured worker
Practice 1-02	Reposition an injured worker

Assess	Activity
Demo 1-03	Primary survey unresponsive worker
Practice 1-03	Primary survey unresponsive worker
Video, demo 1-04	Reposition an injured worker
Practice 1-04	Reposition an injured worker
Discussion	Priority action approach walk in worker
Video, demo1-05	Priority action approach to the walk-in worker
Practice 1-05	Priority action approach to the walk-in worker
Demo 1-06	Priority action approach walk in worker laceration
Practice 1-06	Priority action approach walk in worker laceration
Discussion	Wounds referred to medical aid
Video	Shoulder injury: Strain
Video	Back strain

Materials and equipment

- Presentation equipment
- First aid training equipment
- A sample of a safety data sheet (SDS)

First aid kits

These items must be kept clean and dry and must be ready to take to the scene of an incident. A weatherproof container is recommended for all items except the blankets. Blankets should be readily available to the first aid attendant.

The first aid attendant should check the first aid equipment and supplies at the start of every shift. For a full list of all kits, see worksafebc.com.

The first aid attendant should check the first aid equipment and supplies at the start of every shift.

The first aid attendant should check the First Aid Record for workers requiring follow-up care for previous injuries:

- Who is available to use as helpers in case of an injury?
- Are SDSs and PPE available?
- Who is in charge of ordering supplies?

References

Occupational Health and Safety Regulation

Module 1

Discussion — Introduction

We will discuss some of the physical aspects of the course, what is expected of you, and how the day will unfold.

Slide 1

Instructor and participant introductions:

- Participant name tags

The course format:

- Seven hours class time
- Demonstrations with class practical sessions
- The Basic First Aid Participant Guide is:
  - Referred to throughout the class
  - A reference guide to review during the three years of certification

Classroom management:

- Break schedule (coffee, lunch)
- Parking, washrooms, exits, etc.

Expectations: participant and instructor:

- Full participation in all practical sessions
- During practical sessions the instructor will be asking questions:
  - It's best if you do not call out any answers, as the instructor will call on people for the answer, which helps the instructor keep track of how you are doing.
  - The first time we practise a new skill, it is very important every step is practised correctly. To help with this, the instructor will be asking everyone to stop and freeze during the first practice. Please wait and do not get ahead of the class while the instructor checks to see if

everyone is correct.

- Participants must show competency in the practical exercises for each objective that involves a "lifesaving" skill in order to be certified.
- For the closed-book written exam, you must achieve a pass mark of at least 70% (18 out of 25 questions). Upon successful completion, a certificate is issued that is valid for three years.

Evaluation (practical and written assessment)

- Agency evaluations to be completed

Safety alert

This course is physically demanding. It will require prolonged kneeling, working in stooped positions, and repositioning other participants. Each participant is required to function as attendant, co-worker, and injured worker.

Accommodation may be made for participants who indicate a problem with some of these activities. Participants may be permitted to adopt "comfort" positions on the floor to avoid kneeling or stooping for prolonged periods, even though the positions may not facilitate optimum care. However, regardless of accommodation made during class, participants will be required to demonstrate specific skills according to an accepted standard before certification is issued.

Medical exam gloves are used during all practice sessions. Participants need to be aware of possible allergic reactions to latex gloves and powder used in some brands.

Personal protective equipment (PPE): kneepads are recommended.

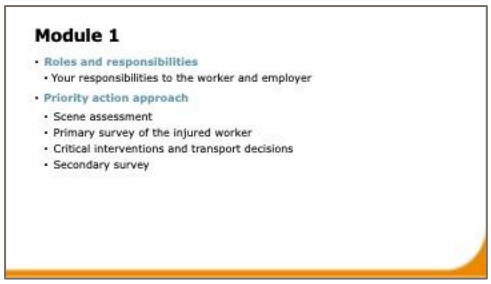
Slide 2

Someone has just been seriously injured at your workplace and is lying on the ground not moving with blood on their face.

What do you do? Call an ambulance?

This course will teach you what to do during those crucial first minutes before the ambulance or ETV (remote workplace) arrives.

In Module 1 we will cover:



Slide 3

- Roles and responsibilities
  - Your responsibilities to the worker and employer
- Priority action approach to an incident or injury which includes:
  - Scene assessment
  - Primary survey of the injured worker
  - Critical interventions and transport decisions
  - Secondary survey

Lecture, discussion — Role and responsibilities

First aid is a vital part of the workplace on any jobsite.

First aid attendants have an obligation to provide first aid in the workplace per the Occupational Health and Safety (OHS) Regulation.

> *The following is an excerpt from the OHS Regulation:*
>
> **3.21 First aid attendant responsibilities**
>
> 1. The first aid attendant must:
>
>   a. promptly provide injured workers with a level of first aid within the scope of the first aid attendant's training and this Part,
>   b. objectively record observed or reported signs and symptoms of injuries and exposures to contaminants covered by this Regulation, and
>   c. refer for medical treatment workers with injuries considered by the first aid attendant as being serious or beyond the scope of the attendant's training.

2. A first aid attendant must be physically and mentally capable of safely and effectively performing the required duties, and the Board may at any time require the first aid attendant to provide a medical certificate.
3. The first aid attendant is responsible, and has full authority, for all the provision of first aid to an injured worker until responsibility for treatment is accepted
    a. at a place of medical treatment,
    b. by ambulance personnel, or
    c. by a person with higher or equivalent first aid certification.
4. The first aid attendant does not have authority to overrule a worker's decision to seek medical treatment or the worker's choice of medical treatment.

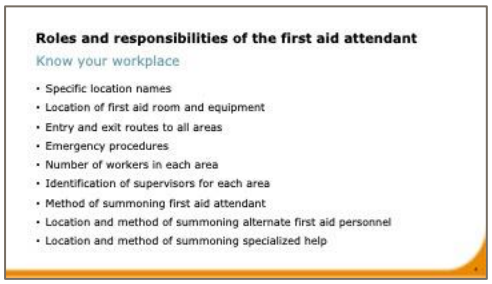
There may be serious consequences if an attendant abandons an injured worker or is guilty of gross negligence towards an injured worker.

Knowing the role and responsibility as a first aid attendant will help to make decisions to do the job effectively.

When you assume the role of a first aid attendant you take on many responsibilities.

The attendant role starts well before an incident or injury even happens.

It is the attendant's responsibility to be familiar with all aspects of the workplace including:

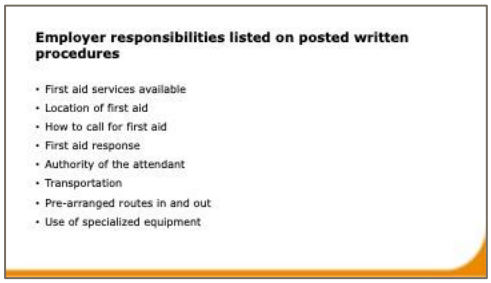


Slide 4

- Specific location names (including jargon) for all areas of the worksite
- Location of first aid room, rescue vehicles, and first aid equipment
- Entry and exit to and from all areas of the worksite
- Provision for emergency procedures under the listed Regulation section numbers
- Determining the approximate number of workers usually expected to be in each general area of the worksite
- Identifying supervisors in each area (how each can be reached)

- Method of summoning first aid attendant
- Location and method of summoning other first aid personnel
- Location and method of summoning workers with specialized training (welders, heavy equipment operators, millwrights, company fire crew, etc.)

The attendant must know where to access information on specific hazards.



Slide 5

The employer must keep, and conspicuously post, up-to-date written procedures for providing first aid at the worksite including:

- The equipment, supplies, facilities, first aid attendants, and services available
- The location of first aid
- How to call for first aid
- How the first aid attendant is to respond to a call for first aid
- The authority of the first aid attendant over the treatment of injured workers and the responsibility of the employer to report injuries to WorkSafeBC
- Who is to call for transportation for the injured worker, and the method of transportation and communication
- Pre-arranged routes in and out of the workplace and to medical treatment
- Use of an AED (if available) and other specialized equipment

More information and samples of the written procedures for providing first aid can be found on worksafebc.com.

A list of emergency numbers must be maintained for use in an emergency.

The attendant should confirm that the employer has provided all minimum first aid supplies and services as required by the Regulation.

Slide 6

Example

First aid kit

Employers are required to provide first aid supplies that meet the minimum requirements outlined in Schedule 3-A of the OHS Regulation. Recommended minimum contents for first aid kits can be found on worksafebc.com.

First aid attendants should check first aid equipment and supplies at the start of every shift, and promptly inform the employer whenever supplies need to be replenished.

First aid kit items need to be kept clean and dry, and ready to take to the scene of an accident. A weatherproof container is recommended for all items except the blankets. Blankets should be readily available to the first aid attendant.

More information about the employer's responsibilities to provide first aid services can be found in section 21 of the Act and sections 3.16-3.20 of the OHS Regulation.

Slide 7

A first aid attendant:

- Must ensure their first aid certification remains valid — know the expiry date (valid for three years)

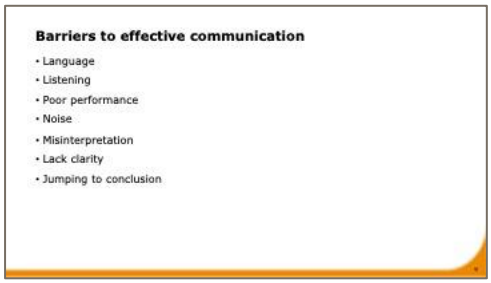
- Must be physically and mentally capable of safely and effectively performing the required duties, and WorkSafeBC may at any time require the attendant to provide a medical certificate
- Is responsible, and has full authority, for all first aid treatment of an injured worker until the worker returns to work or responsibility for treatment is accepted by:
  - A place of medical treatment
  - An ambulance service acceptable to WorkSafeBC
  - A person with higher or equivalent first aid certification accepts responsibility

Slide 8

- Does not have authority to over-rule a worker's decision to seek medical treatment or the worker's choice of medical treatment
- Must act professionally; treat all workers respectfully and expediently
- Must maintain a pleasant personality and remain calm under pressure, which can lessen the anxiety of the injured worker and co-workers, as they:
  - Take charge of the scene and injured worker
  - Direct co-workers to assist when required
- Must maintain confidentiality of things that a worker may convey, whether it be a medical condition, or something else relating to the injury
- Can recommend to the supervisor that there may be alternative duties that the worker could do; the supervisor needs to know the limitations that the injured worker can work under without aggravating the injury
- Must ensure all first aid equipment is clean and well organized
- Should review the reference manual to keep current in the first aid procedures

Barriers to effective communication discussion

Effective communication is critical during an incident. Here are some barriers to effective communication.



Slide 9

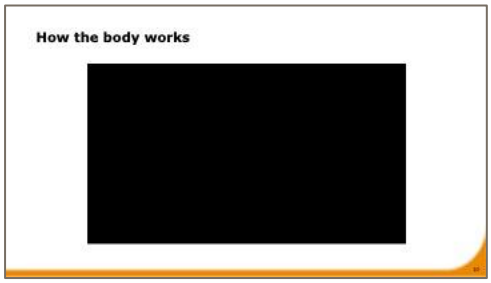
Barriers

- **Language**
  There may be language barriers to work around during an incident. If there is difficulty communicating with a worker or the bystanders, find someone who can communicate with the worker or bystanders; this may help work through the barriers.
- **Not listening**
  You must show enthusiasm when communicating with others. Pay attention to what the individual is saying.
- **Poor performance of equipment**
  There may be technical problems with the equipment (radios, pagers) on a worksite. Check your equipment at the start of each shift to ensure the equipment is working properly.
- **Noise**
  There may be no way of stopping noise during an incident. Get close and listen, pay attention to body language, gestures, and facial expressions.
- **Misinterpretation**
  There may be confusion if the information is misinterpreted. Repeat or paraphrase the individual's response to confirm understanding.
- **Lack of clarity**
  Confusion can be created by the words you have chosen, the tone of your voice or your body language. Keep it simple. "Say what you mean. Mean what you say."
- **Jumping to conclusions**
  People often hear what they expect to hear rather than what is actually said and jump to incorrect conclusions.

The first aid attendant also needs to know the basic actions to keep the injured worker alive until help arrives.

To understand the effects of first aid, a basic knowledge of how the body works is essential.

How the Body Works



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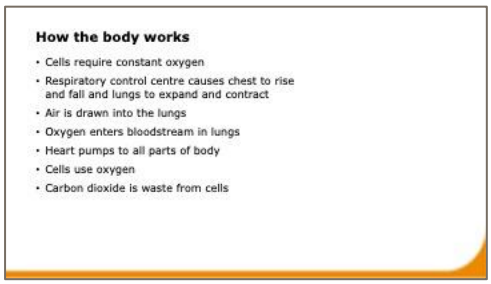


Slide 11

- The cells of the body require a constant supply of oxygen, especially the vital organs such as the brain, heart, lungs, kidneys, and liver.
- The respiratory control centre, located in the brain, causes the chest to rise and fall causing the lungs to expand and contract.
- This draws air in through the nose and mouth to the lungs via the airway.
- In the lungs oxygen enters the bloodstream and is pumped to every part of the body by the heart.
- Oxygen is used by the body cells, leaving carbon dioxide waste that is circulated back to the lungs and expelled when we breathe out.

Cells in our vital organs start dying in as little as four minutes if the supply of oxygen is stopped.

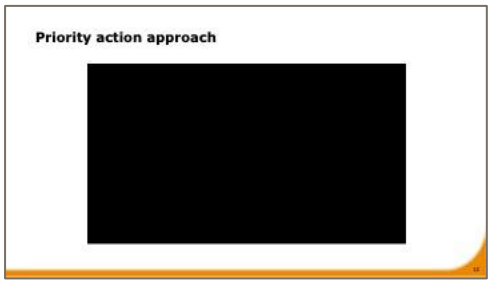
First aid is about maintaining the supply of life-sustaining oxygen until the worker is in more qualified hands.

Priority action approach

- Scene survey
- Assessing responsiveness

- Primary survey
  - Airway assessment
  - Breathing check
  - Circulation assessment
- Critical interventions transport decision
- Secondary survey

Discussion — priority action approach



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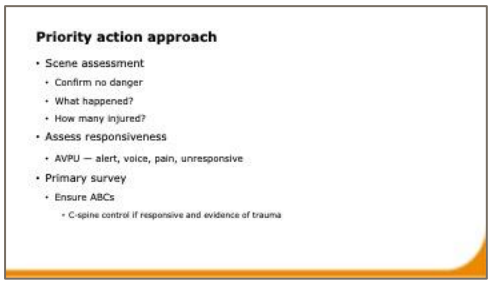
During the critical period after an injury, we follow the sequence of steps of the priority action approach to ensure nothing is missed.



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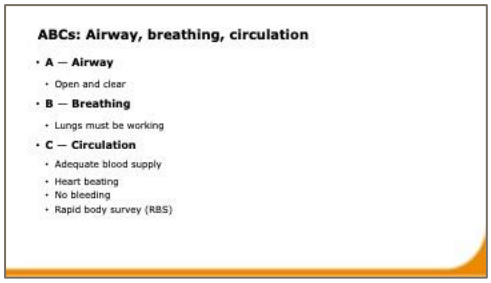
Priority action approach is first things first.

- Scene assessment
  - No further danger to yourself or workers
  - What happened?
  - How many people were hurt?
- Assess responsiveness (AVPU)
  - A — is the worker alert?

    - V — does the worker respond to voice?
    - P — does the worker respond to pain?
    - U — is the worker unresponsive?
- Primary survey
    - Ensure ABCs
    - Stabilize the head and neck if the worker is responsive and the history indicates trauma
    - Consider the possibility of a head, neck, and back injury based on the type of force applied to the body:
        - Numbness and tingling?
        - Loss of feeling in an extremity?
        - Pain on the spinal column?
        - Significant head injury?
        - Loss of motor function?



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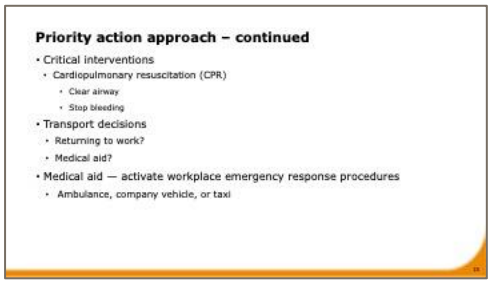
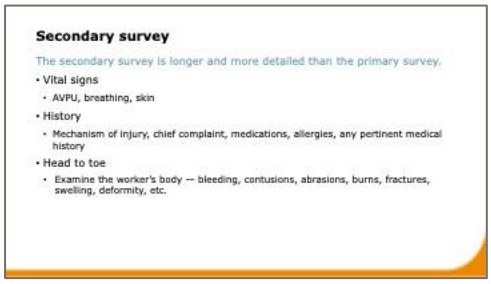
- A (Airway)
    - Must be open and clear
- B (Breathing)
    - Lungs must be working
- C (Circulation)
    - Must be an adequate blood supply
    - Heart must be beating
    - No bleeding — checked by doing a rapid body survey (RBS)



Slide 15

- Critical interventions
  - May require an intervention such as providing CPR, clearing an airway, or stopping bleeding
- Transport decision
  - Returning to work? Transporting to medical aid?
- Medical aid — Activate workplace emergency response procedures
  - Ambulance, ETV, company vehicle, or taxi
- Secondary survey
  - Reassess the ABCs every five minutes while waiting for the ambulance or ETV

If the worker's condition changes, those changes must be updated to the ambulance dispatch



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Discussion — secondary survey

Secondary survey

The secondary survey is similar to the primary survey, except it's more detailed and takes longer.

The secondary survey consists of:

- Vital signs
- History
- Head-to-toe examination

You can read more about how to conduct the secondary survey in Appendix F.

If an ambulance is needed to transport the injured worker or an ETV will be used to meet the ambulance en route to medical aid, provide a verbal report the ambulance to include:

- Worker's name and age
- Vital signs — level of consciousness (AVPU), breathing, skin colour, temperature, condition
- History — mechanism of injury (what happened), worker's chief complaint(s), medications, allergies, any pertinent medical history
- Head to toe — injuries found, treatment rendered

Discussion — transmission of infection and personal protective equipment

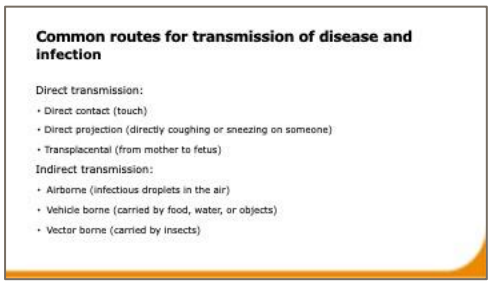
Workplace hazards and risk

The designated first aid attendant may face hazards and be at risk when providing care to an injured worker. A hazard is any source of potential damage, harm or adverse health effects on something or someone.

A risk is the probability that a person will be harmed or experience adverse health effects when exposed to a hazard.

These hazards and risks may be:

- Environmental
- Psychological
- Physical



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Common routes for transmission of disease and infection

Direct transmission:

- Direct contact (touch)
- Direct projection (directly coughing or sneezing on someone)
- Transplacental (from mother to fetus)

Indirect transmission:

- Airborne (infectious droplets in the air)
- Vehicle borne (carried by food, water, or objects)
- Vector borne (carried by insects)

Personal protective equipment (PPE)

Infection and disease are a risk and hazard for the first aid attendant. Transmission of disease and infection may be prevented by always using proper hand hygiene and PPE when interacting with an injured worker.

If there is any risk of exposure to blood or body fluids, you must wear PPE, such as rubber gloves. Remember to change your gloves between patients to avoid cross-contamination.

If there is a potential for spraying body fluids, you must wear safety glasses or face shields. Arterial bleeding, childbirth, and vomiting are examples.

If there is a potential for splatter from blood or body fluids, or there is a suspected respiratory infection, you must wear PPE. If wearing a respirator is required as part of your PPE, you will need to be fit tested before you start your duties and once a year after that.

You may also be required to wear other personal protective equipment, depending on the circumstances, such as high-visibility vests, medical masks for communicable diseases, and respirators for silica dust.

Some of the equipment used in first aid is also PPE, such as the pocket mask with a one-way valve, and gloves.

Safety alert
Medical examination gloves are used during all practice sessions. Students need to be aware of possible allergic reactions to latex gloves and/or powder used in some brands.

Participant Practice 1-01

Materials required

- Gloves
- First aid kit
- Blankets
- Sandbags (for leg support)

Conduct the primary survey

Face up (supine), responsive worker

Assess		Response
1.	Scene assessment (gloves on) • Ensure no danger. • What happened? • How many injured?	• No danger • The worker fell off a 2 m stepladder • One worker
2.	Approach the worker from the line of sight, with a first aid kit and blanket, identify yourself and attempt to talk to the worker.	The worker says they fell off a ladder; worker has a clear airway and is breathing normally.
3.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say "There is a responsive adult who has fallen two meters off a ladder" and to report back	The worker is in great pain and is unable to get up. • In rural worksites this may be a company ETV.
4.	Assess responsiveness AVPU	The worker's eyes are open and they are aware of you as you approach; worker is alert.

Assess		Response
5.	Tell the worker not to move and with your elbows on the ground, stabilize their head and neck by placing your hands on either side of the head, and hold the head still in the position found.	Worker allows the attendant to support their head.
6.	Hand off the support of the head to a co-worker by giving clear directions: • The co-worker's elbows must be braced prior to placing hands on the head. • Direct the co-worker to place one hand over yours, hold the head still while you slide your hand out and repeat with the other hand. • Direct the co-worker not to move and to hold the head still in the position found.	

7.	Primary survey
	• Ensure the worker has a clear airway and is breathing by asking a question.
	• Ask the worker where they are hurt.
	• Assess circulation:
	  • Look for obvious signs of shock by observing skin colour and feeling for temperature and condition.
	  • Conduct a rapid body survey to check for massive external hemorrhage and obvious fractures.
		• The worker is speaking and the breathing is normal.
		• The worker is complaining of pain in the right leg
		  • Skin — normal colour, warm and dry to the touch
		  • RBS — significant pain and obvious deformity in right knee

Assess		Response
	Note: If wounds or bleeding are discovered on the chest area during the RBS, the chest must be exposed, and any chest wounds must be covered with gauze if bleeding and stabilized if the history indicates trauma to the chest, or pain,	No chest injuries, bleeding on the chest or chest pain were discovered or reported during the RBS.
8.	Direct a co-worker to support the leg to prevent movement, reassure, and keep the worker warm.	If there are no co- workers available, the use of any readily available material to prevent movement of the injured leg is appropriate. Remind the worker to remain calm and to try not to move.
9.	Reassess the ABCs every five minutes while waiting for the ambulance. If the worker's condition changes, those changes must be update relayed to the ambulance dispatch.	
10.	Complete the secondary survey • Vital signs • History • Head to toe	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.
Note: At the conclusion of the practice, each participant will practise proper glove removal.		

Participant Practice 1-02

Materials required

- Gloves
- Blankets

Skill only:

- Face down (prone) to face up (supine) roll

Face down (prone) to face up (spine) roll		
Assess		**Response**
The primary survey is best conducted in the supine position. Supine is the best position to open the airway, assess level of responsiveness, airway, and breathing, as well as to perform most critical interventions.		
1.	Kneel beside and behind the worker.	
2.	Direct co-workers to support the legs and hips and help with the roll.	
3.	Cradle the injured worker's head and neck in the hand closest to the injured worker's head, and with the other hand grasp the clothing at the hip and pull the injured worker toward you and over into the face up (supine) position.	

Discussion — head and spinal injuries

When a worker has suffered a traumatic accident, the first aider must have a high degree of suspicion for head, neck, and back injuries. An injured worker with head trauma may suffer a traumatic brain injury. Traumatic brain injuries can range from mild (concussion) to severe (unconscious/unresponsive). Any worker with suspected spinal injury or suspected traumatic brain injury requires medical attention. Activate the workplace emergency response procedures immediately.

Participant Practice 1-03

Materials required

- Gloves
- First aid kit
- Blankets

Conduct the primary survey

Unresponsive worker face down

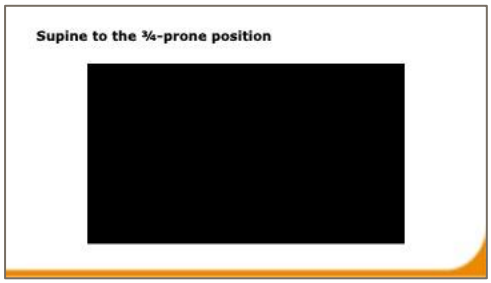
The site first aid attendant is called to an incident in a building under construction.

Assess		Response
1.	Scene assessment (gloves on) • Ensure no danger. • What happened? • How many injured?	• No danger • The site supervisor explains the worker fell through the uncovered opening in the floor. • One worker.
2.	Assess responsiveness • AVPU	The worker's eyes are closed and is unaware of you as you approach; worker does not respond.
3.	Approach the worker from the front, with first aid kit and blanket, identify yourself and attempt to talk to the worker • Apply a pain stimulus to one of the workers fingers.	The worker does not respond to your voice or to pain. This worker requires urgent medical attention.
4.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say there is an unresponsive adult with a head injury and to report back.	• In rural worksites this may be a company ETV or helicopter.
5.	Position the worker on their back (supine).	

Assess		Response

6.	Primary survey
	• From the side of the worker's head, open the airway using a head-tilt chin-lift, keeping the head in line with the body.
	• Assess breathing for 5–10 seconds.
	• Direct a co-worker to kneel on the opposite side of the worker and hold the head in the head-tilt chin-lift position.
	• Assess circulation:
	  • Look for obvious signs of shock by observing skin colour and feeling for temperature and condition.
	  • Conduct a rapid body survey to check for massive external hemorrhage and obvious fractures.
		• Air is moving in and out quietly — airway is clear.
		  • Skin is normal colour, warm, and dry
		  • RBS — nothing obvious

7.	Keep the worker warm.	Apply blanket.
8.	Reassess the ABCs every five minutes while waiting for the ambulance or ETV. If the worker's condition changes, those changes must be updated and relayed to the ambulance dispatch.	
9.	Complete the secondary survey • Vital signs • History • Head to toe	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.



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Participant Practice 1-04

Materials required

- Gloves
- Blankets

Skill only:

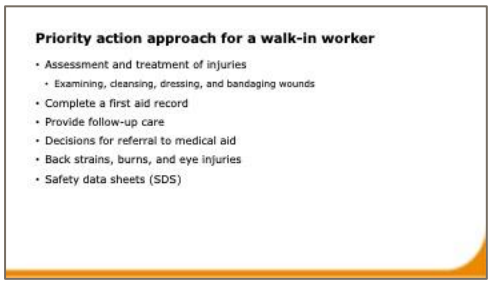
- Face up (supine) to recovery (¾-prone) roll

Face up (supine) to recovery position (¾-prone)		
Assess		**Response**
There are times when the first aid attendant must leave an unresponsive worker to go get help. It is important not to leave an unresponsive worker lying on their back (supine), they must be put in the recovery position (¾-prone).		
1.	Kneel beside the worker; ensure the arm closest to you is extended out to the side.	
2.	Cradle the worker's head and neck in the hand closest to the worker's head, and with the other hand grasp the clothing at the hip and pull the worker up on their side (lateral) — resting against your body.	

Face up (supine) to recovery position (¾-prone)		
3.	Ensure the worker's head is resting on the upper arm, the upper leg is bent to prevent the worker from settling on the abdomen, and the other arm is in a comfortable position in front of the worker.	
4.	A folded blanket may be placed under the worker's upper leg or upper shoulder to help maintain the position.	
5.	Ensure the worker's airway is open and the head is in a drainage position.	
6.	Move away from the worker and ensure the worker is still in good position.	The ABCs should be reassessed now that the worker is in the recovery (¾ prone) position.

Discussion — Priority action approach for the walk-in worker

Most injuries the basic first aid attendant will treat are day-to-day minor wounds and cuts. The attendant is responsible for:



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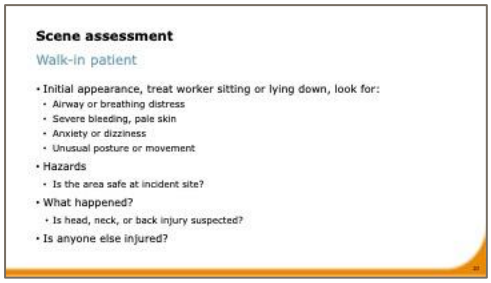
- Assessing these injuries
- Treating the injury
- Documentation (first aid record)
- Referring workers to medical aid when the injury is beyond the scope of basic first aid training

Priority action approach for a walk-in worker (minor injury):

- Assessment and treatment of injuries:
  - Examining wounds
  - Cleansing, dressing, and bandaging wounds
- Completion of the first aid record
- Provision of follow-up care
- Decisions for referral to medical aid
- Back strains, eye injuries, and burns
- Review of the SDS (Workplace Hazardous Materials Information System [WHMIS] 2015)

When the injured worker is walking and talking, the priority action approach can be modified depending on information gathered during the initial management.

During the scene assessment, information gathered will help the attendant make decisions.



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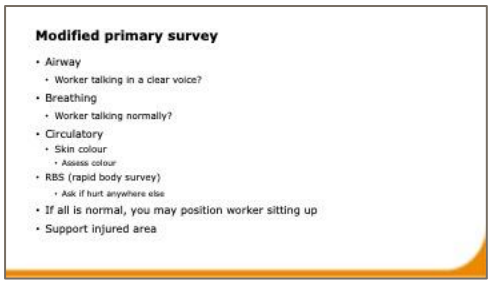
- Worker's initial appearance helps us decide if the worker can be treated sitting or must be lying down if any of the following are present:
  - Airway distress
  - Breathing distress
  - Severe bleeding
  - Pale skin colour
  - Anxiety or dizziness
  - Unusual posture and movement
- Hazards
  - Is it safe back at incident site?
- Mechanism of injury

- What happened?
- Force involved and to what part of the body?
- Is head and neck support (C-spine control) required?
- Number of victims — is anyone else injured?

A primary survey involves assessing a worker's airway, breathing, and circulation. The ABC assessments were done thoroughly and carefully because those injured workers were not walking or talking. For the worker who walks in to see the first aid attendant, we can usually modify this survey.

Modified primary survey

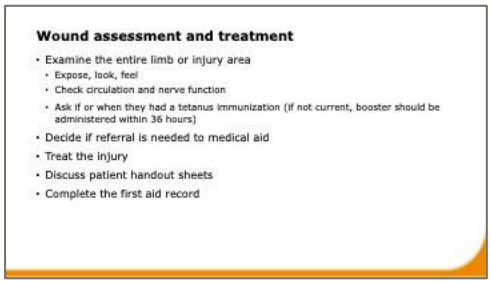


Slide 21

- Airway assessment
  - Is the worker talking in a clear voice?
- Breathing assessment
  - Is the worker talking normally?
- Circulatory assessment:
  - Look to see if the skin colour is normal
  - RBS — ask if the worker hurts anywhere else

If everything looks normal, the worker may be positioned sitting, with support for the injured area.

Now the injured area must be fully assessed to decide on treatment and if referral to medical aid is required:



Slide 22

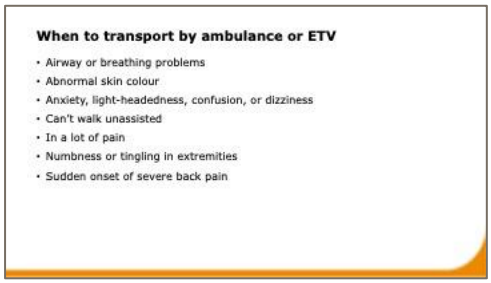
- Expose the limb or injured area.
- Look at the entire limb or area for wounds, discolouration, swelling, or deformities.
- Feel the entire limb or area to determine extent of injury.
- Check circulation and nerve function.
- Tetanus injections should be administered within 36 hours of the injury even if the injury seems insignificant.
- A tetanus booster shot should be recommended if the wound is very dirty at 5 years after the last injection and at 10 years if it is a clean wound.
- Once a tetanus infection is established, there is about a 40% mortality rate even with appropriate therapy.

Decide if the worker can be treated and returned to work or must be referred to medical aid. Treat the wound — cleanse, dress, and bandage.

If the worker is being treated and returned to work, a worker handout sheet must be given out and discussed. Sample worker handout sheets are included in Appendix C in this guide.

An ambulance will be required if the worker is not responsive or is unwilling or unable to get up.

In addition, workers who display any of the following signs or symptoms must be transported to medical aid by ambulance.



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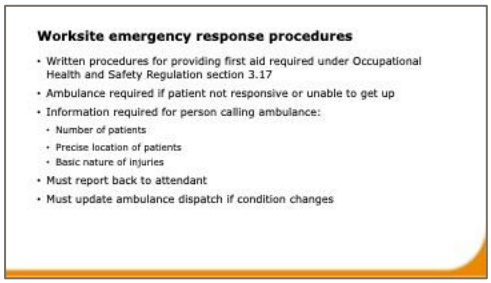
- Airway or breathing problems
- Abnormal skin colour
- Anxiety, light-headedness, confusion, or dizziness
- Worker cannot walk unassisted
- Worker is in great pain
- Injury has resulted in ongoing numbness or tingling in an extremity
- Weakness, numbness, or tingling in the extremities
- Sudden onset of severe pain in the spinal area

If none of the above are present and the worker needs to be referred to medical aid, the worker may be transported in a company vehicle or taxi.

The worksite's emergency response procedures are activated as outlined in the written procedures for providing first aid required for every worksite under section 3.17 of the OHS Regulation.

The workplace emergency response procedures will include a process for calling the ambulance. In some remote workplaces, there may be a process for arranging to have an ETV or helicopter respond and call the ambulance. The ETV or helicopter will meet the ambulance en route to medical aid.



Slide 24

When a co-worker is designated to call for an ambulance, they must have information to be given to the ambulance dispatcher:

- Number of injured workers
- Precise location of the injured workers
- Basic nature of the injuries

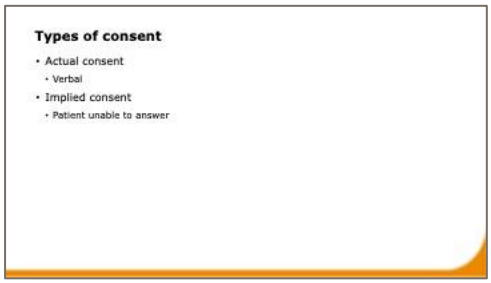
The co-worker must report back to the attendant to confirm an ambulance has been called. The ABCs must be reassessed every five minutes:

- A — Airway is still clear and open
- B — The worker is still breathing
- C — There are no signs of shock and any bleeding is still controlled

While a designated first aid attendant is considered to have authority to provide first aid in the workplace, all workers have the right not to be touched by anyone.

In order to help someone we must have their consent.

There are two types of consent — actual consent and implied consent:



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- Actual consent refers to a worker making an informed decision and allowing you to help them.

- Implied consent refers to a situation where a worker is unable to respond and the law assumes that, if able, the worker would give consent in an emergency situation.

Slide 26

Video — Ankle Injury: Sprain

Participant Practice 1-05

Materials required

- Gloves
- Cold pack
- Blanket

Assess and treat a sprained ankle

Ankle sprain

Assess		Response
1.	Scene assessment — modified • Assess initial appearance • What happened? • Did you fall or hit your head? • Is it safe back at injury site? • Was anyone else hurt?	• The worker's appearance is normal. • "While going down the stairs I twisted my ankle." • No trauma to head or neck. • No hazards. • No other workers hurt.

Assess		Response

2.	Primary survey — modified
	• Airway
	• Breathing
	• Circulation
	  • Skin colour
	  • RBS — ask the worker "Did you hurt yourself anywhere else?"
	Provide immediate care by elevating the injured leg.
		The modified primary actually begins as the worker enters the first aid room and you question the worker.
		• The worker is talking in a clear voice and the mechanism does not indicate major trauma.
		• Breathing is adequate, as the worker is talking normally.
		• You can see the skin colour is normal.
		"No, only my ankle hurts."
		The modified primary survey is complete.
		Based on information gathered, the worker can be treated sitting in the treatment chair.

3.	Wash hands and put on gloves.	
4.	Secondary survey — examination and assessment (modified head to toe): • Thoroughly examine the leg from the knee to the toes for other injuries. • Examine around the injury site for damage to underlying structures. • Feel the foot for warmth (circulation). • Ask if the worker can feel touch on the toes and if the worker can move the toes. • Assess range of motion.	Vital signs are not required because the worker is not likely going to medical aid. History — no allergies, medications, medical problems Chief complaint • There is no redness. • There is no swelling. • Foot is warm to the touch • The worker can feel and move the injured limb. • Worker can move their foot, but there is a slight increase in pain on movement.

Assess		Response
5.	Decide or confirm the need to refer the worker to medical aid.	There is nothing to indicate this injury will require medical aid.
6.	If the foot has normal colour and is warm apply ice for 20 minutes on and 5 off.	• Foot is warm • Normal colour
7.	Talk to supervisor if the worker cannot return to their normal duties.	
8.	Discuss sprain care and follow-up treatment Continue applying ice for 24–48 hours. Advise the worker to report to first aid in 24 hours or at the start of their next shift for follow-up care.	A handout on sprains care should be given to the worker (in Appendix C).
9.	Complete the first aid record.	Verbalize first aid record completion.

Participant Practice 1-06

Materials required

- Gloves, protective eyewear
- Clean water or saline
- Sterile gauze
- Absorbent dressing
- Adhesive tape
- Blanket
- Skin closures or band aid
- Worker handout sheet
- Gauze roller and crepe roller

Assess, cleanse, and dress an open wound

Cut to the inner arm

Assess		Response
1.	Scene assessment — modified • Assess initial appearance. • What happened? • Did you fall or hit your head? • Is it safe back at injury site? • Was anyone else hurt?	• The worker's appearance is normal. • While working on an automobile motor, the worker was cut on the arm by a piece of metal. • No trauma to head or neck. • Motor is shut off. • No other workers hurt.

2.	Primary survey — modified
	• Airway
	• Breathing
	• Circulation
	  • Skin colour
	  • RBS — ask the worker "Did you hurt yourself anywhere else?"
	Provide immediate care by supporting the injured arm and covering the wound with sterile gauze.
		The modified primary actually begins as the worker enters the first aid room and you question the worker
		• The worker is talking in a clear voice and the mechanism does not indicate major trauma.
		• Breathing is adequate as the worker is talking normally.
		• You can see the skin colour is normal.
		• "No, only my arm hurts."
		The modified primary survey is complete.
		Based on information gathered, the worker can be treated sitting in the treatment chair.

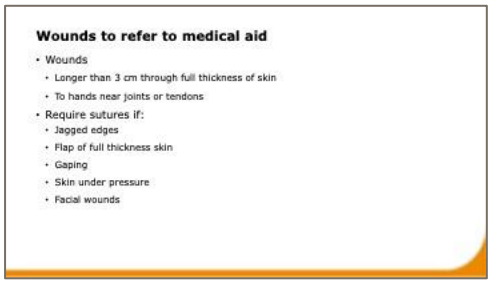
3.	Wash hands and put on gloves and protective eyewear.	

Assess		Response
4.	Secondary survey — examination and assessment (modified head to toe): • Thoroughly examine the arm from the shoulder to fingertips for other injuries. • Examine around the wound for damage to underlying structures. • Examine inside the wound for extent of damage, contamination, or material. • Feel the hand for warmth (circulation). • Ask if the worker can feel touch on the hand and fingers and if the worker can move the hand and fingers.	Vital signs are not required because the worker is not likely going to medical aid. History — no allergies, medications, medical problems. Chief complaint • The cut is 2 cm long. • It is not deep or jagged. • There is minimal bleeding. • There is no swelling. • The cut appears clean. • No other injuries on the arm • Hand is warm. • The worker can feel and move the injured limb.
5.	Decide or confirm the need to refer the worker to medical aid.	There is nothing to indicate this injury will require medical aid.
6.	Clean by prolonged flushing of the wound with tap water.	
7.	Dry around the wound with sterile gauze.	
8.	Because this wound is open slightly (gapes), apply skin closures to bring the edges of the wound together to close it (an adhesive strip can be used to make wound closures).	Advise the worker the closures are to remain in place for 7–10 days.

Assess		Response
9.	Dress and bandage — apply: • Sterile gauze • Extra layers of gauze or an absorbent dressing • A crepe roller bandage or roller gauze, if available	
10.	Discuss wound care and follow-up treatment: • Advise the worker to keep the bandage clean and dry and to report back to first aid if the bandage gets wet or dirty or starts to come off and in 24 hours or at the start of their next shift for follow-up care. • Advise to come back if they develop signs and symptoms of wound infection (red, hot, swollen, painful, pus, red streaks)	A handout on minor wound care should be given to the worker (in Appendix C).
11.	Complete the first aid record.	Verbalize first aid record completion.
12.	Advise injured worker to ensure their tetanus immunization is up to date.	Worker received tetanus immunization less than five years ago.

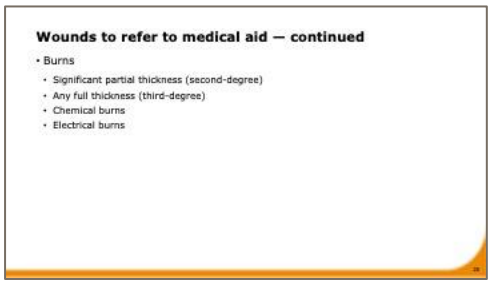
Discussion

Wounds that should be referred to medical aid



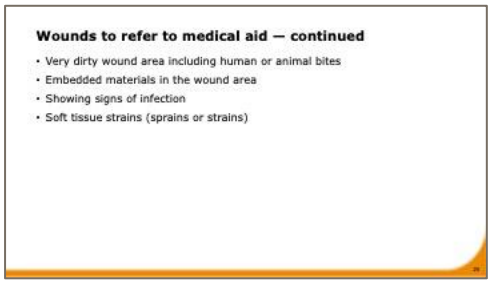
Slide 27

- Wound longer than 3 cm through the full skin thickness
- Wounds to hands in areas of joints or tendons
- Wounds that require sutures:
  - Jagged edges
  - Flap of full thickness skin
  - Gaping or difficulty closing
  - Areas where the skin is under pressure
  - Facial wounds



Slide 28

- Burns
  - Significant partial thickness (second degree)
  - Any full thickness (third degree)
  - Chemical burns
  - Electrical burns



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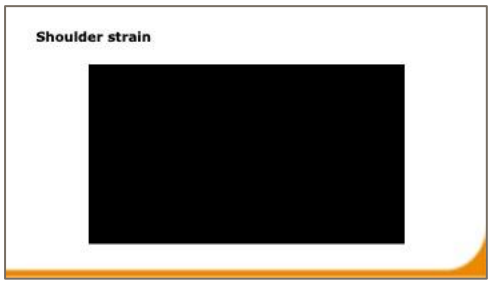
- Wounds that are very dirty, including human or animal bites
- Wounds with embedded materials
- Any sign of infection
- Soft tissue strains, i.e., sprains or strains

Soft tissue strains refer to a group of disorders affecting muscles, tendons, bursae, nerves, and blood vessels. If there is a suspected underlying problem (fracture, etc.), the injured worker must be referred to medical aid. The injured worker must also be referred to medical aid if there is no improvement with treatment and altered activity after three days.

Video — Shoulder Injury: Strain



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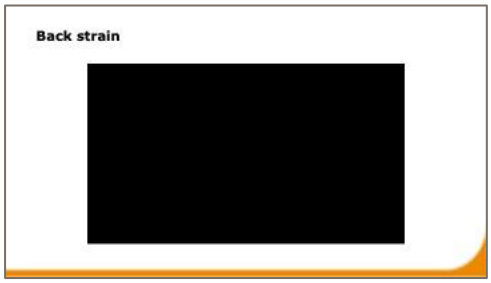
Video — Back Strain



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Module 2

Module 2

Objective

A competent first aid attendant will be able to:

- Identify breathing emergencies
- Identify a mild (partial) obstructed airway
- Identify a severe (complete) obstructed airway
- Clearing of an obstructed airway
- Use a pocket mask
- Perform CPR and use an AED

Module outline

Module 2	
Discussion	Airway and breathing emergencies
Instructor demo 2-01	Partial airway obstruction — responsive worker
Practice 2-01	Partial airway obstruction — responsive worker
Instructor demo 2-02	Complete airway obstruction — responsive worker
Practice 2-02	Complete airway obstruction — responsive worker
Discussion	Circulation system
Video	Chest pain
Discussion	Unresponsive worker
Skill-only practice 2-03	Ventilating a mannequin with a pocket mask
Instructor demo 2-04	CPR respiratory and/or cardiac arrest
Practice 2-04	CPR respiratory and/or cardiac arrest

Module 2	
Instructor demo 2-05	CPR respiratory and/or Cardiac arrest with AED
Practice 2-05	CPR respiratory and/or cardiac arrest with AED
Discussion	Medical conditions
Video	Asthma
Video	Anaphylaxis
Video	Epinephrine

Materials and equipment

- Presentation equipment
- First aid training equipment

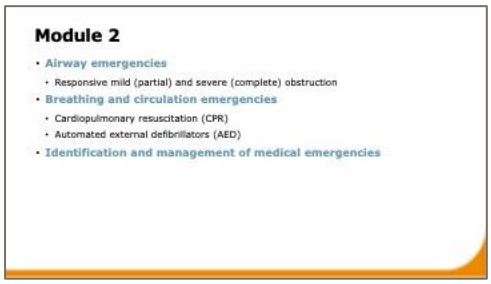
Module 2

Discussion — Airway and breathing emergencies

Slide 33

Of all the procedures a first aid attendant can perform, clearing an airway and maintaining oxygen to the body's vital organs are truly lifesaving.

In Module 2 we will cover:



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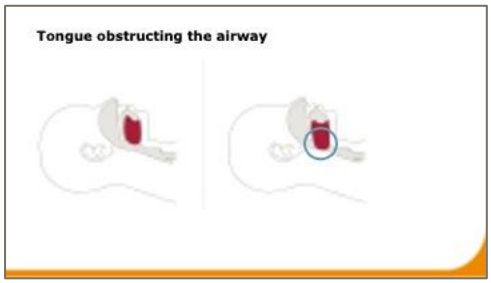
- Managing airway emergencies by clearing an obstructed airway:
  - Responsive worker with mild or severe (partial or complete obstruction)
- Managing breathing and circulation emergencies:
  - Cardiopulmonary resuscitation (CPR)
  - Automated external defibrillators (AED)

Air is delivered to the body through the respiratory system, and oxygen is transferred from the air to the bloodstream in the lungs and carbon dioxide is removed.

At the top end of the airway are the nose, mouth, and throat, which, when obstructed, are most often obstructed by the tongue.



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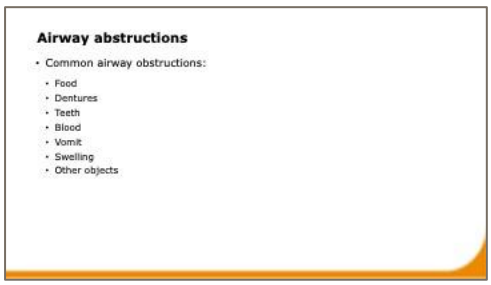
When an unresponsive worker is lying on their back, the tongue can fall backward and obstruct the airway.

The tongue is lifted upward when a head-tilt chin-lift is performed.

Loose objects can also cause an obstruction and must be removed quickly:



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- Food
- Dentures
- Teeth
- Blood
- Vomit
- Swelling
- Other objects

The universal sign of distress (or choking) is a person holding their throat. The obstruction may be:

- Mild (partial): some air is getting past the obstruction
- Severe (complete): the airway is essentially blocked

When there is a mild (partial) obstruction caused by food, fluid, soft tissue swelling, or a loose object:

- Reassure the worker and encourage them to cough.
- Back blows and abdominal thrusts, or chest compression are not given as they may make the obstruction worse.

If the worker can't speak or cough it is a severe (complete) obstruction:

- Back blows and abdominal thrusts, or chest compressions are given to dislodge the object.
- When a worker with a severely (completely) obstructed airway goes from responsive to unresponsive, the attendant lays the worker on their back and starts CPR.
- After 30 chest compressions, the attendant looks in the mouth as the object may have been moved.
- If an object is seen in the mouth, remove it before giving breaths and resuming CPR.

Participant practice 2-01

Materials required

- Gloves
- Face shield or medical mask and eye protection

Manage a mild (partial) airway obstruction

Responsive, standing worker

The attendant hears a call for first aid needed in the lunchroom.

Assess		Response
1.	Scene assessment	No danger, one worker, the worker was eating.
2.	Assess responsiveness AVPU	Worker is aware of you as you approach; worker is alert.
3.	Identify yourself and talk to the worker, asking, "Are you choking?" and assess for blueness around the lips, ears and fingernails.	The worker answers hoarsely, "I'm choking, help me!" There is no blueness (cyanosis)of the skin.

Assess		Response
4.	Place the worker in a position of most comfort, reassure them, and encourage them to cough.	The worker continues to cough effectively (signs of a mild airway obstruction).
5.	Complete the primary survey.	
6.	Transport decision; decide or confirm the need to refer the worker to medical aid.	The obstruction is not clearing and the worker is becoming more anxious with obvious distress. This worker requires urgent medical attention.
7.	Activate the worksite emergency response procedures: Instruct the co-worker calling the ambulance to say there is a responsive adult with a partial (mild) airway obstruction and to report back.	
8.	Continue to monitor the worker and if their condition worsens, instruct someone to call the ambulance back with this new information and follow the procedures for a severe (complete) airway obstruction.	
9.	Complete the secondary survey Vital signs History Head to toe	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.

Participant practice 2-02

Materials required

- Gloves
- Face shield or medical mask and eye protection

Manage a severe (complete) airway obstruction

Responsive, standing worker

The attendant responds to a call for first aid needed in the lunchroom.

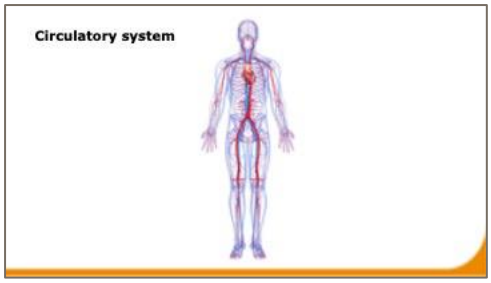
Assess		Response
1.	Scene assessment	No danger, one worker, the worker was eating.
2.	Assess responsiveness AVPU	Worker is aware of you as you. Approach; worker is alert.
3.	Identify yourself and talk with the worker asking, "Are you choking?" and assess for blueness around the lips, ears and fingernails.	• The worker is unable to speak or cough. • The worker nods yes and is very anxious. • The worker is pale.
4.	Transport decision	Because the obstruction is not clearing and the worker is becoming more anxious with obvious distress you decide that this worker requires urgent medical attention.
5.	Activate the worksite emergency response procedures: Instruct the co-worker calling the ambulance to say "there is a responsive adult with a complete (severe) airway obstruction" and to report back.	
6.	Explain to the worker in a brief and calm manner what will be done. **Warning:** Abdominal thrusts and back blows must be simulated in the classroom.	

Assess		Response
7.	Give up to five back blows, maintain contact with the worker, and move around to the side while supporting the worker with an arm across the upper body. Deliver up to five back blows between the shoulder blades.	The airway does not clear.
8.	Give up to five abdominal thrusts Standing behind and providing support to the worker, wrap your arms around the worker's waist, make a fist, and place it thumb side against the abdomen in the midline just above the navel, but below the ribs.	The airway does not clear.
9.	Repeat the sequence of five back blows and five abdominal thrusts until the object clears or the worker collapses.	The airway clears during the second set of abdominal thrusts.
10.	Complete the primary survey.	
11.	Reassess the need for urgent medical attention based on: • Worker anxiety • Primary survey findings • Signs of oxygen deficiency • Abdominal pain	• No anxiety • ABCs all normal • No blueness • No abdominal pain
12.	Reassess the ABCs every five minutes while waiting for the ambulance. If the worker's condition changes those changes must be updated and relayed to the ambulance dispatch.	

Assess		Response
13.	Complete the secondary survey • Vital signs • History • Head to toe	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.

Circulation emergencies — discussion

The circulatory system is an arrangement of blood vessels that, under pressure from the heart, channel blood throughout the body.



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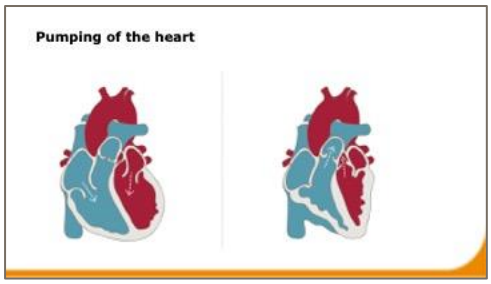
Blood, moving constantly, transports life-giving oxygen and other nutrients to the body cells and removes carbon dioxide and waste.

The heart is a four-chambered, muscular organ, slightly larger than a fist, located just left of the centre of the chest behind the breastbone.

The heart's ventricles pump blood into the arteries 60 to 80 times a minute.



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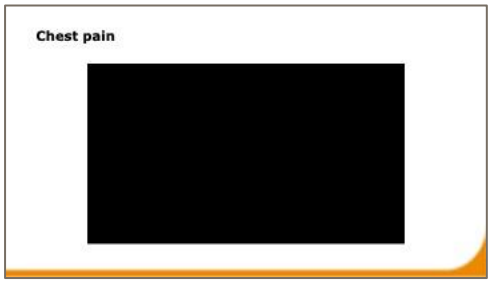
The body cannot store oxygen, and cells in vital organs like the brain will begin to die in as little as four minutes if the supply of oxygen is interrupted.

Arteriosclerosis

Atherosclerosis is the buildup of fatty deposits in the inner walls of an artery. These deposits, known as plaque, are made up of fats such as cholesterol. As these deposits build, the artery is narrowed, and the flow of arterial blood is restricted.

Over time, calcium can be deposited at the site, causing the area to harden and the vessel to lose its elasticity. This affects blood flow and increases blood pressure. Blood clots may form and break off, causing heart attacks.

Chest pain



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A worker with chest pain may come to first aid.

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Chest pain may indicate heart problems.

If the worker has a history of chest pain and has medication, the attendant can assist the worker in taking nitroglycerin medication:

- Pills are placed under the tongue and allowed to dissolve — follow instructions.
- Spray is also used orally according to instructions.
- If available, workers with a suspected heart attack can be offered two 80 mg chewable ASA or one regular adult-strength 325 mg ASA tablet to chew and swallow. It must be ASA, not acetaminophen or ibuprofen.

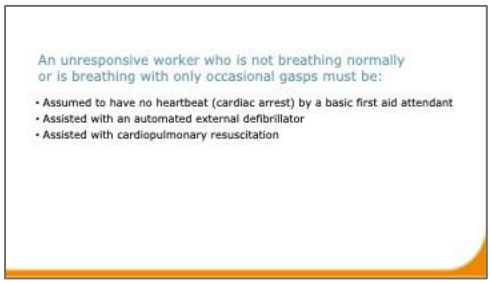
- Ensure the worker does not have an allergy to ASA.

If this is the first time the worker has experienced chest pain, follow the priority action approach — worker requires urgent medical attention.

If pain has lasted longer than 15 minutes despite rest and medication, the worker requires urgent medical attention.

Discussion — Unresponsive

An unresponsive worker who is not breathing or is not breathing normally must be:



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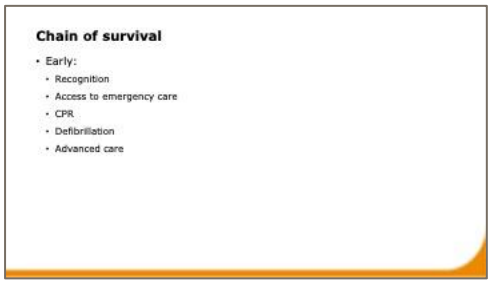
- Assumed to have no heartbeat (cardiac arrest) by a basic attendant (lay rescuer)
- Assisted with an automated external defibrillator (AED) if available
- Assisted with cardiopulmonary resuscitation (CPR)

The chain of survival is a series of steps aimed at decreasing death and disability due to cardiac or respiratory arrest.



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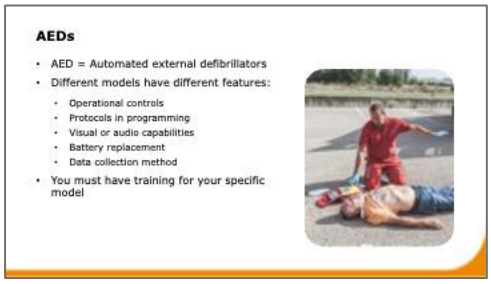
- Early recognition of warning signs
- Early access to emergency care
- Early CPR
- Early defibrillation

- Early advanced care

An AED is a machine that sends an electrical shock through the heart when certain lethal heart rhythms are detected.



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The AED:

- Stops all electrical activity
- Allows the heart to regain its normal pumping action

There are many models of AEDs available on the market.

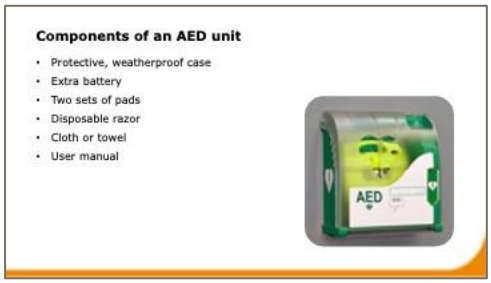
The operation of each is basically the same but there are some differences:

- Operational controls
- Protocols in programming may not be current
- Visual and audio capabilities
- Battery replacement
- Data collection method

Data collection is the electronic recording of arrest information while protocols are performed when the AED is attached to the worker.

AEDs are not on the list of equipment required to be supplied by the employer for B.C. workplaces. However, an employer, in consultation with the joint health and safety committee or worker representative, may decide to supply one.

If an AED is supplied at your workplace, the employer must ensure you receive training in the operation of that specific model.



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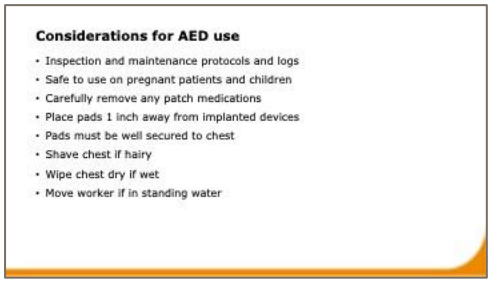
In addition to the AED itself, an AED unit should consist of:

- Protective case
  - Weatherproof if the AED is to be exposed to an outside environment.
  - If it's to be used in a cold environment (approaching freezing), a heated case may be a way of warming the AED.
- Extra unexpired, unused battery
- Two sets of AED pad electrodes
- Disposable razor
- A cloth or towel
- User or instruction manual



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Considerations when using an AED include:

- Establish inspection and maintenance protocols and logs as required by manufacturer's directions.
- AED use is safe for pregnant workers and children.
- Carefully remove any patch medications with gloves and wipe any excess medication from the chest with a clean cloth or gauze pad.

- Place AED pad electrodes 1 inch away from implanted pacemakers or implanted defibrillators
- Ensure AED pad electrodes are well applied to the chest.
- Shave pad area if chest is very hairy.
- Wipe the chest with towel or cloth before applying AED pad electrodes if the chest is wet.
- If attendant or worker is in standing water move to an area with no standing water.

The injured worker's best chance for survival is the delivery of good-quality CPR until an AED is available.

- When it is available, the AED is used immediately.
- If the worker shows any signs of life, stop resuscitation efforts, and assess airway and breathing
- Signs of life include:
  - Normal breathing resumes (occasional gasps are not considered to be normal breathing).
  - Worker moves or coughs.
  - Worker becomes responsive.
- When an AED is not available, CPR is performed.
- The AED is used as soon as it is brought to the scene.

Guided practice 2-03

Materials required

- Gloves
- Mannequin
- Pocket mask c/w one-way valve

Skill-only guided practice of:

- Holding a pocket mask on the face and breathing into the mannequin

Assess		Response
1.	Place the mask in the proper position over the worker's nose and mouth and establish a good seal.	
2.	Breathe into the worker ensuring the chest wall rises.	

Safety alert
Students are required to perform CPR compressions during this course. Students must only perform chest compressions on a mannequin; performing CPR compressions on a classmate for real could result in discomfort or injury.

Guided practice 2-04

Materials required

- Gloves, eye protection
- Pocket mask
- Mannequin

Manage a worker in respiratory/cardiac arrest

The attendant is called to the workplace shipping and receiving area for an unresponsive worker.

Assess		Response
1.	Scene assessment The first aid attendant is called to a lounge area by a co-worker	• No danger machines are all stopped and area is secured. • One worker • Co-workers in the area report one worker was found slumped over in a chair and was carefully placed on floor.
2.	Assess responsiveness AVPU	Worker does not respond to your voice or pain.
3.	Approach the worker from the front, identify yourself, and attempt to talk with the worker. • Pinch the finger on the workers hand closest to you.	The worker does not respond to pain.

Assess		Response
4.	Transport decision	Because this worker is unresponsive, you decide that this worker requires urgent medical attention.
5.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say "there is an unresponsive adult worker" and to report back.	
6.	Primary survey • From the side of the worker, open the airway using a head-tilt chin-lift. • Assess breathing for 5–10 seconds.	• There is no breathing.
7.	Request any other first aid attendants or co- workers trained in CPR to assist. • Designate co-worker to go get the AED if one is available at the worksite. • Update the ambulance that you are starting CPR (the worker is in cardiac arrest). • Ensure the worker is on a hard surface.	• An AED is not available. CPR should be initiated for all unresponsive workers who are not breathing normally or who are only breathing with occasional gasps.
8.	Start CPR: • Expose the chest as necessary. • Place hands in the centre of the chest, between the nipples. • Perform 30 chest compressions.	• Compress the chest at least 5 cm (2 inches). • At a rate of at least 100–120 per minute. Push hard, push fast. • Allow the chest to recoil after each compression.

Assess		Response
9.	After each set of 30 chest compressions, using a pocket mask, give the worker two breaths.	One second per breath, just enough to see the chest rise. • Air goes in and the chest rises.
10.	Repeat the sequence of 30 compressions and two breaths until: • The AED arrives • A physician assumes responsibility • Worker is transferred to ambulance personnel • The attendant is physically exhausted and unable to continue • Spontaneous breathing and circulation are restored	If possible, switch off with another trained rescuer every two minutes
11.	If spontaneous breathing is restored, complete the primary survey and secondary survey.	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.
Note: All workers who are in cardiac arrest must receive CPR unless there is clear evidence that death has occurred, for example, if there is decapitation, transection, decomposition, an adult who has been submerged in water for over 60 minutes, or in certain triage situations. If available, have helper take over compressions. Switch roles every 2 minutes or 5 cycles of 30:2.		

Safety alert
Students are required to perform CPR compressions during this course. Students must only perform CPR chest compressions on a mannequin; performing CPR compressions on a classmate for real could result in discomfort or injury.

Participant practice 2-05

Materials required

- Gloves, protective eyewear
- Pocket mask with one-way valve
- Mannequin
- AED

The attendant is called to the restroom for an unresponsive worker.

Assess		Response
1.	Scene assessment The first aid attendant is alerted about a medical situation in one of the restrooms.	• No danger • One worker • Co-workers in the area report one worker suddenly felt ill and was helped to the floor. • No trauma
2.	Assess responsiveness AVPU	• Worker does not respond to your voice or pain.
3.	Approach the worker from the front, identify yourself, and attempt to talk with the worker. • Pinch the finger on the worker's hand closest to you.	The worker does not respond to pain.
4.	Transport decision	Because this worker is not responsive, this worker requires urgent medical attention.
5.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say "there is an unresponsive adult worker" and to report back.	

Assess		Response
6.	Primary survey • From the side of the worker, open the airway using a head-tilt chin-lift. • Assess breathing for 5–10 seconds.	• There is no breathing.
7.	Request any other first aid attendants or workers trained in CPR to assist. • Designate a co-worker to update the ambulance that you are starting CPR/AED.	An AED is readily available at the scene.
8.	Prepare the AED: • Position the AED so it is located on the side of the worker closest to the operator. • Open and turn on the AED. • Follow voice prompts. • Ensure the AED pads are not expired or torn and are connected to the AED.	**Note:** The AED model at the workplace may operate differently. The employer must ensure that the attendant is trained on the specific model used at the workplace.
9.	Attach the AED: • Prepare the worker's chest for the AED pads. • Remove the backing from the pads and place one pad below the worker's right collar bone and the other pad on the left side of the chest, just below to nipple level.	• Worker's chest is dry. • There is no chest hair. • There are no medication patches or any implanted medical devices.
10.	Analyze the heart rhythm: • Ensure no one is touching the worker and everyone is standing clear. • Continue following voice prompts.	• The AED gives a "shock advised" prompt.

Assess		Response
11.	Deliver a shock: • Ensure no one is touching the worker and everyone is standing clear. • State "I'm clear, everyone is clear, do not touch the worker." • Press the shock button if the AED advises.	If a "no shock" prompt was given, then two minutes of CPR is administered before the heart rhythm is re-analyzed.
12.	Administer two minutes of CPR: • Repeat 30 compressions to two breaths four a total of five cycles.	
13.	Repeat cycles of analyze and shock or no shock and two minutes of CPR until: • A physician assumes responsibility • The worker is transferred to ambulance personnel • The attendant is physically exhausted and unable to continue • Spontaneous breathing and circulation are restored	If possible, switch off with another trained rescuer every two minutes.
14.	If spontaneous breathing is restored, primary survey and secondary survey would be completed.	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.

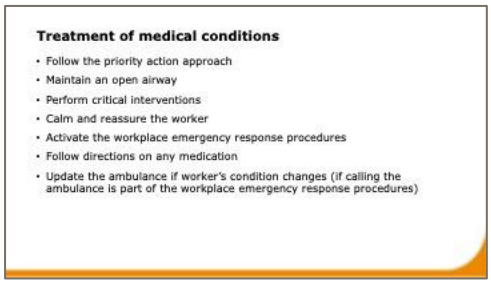
Medical conditions

There are a number of medical conditions that commonly occur in the workplace that the attendant may have to deal with.

In some cases, these are pre-identified conditions that the worker is aware of and may have medication for.

These conditions may vary from minor discomfort to life-threatening, depending on the circumstances.

General treatment for all medical conditions follows the priority action approach, specifically the ABCs.



Slide 46

- Follow the priority action approach
- Maintain an open airway
- Perform any critical interventions required
- Calm and reassure the worker
- Call for an ambulance
- Follow directions on any medication the worker may have
- Update the ambulance if the worker's condition gets worse

Video — Asthma

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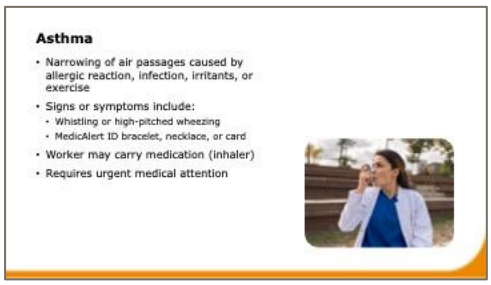


Slide 48

Asthma may be caused by:

- An allergic reaction
- A respiratory infection
- Exposure to irritants
- Exercise induced

Main signs and symptoms of asthma are:

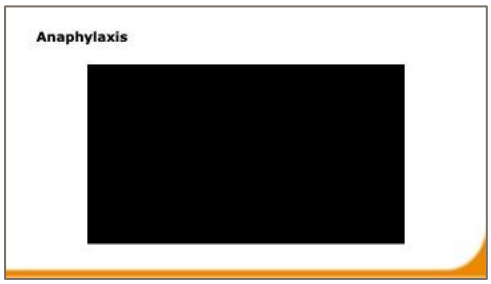
- Whistling or high-pitched wheezing during respiration
- MedicAlert bracelet or necklace indicating asthma

Most people who have asthma will carry some form of medication with them in the form of one of the following:

- An oral medication (tablets)
- Some type of inhaler that releases a mist for the worker to breathe in

Anyone having an asthma attack requires urgent medical attention.

Video — Anaphylaxis



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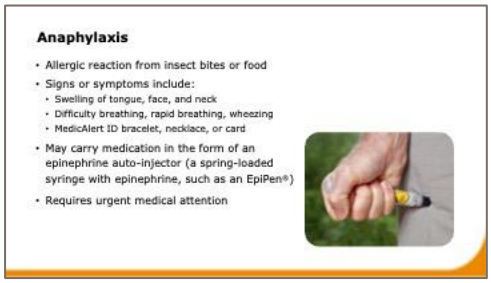

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Anaphylaxis is a condition associated with allergic reactions that can happen quickly and can be severe enough to kill.

Common causes include reactions to insect bites and certain foods. Main signs and symptoms of anaphylactic shock are:

- Swelling of the tongue, face, and neck area
- Difficulty breathing or rapid breathing, wheezing
- MedicAlert bracelet or necklace indicating an allergy

Most people who know they have a serious allergy will carry a device called an epinephrine auto-injector — often referred to by the common brand name EpiPen®. — This is a spring-loaded syringe that will administer a premeasured dose of epinephrine to counteract the allergic reaction.

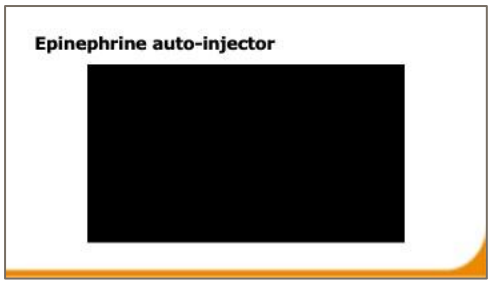
- Assist the worker with the auto-injector if available:
  - Ensure the proper end with the needle is facing the worker.
  - Help them to hold the injector at a 90-degree angle to the skin and press against the thigh muscle.
  - Once the "click" is heard, hold the injector in place for a full 10 seconds.
  - Massage the area to aid in quicker dispersal.
  - If no improvement in five minutes assist with a second dose.

An attendant may administer an epinephrine auto-injector to an unresponsive worker if the following three criteria are met:

- There is history of exposure to an allergen.
- The worker shows signs of anaphylaxis.
- There is no known reason, such as a known heart condition, not to give epinephrine.

Anyone in anaphylaxis requires urgent medical attention.

Video — Epinephrine Auto-Injector



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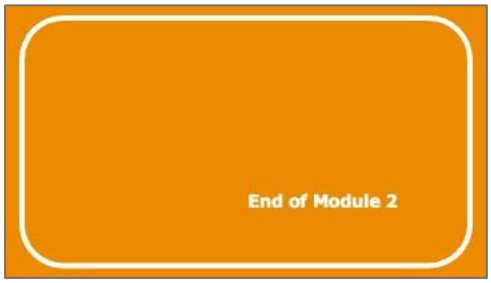

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Module 3

Module 3

Objective

A competent first aid attendant will be able to:

- Manage bleeding
- Identify the signs of shock
- Reposition an injured worker
- Identify common medical emergencies
- Manage common medical emergencies

The procedures will follow the guidelines described in this guide.

Module outline

Module 3	
Lecture / discussion	Shock and bleeding
Instructor demo 3-01	Internal bleeding — sitting worker
Practice 3-01	Internal bleeding — sitting worker
Guided practice 3-02	Loop tie, pressure bandage, elastic Velcro strap
Instructor demo 3-03	External bleeding — standing face up
Practice 3-03	External bleeding — standing face up
Guided practice 3-04	Tourniquet
Lecture, discussion	Medical conditions

Materials and equipment

- Presentation equipment
- First aid training equipment

Module 3

Discussion — Shock and bleeding

Recognition of shock and the control of bleeding are essential to the survival of the injured worker.

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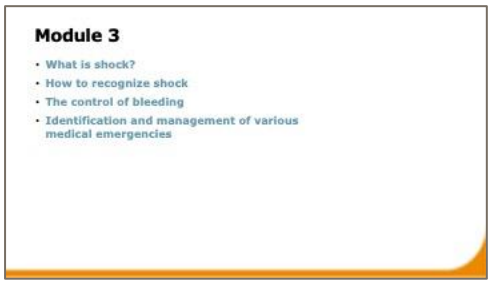
In Module 3 we will cover:



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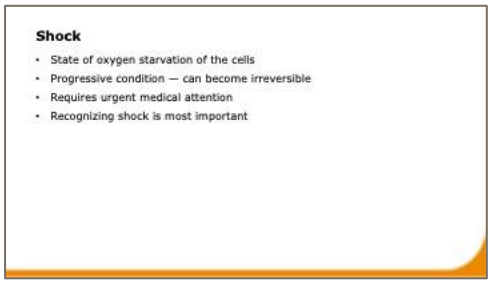
- What is shock
- How do we recognize shock
- Control of bleeding
- Identification and management of various medical emergencies

We've seen that blood, in the circulatory system, transports oxygen and nutrients to all the body cells and removes wastes.

If, for some reason, something interferes with this transportation system, the cells are no longer adequately supplied with oxygen and start dying.

This state of oxygen starvation is called shock.



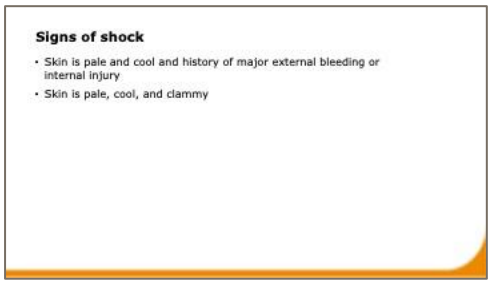
Slide 55

Shock is a progressive condition and can quickly become irreversible.

Workers in shock require urgent medical aid.

Recognizing shock early is one of the most important functions of the first aid attendant.

A person is in shock if:



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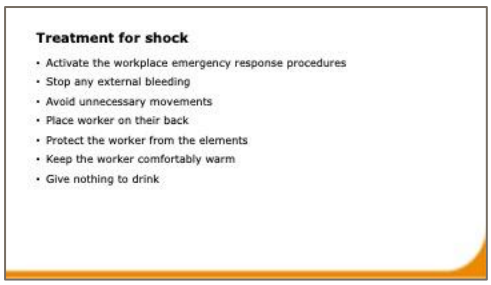
- The skin is pale and cool and there is a history of major external bleeding or internal injury.
- The skin is pale, cool, and clammy.

Recognizing shock is critical, and unless this is done quickly, the person may die.



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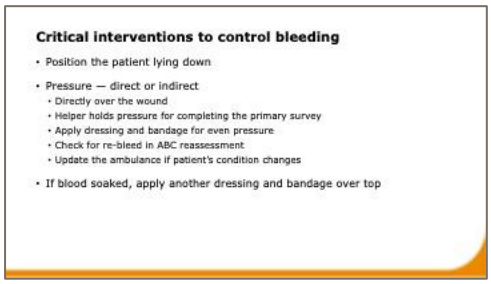
- Activate the workplace emergency response procedures
- Stop any external bleeding

- Avoid unnecessary movements
- Place worker on their back
- Protect the worker from the elements
- Keep the worker comfortably warm
- Give nothing to drink

For the control of external bleeding



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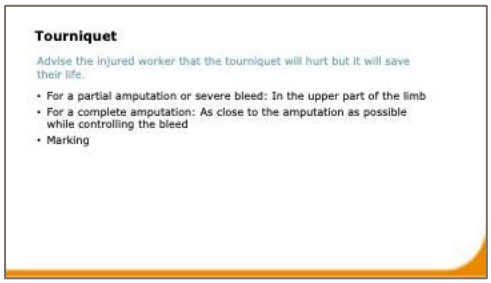
- Position the worker lying down
  - With worker at rest, heart rate slows — this slows bleeding
- Pressure — directly over the wound after exposing the area
  - Compresses the blood vessels, stopping the bleeding
  - Helper holds for completing the primary survey
  - Apply dressings and a bandage that will maintain even pressure over the wound area
  - Check for re-bleeding during ABC reassessment
  - Update the ambulance if the worker’s condition changes

If dressing and bandage become soaked with blood, add a second dressing and bandage but do not remove the first bandage because it would disturb the clotting process.

A tourniquet is applied if direct pressure is not controlling the bleed, or the limb is entrapped, and you do not have access to the bleed. In these circumstances a tourniquet may be used to control the bleed.



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- Application, for a partial amputation, severe bleed
  - Apply the tourniquet to the middle of the upper limb
  - Do not place over a joint
  - Tighten until the bleeding stops
  - Lock the tourniquet in the tightened position
- Application, for a complete amputation
  - Apply the tourniquet approximately 5 cm (2 inches) above the amputated part
  - Tighten until the bleeding stops
  - Lock the tourniquet in the tightened position
- Tourniquet application marking
  - Mark the worker in some way that it will be easy to see that a tourniquet has been applied, including the time it was applied

Participant practice 3-01

Materials required

- Gloves, face shield or medical mask, and protective eyewear
- First aid kit
- Blanket

Manage internal bleeding

Responsive, sitting on ground or floor

- A responsive sitting worker with suspected internal bleeding

The first aid attendant responds to a call for first aid in the warehouse. A worker was struck by a moving forklift.

Assess		Response
1.	Scene assessment first aid attendant is called to the warehouse.	• No danger • One worker • Knocked down by a moving forklift
2.	Assess responsiveness AVPU	The worker's eyes are open and they are aware of you as you approach; worker is alert.
3.	Approach the worker, from the front, with a first aid kit and blanket, identify yourself and attempt to talk with the worker.	The worker responds with clear speech and is very anxious, complaining of pain in the upper abdomen; the skin looks pale.
4.	Transport decision	This worker requires urgent medical attention (mechanism and cool, pale skin).
5.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say there is a conscious adult hit by a forklift who may be in shock and to report back.	
6.	With support of the head, neck, and upper body, lay the worker face up with a co-worker's assistance. • Tell the worker not to move their head and explain what you are going to do. • Kneel beside the worker steady and support the head and neck. • Direct a co-worker to go to the opposite side and assist in laying the worker onto their back. • Direct the helper to support the head.	

Assess		Response
7.	Assess the breathing.	Breathing is shallow, but effective.
8.	Assess the skin.	The skin is pale, cool, and clammy; the worker is irritable and anxious.
9.	Conduct a rapid body survey. • Expose the chest (using scissors in kit).	• No major external bleeding or gross deformity. • Worker complains of pain in right upper abdomen.
10.	Cover the worker with a blanket and reassure the worker.	
11.	Reassess the ABCs every five minutes while waiting for the ambulance or ETV. If the worker's condition changes, those changes must be relayed to the ambulance dispatch or ETV.	• Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.

Participant practice 3-02

Materials required

- Gloves, face shield or medical mask, and protective eyewear
- First aid supplies

Skill-only guided practice of:

- The application of a loop tie
- The application of a pressure dressing
- The application of a quick strap

Assess	Response
The application of a loop tie on the upper leg	
The application of a pressure dressing on the upper leg	

Assess	Response
The application of a quick strap on the upper leg	

Participant practice 3-03

Materials required

- Gloves, face shield or medical mask, and protective eyewear
- Triangular bandage
- Elastic Velcro strap
- Blanket
- First aid kid with supplies

Manage external bleeding

Responsive, face up

- External arterial bleeding from the thigh of a responsive standing worker. The worker was cut by a circular saw.

The attendant has been called to the fabrication area for an injured worker.

Assess		Response
1.	Scene assessment	• No danger, scene is safe; the circular saw is unplugged. • One worker. • There is large bleed in the thigh area. • The worker is anxious. • Colour appears normal.
2.	Assess responsiveness AVPU	The worker's eyes are open and is aware of you as you approach; worker is alert.
3.	Approach the worker from the front, identify yourself, talk to the worker, and put on medical gloves, face shield or medical mask and protective eyewear.	Worker responds with clear speech.

Assess		Response
4.	Transport decision	Because this worker has a large bleed, this worker requires urgent medical attention.
5.	Activate the worksite emergency response procedures: • Instruct the co-worker calling the ambulance to say there is a responsive adult who cut their leg with a circular saw and to report back.	
6.	Go straight to the bleed, expose the area using the scissors in the kit, and apply pinpoint direct pressure over the wound site (use bulky dressings).	The bleeding stops with direct pressure.
7.	Direct the co-worker to put gloves, face shield or medical mask and protective eyewear on and maintain direct pressure on the dressings.	
8.	Assess the airway and breathing.	The breathing is normal.
9.	Circulation — look for signs of shock.	Skin is normal colour, warm and dry.
10.	Complete the rapid body survey.	Nothing else found.
11.	Apply an additional dressing over the first one if blood has soaked through the original dressing, and apply a bandage.	Bandage must be tight enough to control bleeding without cutting off circulation. All dressing must be covered with the bandage.
12.	Cover worker with a blanket and reassure the worker.	
13.	Reassess ABCs including a check of the bandaged area for re-bleeding.	The bandage is becoming blood soaked.

Assess		Response
14.	Apply an additional dressing and another bandage over the original bandage — update the ambulance/ETV if there are any changes.	
15.	Complete secondary survey	Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV.

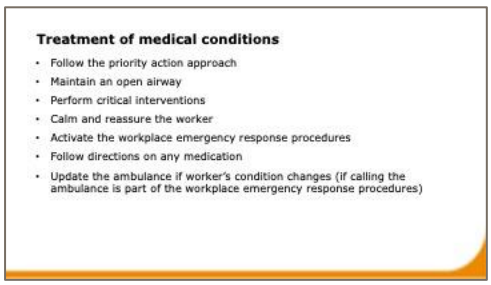
Participant practice 3-04

Materials required

- Gloves, face shield or medical mask, and protective eyewear
- First aid supplies
- Commercial tourniquet

Assess	Response
The application of a tourniquet to the upper leg	Each participant will practise the application of a tourniquet on their own upper leg.

Discussion — Medical conditions continued



Slide 60

- Follow the priority action approach
- Maintain an open airway
- Perform any critical interventions required
- Calm and reassure the worker

- Activate the workplace emergency response procedures
- Follow directions on any medication the worker may have
- Update the ambulance if the worker's condition gets worse

Stroke

Slide 61

Slide 62

A stroke is sudden brain damage caused by a blocked or ruptured blood vessel in the brain. The worker requires urgent medical attention.

A severe stroke may cause death, and a less severe one may cause impairment of certain body functions.

Signs and symptoms of a stroke may be identified with the FAST mnemonic.

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- **F**acial drooping, ask them to smile

- **A**rm weakness, have them lift both arms straight in front
- **S**peech difficulty
- **T**ime to call 911

If the worker is unresponsive, position the worker in the recovery (¾-prone) position due to a high probability of vomiting.

A person suffering from a stroke may be unable to speak but will probably be able to hear and understand what is being said. Be careful of what is said.

Diabetic emergencies

Slide 64

Diabetes is a disease that affects the body's ability to regulate the level of blood sugar.

Signs and symptoms may vary significantly depending on the sugar and insulin levels in the blood and could include:

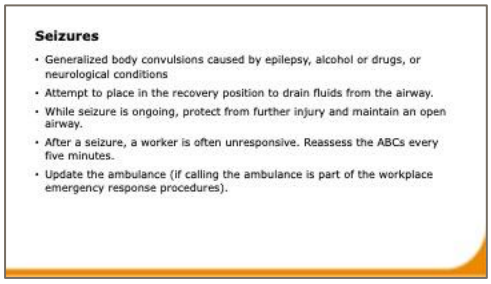
- Decreasing level of consciousness
- Pale, clammy, or warm dry skin
- Confusion, restlessness, irrational behaviour; may appear intoxicated
- MedicAlert bracelet or necklace indicating diabetes

If unresponsive, position the worker in the recovery (3/4-prone) position, reassess the ABCs and update the ambulance of any changes.

If fully responsive give sugar, honey, syrup, fruit juice, pop (not diet pop), or candy bars.

If the condition does not improve immediately or the worker has a decreasing level of consciousness, they require urgent medical attention.

Seizures



Slide 65

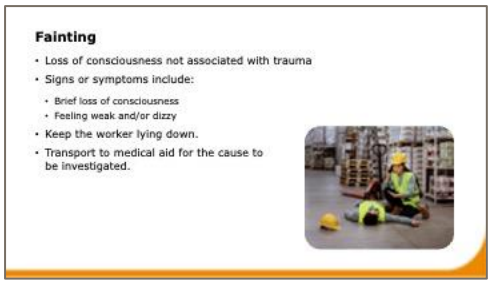
Seizures are generalized body convulsions that can be caused by epilepsy, alcohol or drugs, or neurological conditions; requires urgent medical attention.

Attempt to position the worker in the recovery position to help drain fluids from the airway.

While the seizure is ongoing, protect the worker from further injury and maintain an open airway.

After a seizure a worker is often unresponsive. Reassess the ABCs every five minutes. Update the ambulance if there are any changes in the worker's condition.

Fainting



Slide 66

Fainting is a loss of responsiveness not usually associated with trauma.

People may faint for a wide variety of reasons, but it is usually of a short duration and the worker becomes responsive quickly.

Signs and symptoms of fainting include:

- A loss of responsiveness usually for a brief period
- The worker may feel weak, and/or dizzy

Even if the worker becomes responsive quickly, it is best to keep them laying down. Allowing them to sit or stand up too soon may result in the worker fainting again.

It is important that the worker is transported to medical aid for the cause to be investigated.

If the worker does not become responsive quickly, they require urgent medical attention. Reassess ABCs every five minutes and update the ambulance if the worker's condition changes.

Burns

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Burns require careful assessment.

Excessive external heat causes damage to the skin and possibly the underlying structures. Burns can also be caused by:

- Ultraviolet light (snow blindness, arc flash, welder flash)
- Chemical exposure
- Electrical contact
- Steam
- Radiation (x-ray)
- Friction (blister)

The extent of damage from a burn depends on the size of the area affected and the depth of the tissue involved.

When discussing depth, burns are described as first, second, and third degree.

Superficial burns (first degree)

- Involve outer layer of skin causing redness and pain
- Do not require medical aid unless large areas of the body are involved

Partial thickness burns (second degree)

- Involve the second layer of skin causing blisters and pain
- Fluid loss into the blisters can be a complication
- Require medical aid if significant or in sensitive areas

Full thickness burns (third degree)

- Involve full thickness of skin and underlying tissues
- Damage to nerve endings so may be less pain
- May appear charred or dry and pale
- Fluid can be lost into tissue spaces
- Require immediate cooling and urgent medical aid

Management of burns involves immediate cooling after the primary survey (cool for 10 minutes minimum).

- If worker is walking, use sink or tap.
- Use wet dressings on larger burns.
- Cool until worker feels relief.
- Take off rings, watches or clothing.
- Dress and bandage as for any open wound.

Dislocations and fractures (open and closed)

A dislocation is a displacement of bone ends at a joint. A fracture is a break in a bone. An open fracture is a fracture with an open wound or break in the skin near the broken bone (usually caused by the bone breaking through the skin).

Signs and symptoms of dislocations

- Deformity
- Swelling
- Pain
- Immobility of affected area
- Numbness and tingling
- Instability
- Open wound (open fracture)
- Crepitus (grating sound)
- Bruising

Treatment

1. Fully assess the injured area/limb and cover any open wounds
2. Apply cold (if circulation is not impaired)
3. Support and immobilize upper limb injuries with a sling
4. Support and immobilize upper limb injuries by hand (helper) or rolled blankets

Environmental injuries

Environmental injuries can occur when workers are exposed to the environment without the ability to protect themselves from the environment. Some examples of environmental injuries include frost bite, hypothermia, heat exhaustion, heat stroke, sunburn, snow blindness, trench foot, drowning, decompression illness, and altitude sickness.

These injuries may be caused by exposure to:

- Cold
- Heat
- Sun (UV rays)
- Wind
- Rain/Water
- Atmosphere
- Altitude
- Decompression

Safe removal of the injured worker from the environment that is creating the injury is the first step in management for all environmental injuries. Safe removal of an injured worker in specific environments may require additional training to perform the safe removal of the worker.

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Module 4

Module 4

Objective

Module 4 is a review and practice lesson.

Module 4	
Participant practice	

Materials and equipment

- First aid training equipment

Module 4

Rotation 1-1

Objective: To recognize and manage an unresponsive worker found on their side.

A food services worker slipped on a wet floor and fell backward, striking their head on the tile floor. The worker is on their left side, eyes closed, not moving. The skin is a normal colour and there is no obvious bleeding or deformity.

A ladder collapsed and a painter fell four metres to the ground. The worker is on their right side, eyes closed, not moving. The skin is a normal colour and there is no obvious bleeding or deformity.

A stunt-person in a movie fell five metres from a window and landed on the ground, rather than the designated landing area. The worker is on their left side, eyes closed, not moving. The skin is a normal colour and there is no obvious bleeding or deformity.

- One worker, danger — not safe: wet floor, ladder, movie set still a hazard
- Have co-workers secure the area — wet floor, ladder, movie set
- Injured worker does not respond to voice or pain to the finger
- Activate worksite emergency response procedures — send for an ambulance — worker requires urgent medical attention
- Roll the worker onto their back
- Open airway using a head-tilt chin-lift
- Assess breathing — airway is clear, worker is breathing normally
- Pass off head-tilt chin-lift to a co-worker
- Assess skin — skin is normal colour, warm, dry
- RBS — no obvious bleeding or gross deformity
- Cover worker with a blanket and reassure
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 1-2

Objective: To recognize and manage a responsive worker with a severe (complete) airway obstruction who becomes unresponsive.

A co-worker stands up from the table in the lunchroom and clutches their throat. The worker is unable to speak or cough. Worker's face is red (flushed).

At a health and safety meeting, the secretary stands up and clutches their throat. The worker is unable to speak or cough. Their face is red (flushed).

You receive a telephone call and are summoned to the vice-president's office because they are choking. When you arrive in the office, the VP is unable to speak or cough. Their face is red (flushed).

- One worker, no further dangers
- Worker is not speaking or coughing
- Activate worksite emergency response procedures — send for an ambulance — worker requires urgent medical attention
- Identify yourself and explain what you are going to do
- Give five back blows and five abdominal thrusts until airway clears
- Worker collapses
- Lay worker on their back, protecting their head
- Send co-workers to get the AED and update the ambulance
- Give 30 chest compressions
- Look in mouth and remove any object seen — nothing seen
- Attempt to breathe into the worker — no air goes in (chest does not rise)
- Reposition the head and breathe again(chest does not rise)
- Give 30 chest compressions
- Look in mouth and remove any object seen — food is removed
- Attempt to breath — air goes in — second breath — worker starts to breath
- Ask co-worker to maintain open airway using the head-tilt chin-lift
- Assess breathing — breathing is normal
- Assess skin is normal colour, warm, and dry
- RBS — nothing else found
- Place worker in the recovery position

- Cover worker with a blanket and reassure
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 1-3

Objective: To recognize and manage an unresponsive, non-breathing worker found face down.

A dock worker fell seven metres and struck a log before entering the water. Bystanders tell you the worker was face down in the water for five minutes. Worker was placed face down on the dock, not moving, blue (cyanotic), and wet.

While cutting grass on a steep slope, a maintenance worker was thrown from the riding lawnmower as it rolled into a water-filled ditch. The worker was face-down in the water. Bystanders pulled the worker out of the ditch and placed worker face down on the grass. Worker is not moving, blue (cyanotic), and wet.

A fish harvester was struck in the head and fell overboard. It took co-workers about five minutes to pull worker back onto the boat. The worker is face down, not moving, blue (cyanotic), and wet.

- One worker, no further hazards
- Worker does not respond to shouting or pain to the finger
- Activate worksite emergency response procedures — send for an ambulance — worker requires urgent medical attention
- Roll worker onto their back
- Open airway using heat-tilt chin-lift
- Assess airway and breathing — not breathing
- Send co-worker to get the AED and update the ambulance
- Start CPR — apply 30 chest compressions
- Breathe into the worker twice — air goes in (chest rises)
- Continue with cycles of 30 compression and two breaths until ambulance or AED arrives (use AED right away if it arrives)
- If possible, switch compressors every two minutes
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 1-4

Objective: To recognize and manage arterial bleeding on a responsive worker.

A mill worker was struck on the back of the left knee by a log and knocked to the ground. The worker is lying on their right side, calling for help. Skin is pale, left pant leg is soaked with blood, and there is a large pool of blood on the ground.

A warehouse worker was struck in the back of the left knee by a forklift and knocked to the ground. The worker is on their right side, calling for help. Skin is pale, left pant leg soaked with blood, and a large pool of blood is noted.

A construction worker was struck in the left knee and knocked to the ground when their nail gun misfired. The worker is on their right side, calling for help. Skin is pale, left pant leg is soaked with blood, and a large pool of blood is noted.

- One worker, no further hazards
- Activate worksite emergency response procedures — send for an ambulance — worker requires urgent medical attention — massive bleed, trauma, and pale skin on approach
- Tell worker to lie still
- Tell a helper to put on gloves and apply pressure to the bleed
- Roll worker onto their back with helpers
- Have co-workers take over support of the workers head
- Assess airway and breathing — worker is breathing and talking clearly
- Expose left knee — massive arterial bleeding present
- Apply pin-point direct pressure with bulky dressings — bleeding slows
- Have another co-worker to helper take over direct pressure
- Assess skin — pale, cool, and dry
- RBS — nothing else found
- Dress and bandage the wound
- Cover patient with a blanket and reassure
- Reassess ABCs every five minutes and recheck that the bandages are not blood-soaked — apply additional dressing and bandages if needed — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 2-1

Objective: To recognize and manage a severe (complete) airway obstruction.

A worker is found unresponsive in a chair. Worker is unresponsive and not moving. Skin is pale.

You are called to the lunchroom. A worker is found unresponsive in a chair. Worker is not moving and their skin is pale.

You are called to the parking lot. A worker is found unresponsive in a car. Worker is unresponsive and their skin is pale.

- One patient, no further dangers
- Lay patient on their back (supine)
- Patient does not respond to shouting or a gentle tap on the shoulder
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Open airway using a head-tilt chin-lift
- Assess breathing — no breathing
- Send bystanders to get the AED and update the ambulance
- With helpers, move the patient from sitting to a firm surface
- Apply 30 chest compressions
- Attempt to ventilate — air does not go in (no visible chest rise)
- Look in mouth and remove any object seen — nothing is seen
- Ensure airway is open (confirm adequate head-tilt, chin-lift) and attempt to ventilate the patient again — air does not go in (no visible chest rise again)
- Apply 30 chest compressions
- Look in mouth and remove any object seen — a piece of apple is removed
- Attempt to ventilate — air goes in — two breaths — patient begins to breathe
- Assess airway and breathing — breathing is quiet, normal chest rise/fall
- Pass off head-tilt chin-lift to a helper (patient still unresponsive)
- Assess skin — pale, cool, and dry
- RBS — nothing found
- Place worker in the recovery position
- Cover patient with a blanket and reassure

- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 2-2

Objective: To recognize and manage a patient in respiratory and/or cardiac arrest who vomits.

Co-workers inform you this worker had been complaining of severe chest pain moments before appearing faint and had to be helped to the floor. Worker is now on their back, not moving, and blue (cyanotic). No blood is visible.

You are called to the boardroom for a worker who is having chest pain. When you arrive, worker is unresponsive in a chair and co-workers are laying the worker onto their back on the floor. Worker is cyanotic (blue). No blood is noted.

A co-worker reports to the first aid room complaining of severe chest pain. Worker appears cyanotic (blue) and dizzy and is helped to the floor. As you are helping the worker to the floor, they becomes unresponsive.

- One patient, no further hazards
- Patient does not respond to shouting or a pain to the finger
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Open airway using head-tilt chin-lift
- Assess breathing — no breathing
- Send bystanders to get the AED and update the ambulance
- Apply 30 chest compressions
- Ventilate with two breaths — patient vomits
- Support head and roll lateral — finger sweep the mouth, assess airway is clear of vomit — no breathing
- Roll patient on their back
- Apply 30 chest compressions
- Ventilate with two breaths — air goes in — no spontaneous breathing
- Continue with cycles of 30 compression and two ventilations until ambulance or AED arrives or the patient starts breathing
- If possible, switch compressors every two minutes
- If the patient's condition changes, update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 2-3

Objective: To recognize and manage a responsive patient with back pain.

A roofer fell nine metres from the roof and landed supine in the mud. Worker is complaining of back pain. Their skin is pale and there is no visible blood.

A tree pruner fell eight metres from a tree and landed on their back. Worker is complaining of back pain. Skin is pale and there is no blood visible.

A retail worker fell down a flight of stairs and landed on their back. Worker is complaining of back pain. Skin is pale and there is no blood visible.

- One patient, no further dangers
- Patient is talking clearly
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention — trauma and pale skin on approach
- Assume C-spine control — remind patient to lay still
- Assess airway and breathing — patient is breathing and talking clearly
- Assess skin — pale, cool, and dry
- RBS — no blood is discovered and nothing else was found
- Cover the patient with a blanket and reassure
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 2-4

Objective: To recognize and manage a responsive patient with a mild (partially) obstructed airway with good air exchange.

A co-worker stands up at the table in the lunchroom clutching their throat and starts to cough. The patient hoarsely asks for help. Their skin is flushed (red).

You are called to the meeting room to attend to a fellow worker who is choking. As you approach, the worker is coughing effectively and asking for help. Their skin is flushed (red).

While eating lunch with a co-worker, another worker stands up at the table, clutching their throat and coughing. The patient hoarsely asks for help. Their skin is flushed (red).

- One patient, no further dangers
- Assess airway — patient is coughing effectively, speaking hoarsely
- Assess breathing — good air exchange
- Assess skin — flushed, warm, and dry
- Patient's airway clears by coughing after a few moments
- Monitor and reassure patient
- If the patient's condition gets worse, update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 3-1

Objective: To recognize and manage a worker laying on their back with blood obstructing the airway.

A landscaper was using a come-a-long to pull out an old tree stump. A section of rotten wood broke free and struck the worker in the face. The worker is lying supine. Blood can be seen on their face and bubbles near their nose and mouth. Their skin is pale and cyanotic (blue). As you get closer you hear a noisy, gurgling sound.

A sawmill worker was struck in the face by a log. The worker is lying on their back and blood can be seen on their face with bubbles near the nose and mouth. Skin is pale, cyanotic (blue), and you hear a noisy, gurgling sound as you approach.

A steelworker was struck in the face by a beam as it broke from a cable. The worker is lying on their back and blood is seen on their face with bubbles near their nose and mouth. The worker's skin is pale, cyanotic (blue), and you hear gurgling as you approach.

- One patient, no further hazards
- Patient does not respond to shouting or to pain to the finger
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Roll the patient onto their side
- Finger sweep to clear the airway — blood and teeth are swept out
- Assess the airway — airway is clear — breathing is present
- Roll patient onto their back
- Open airway using a head-tilt chin-lift
- Assess airway and breathing — breathing is quiet, normal
- Hand off head-tilt chin-lift to a helper
- Assess skin — pale, cyanotic, cool, and dry
- RBS — nothing else found
- Cover the patient with a blanket
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 3-2

Objective: To recognize and manage an unresponsive patient with arterial bleeding.

A forklift driver is thrown out of the vehicle when it tips over. Worker lying on their back, not moving. Skin is pale, pants on the left thigh are soaked with blood, and there's a large pool of blood in that area.

A logging truck driver is thrown out of the vehicle as it rolls over. Worker lying on their back, not moving, and their eyes are closed. Skin is pale, pants on the left thigh are soaked with blood and there is a pool of blood in that area.

A tree planter is thrown off the ATV when it rolls over a steep hill. Worker is on their back, not moving, and eyes are closed. Skin is pale, pants on the left thigh are soaked with blood, and there is a large pool of blood in that area.

- One patient, no further danger
- Patient does not respond to shouting or to pain to the finger
- Tell a helper to glove up and apply direct pressure to the bleed
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Open the airway using a head-tilt chin-lift
- Assess breathing — breathing is quiet, normal
- Hand off head-tilt chin-lift to a helper
- Expose left thigh area — arterial bleeding present
- Apply direct pressure with bulky dressings
- Helper to maintain direct pressure
- Assess skin — pale, cool, and dry
- RBS — nothing else found
- Dress and bandage wound
- Cover the patient with a blanket
- Reassess ABCs every five minutes — update ambulance
- Recheck bandages and re-bandage if needed
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 3-3

Objective: To recognize and manage an unresponsive patient who vomits.

A drywaller fell three metres from a ladder and struck his head on the way down. The patient is lying on their stomach, unresponsive, and eyes are closed. Skin is normal and no blood is visible.

A logger was struck in the head by a branch from a falling tree. The patient is lying on their stomach, unresponsive, and eyes are closed. Their skin is normal, and no blood is visible.

A roofer fell four metres to the ground. The patient is lying on the ground, unresponsive, and eyes are closed. Their skin is normal, and no blood is visible.

- One patient, no further dangers
- Patient does not respond to shouting or to pain to the finger
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Roll patient onto their back
- Open airway using a head-tilt chin-lift
- Assess breathing — breathing is quiet, normal
- Hand off head-tilt chin-lift to helper
- Patient vomits
- Roll patient onto their side
- Finger sweep to clear the airway — vomit is swept out
- Assess airway — airway is clear, patient is breathing
- Roll patient onto their back
- Open airway using a head-tilt chin-lift
- Assess airway and breathing — breathing is quiet, normal
- Hand off the head-tilt chin-lift to helper (if available)
- Assess skin — normal, warm, and dry
- RBS — nothing else found
- Cover the patient with a blanket
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Rotation 3-4

Objective: To recognize and manage a responsive patient suffering from smoke inhalation.

There has been a fire in the shipper's office. The shipper, in an effort to put the fire out, was overcome by smoke and had to be helped from the office. The patient is standing, coughing vigorously, and his skin colour is normal.

You have been told there is a fire in the lunchroom. When you arrive at the scene, you are informed that a worker extinguished the fire, was overcome by smoke, and was helped from the room. The worker is standing, coughing, and their skin is a normal colour.

There has been a fire in the stock room. The worker, in an effort to put the fire out, was overcome by smoke, and helped from the room. The worker is standing, coughing, and their skin is a normal color.

- One patient, no further dangers
- The patient did not fall and was not struck
- Activate worksite emergency response procedures — send for an ambulance — patient requires urgent medical attention
- Assess airway — clear, patient coughing effectively
- Position patient for ease of breathing — patient prefers semi-sitting
- Fully support patient
- Assess breathing — patient is coughing but breathing effective
- Assess skin — normal, warm, and dry
- RBS — modified, patient does not hurt anywhere else
- Cover the patient with a blanket and reassure
- Reassess ABCs every five minutes — update ambulance
- Secondary survey would be completed waiting for an ambulance or en route to medical aid in ETV

Module 5

Module 5

Objective

- Completion of written closed-book examination

Module 5	Details
Written exam	25 multiple-choice questions
Administration	Check identification, complete documentation

Materials and equipment

- Exam paper
- Answer sheet

This is a closed-book written examination.

Appendix A — Two-Person CPR & AED

Two-person CPR with AED

Assess		Response
1.	Scene assessment The first aid attendant is alerted about a medical situation in one of the restrooms.	• No danger • One worker • Co-workers in the area report one worker suddenly felt ill and was helped to the floor • No trauma
2.	Assess responsiveness AVPU	• Worker does not respond to your voice or pain.
3.	Approach the worker from the front, identify yourself, and attempt to talk with the worker. • Pinch the finger on the workers hand closest to you.	The worker does not respond to pain.
4.	Transport decision	Because this worker is not responsive, this worker requires urgent medical attention.
5.	Activate the worksite emergency response procedures: • Information to provide co-worker for workplace emergency response procedures — "there is an unresponsive adult worker" and co-worker to report back.	First attendant on scene activates the emergency response procedures and calls for the AED.
6.	Primary survey • From the side of the worker, open the airway using a head-tilt chin-lift. • Assess breathing for 5–10 seconds.	First attendant on scene assesses the primary survey. Second attendant arrives immediately with AED . • There is no breathing.

Assess		Response
7.	Request any other first aid attendants or workers trained in CPR to assist. • First attendant — designate a co-worker to update the emergency response procedures (ambulance and/or ETV) that you are starting CPR/AED.	The second attendant prepares the AED.
8.	The second attendant — Prepare the AED: • Position the AED so it is located on the side of the worker closest to the operator. • Open and turn on the AED. • Follow voice prompts. • Ensure the AED pads are not expired or torn and are connected to the AED.	The AED model at the workplace may operate differently than a training model. The employer must ensure that the attendant is trained on the specific model used at the workplace.
9.	Second attendant — Attach the AED: • Prepare the worker's chest for the AED pads. • Remove the backing from the pads and place one pad below the worker's right collar bone and the other pad on the left side of the chest, just below nipple level.	• Worker's chest is dry. • There is no chest hair. • There are no medication patches or any implanted medical devices.
10.	Second attendant — analyze the heart rhythm: • Ensure no one is touching the worker and everyone is standing clear. • Continue following voice prompts.	• The AED gives a "shock advised" prompt.

Assess		Response
11.	Second attendant — deliver a shock: • Ensure no one is touching the worker and everyone is standing clear. • State "I'm clear, everyone is clear, do not touch the worker." • Press the shock button if the AED advises.	**Note:** if a "no shock" prompt was given, then two minutes of CPR is administered before the heart rhythm is re-analyzed.
12.	Administer two minutes of CPR: • Repeat 30 compressions to two breaths for a total of five cycles.	• First attendant starts chest compressions. • Second attendant provides breaths (ventilations).
13.	Repeat cycles of analyze and shock or no shock and two minutes of CPR until: • A physician assumes responsibility • The worker is transferred to ambulance personnel • The attendant is physically exhausted and unable to continue • Spontaneous breathing and circulation are restored	First and second attendant switch roles every two minutes.

The two attendants should switch roles every two minutes.

Automated external defibrillators in the workplace

If AEDs are provided for use in a workplace, Occupational Health and Safety requirements apply. Some of the applicable provisions include sections 3.16, 3.17, 4.3, 4.5, 4.10 of the Occupational Health and Safety Regulation (OHS Regulation) and section 21 of the *Workers Compensation Act*.

To assist employers and first aid attendants, WorkSafeBC's Certification Services offers the following information:

- An AED is not required by the OHS Regulation; however, AED training is included in all of the first aid and first aid equivalent courses. No separate certificate is issued for the CPR/AED training received in a first aid course — the training is simply part of the course. Workers who possess a valid first aid certificate were able to demonstrate competency deploying an AED as part of their training or examination and were duly certified by their first aid instructor or evaluator. The AED training a worker receives in a first aid course may not be as comprehensive as what a worker might receive if brand-specific AED training were taken.
- An AED that is in the workplace is considered to be part of the workplace first aid equipment (sections 3.16 and 3.17 of the OHS Regulation). Workers are trained in the use of an AED when taking an first aid course but only the emergency application protocol. There is very little information about the care, maintenance and inspections recommended by the manufacturer included in an first aid course. (That information would be found in the workplace AED user manual and spec sheet).
- The brand of AED training simulator used in an first aid or first aid equivalent course may be different from the brand of AED found in a workplace. Just as for any piece of equipment, the worker must be trained in the use of the equipment and authorized to use it (4.10 of the OHS Regulation). Inspection and maintenance records may be required for the AED as per the manufacturer's instructions; some inspections may be daily, weekly, monthly etc. (4.3 and 4.9 of the Regulation).
- Although medical oversight is not required by the OHS Regulation, it is recommended. Physicians with an expertise in pre-hospital defibrillation can offer expert advice on training issues, special situation protocols, AED policies and procedures, post-arrest data management and the handling of confidential patient clinical information. This will assist the workplace gaining compliance with the applicable sections of the OHS Regulation and other generally accepted medical practices in Canada.
- Written procedures need to include who is to, and how to access the AED and must include the location of the AED (section 3.17 of the OHS Regulation). The first aid attendants in a workplace should be able to answer questions specific to the AED unit that is available at the workplace. The AED user manual and spec sheet will allow for the development of a checklist that the first aid attendants should use to conduct inspections of the workplace unit(s).

During WorkSafeBC inspections of a jobsite, officers may question the first aid attendants to establish knowledge of the onsite AED and any routine inspections and/or pre-use checks that should be performed.

If the brand of AED training unit (AED simulator) used to instruct an first aid course is different from the brand of AED unit found in a workplace, the first aid attendants will require further orientation and training specific to the AED brand found in the workplace. A separate certificate is not required for an AED but records of the training are required.

If the employer determines that medical oversight is appropriate (possibly following a first aid assessment), the medical director may establish additional training and orientation including the frequency of any CPR/AED retraining. Currently all first aid and equivalent certificates are valid for three years.

Certification Services supports the Canadian Heart and Stroke Foundation recommendations for periodic assessment of rescuer knowledge and skills, with reinforcement or refresher information provided as needed during the certification period. Ideally, retraining should not be limited to three-year recertification intervals.

Questions about first aid certification and/or AED training should be directed to an approved first aid training provider, or to WorkSafeBC's Certification Services at 604.276.3090 or certification@worksafebc.com.

Appendix B — Administrative and Housekeeping

Introduction to exposure control

Section 6.34 of the Occupational Health and Safety Regulation requires an employer to develop and implement an exposure control plan if a worker has or may have occupational exposure to a biological agent. Workplaces where occupational exposure to a biological agent may be reasonably anticipated to occur include worksites with first aid attendants.

The following exposure control plan is meant to assist employers (whose only exposed worker is a first aid attendant) in developing a plan that meets the requirements of the OHS Regulation. This sample of an acceptable exposure control plan is included in these materials so first aid attendants can share the information with their employers.

This sample plan may be used as is, but employers must consider the plan, ensure that it suits their workplace, and ensure that the plan is actually implemented at the worksite.

The sample plan may be modified to suit the specific circumstances at the employer's particular worksite. The final exposure control plan, however, still requires all seven elements identified in this sample plan.

If you have any questions or need further assistance, contact a WorkSafeBC occupational hygiene officer at your nearest WorkSafeBC office.

Exposure control plan for biological agents for first aid attendants

(Company name) (Date)

Policy and scope

The policy of (*company name*) is to ensure that our first aid attendants are protected from occupational exposure[1] to biological agents[2] in a manner that complies with the B.C. *Workers Compensation Act* and Occupational Health and Safety Regulation, as well as human rights legislation.

This exposure control plan covers all first aid attendants, as it is reasonably anticipated that they may have harmful contact[3] with blood or other potentially infectious materials (OPIMs)[4] as a result of performing their normal job duties.

1. Purpose and responsibilities

The purpose of this exposure control plan is to eliminate or minimize the first aid attendants' risk of occupational exposure to biological agents in blood and OPIMs, as well as to reduce the risk of infection should exposure occur.

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1. Occupational exposure: Reasonably anticipated harmful contact with blood or other OPIMs that may result from the performance of a worker's duties.
2. Biological agents: Pathogenic microorganisms present in human blood and OPIMs that can cause disease in humans. These pathogens include but are not limited to the hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).
3. Harmful contact: An exposure incident to blood or OPIMs through:
   - Percutaneous injury (injury through the skin from a contaminated sharp item such as a needle)
   - Contact with the mucous membranes of the eyes, nose, or mouth
   - Contact with non-intact skin (healing wound less than three days old or lesion causing disruption of outer skin layer)
   - Bites
4. OPIMs: Other materials (besides blood) that can be sources of blood-borne pathogens. Examples of OPIMs include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, any body fluid visibly contaminated with blood, all body fluids in situations where it is difficult to differentiate between body fluids, and tissues.

The company will:

- Conduct a risk identification and assessment of the first aid attendants' potential occupational exposure to biological agents.
- Implement engineering controls, safe work practices, and written work procedures to eliminate or reduce the first aid attendants' potential exposure to biological agents.
- Provide first aid attendants with appropriate personal protective equipment.
- Ensure first aid attendants are provided with education and training on biological agents and the exposure control plan (see section 4, "Education and training," below).
- Provide first aid attendants with the hepatitis B vaccination at no cost (upon request).
- Ensure that all pertinent records are maintained.
- Set up a check system to ensure that first aid attendants who have had an exposure incident to blood or OPIMs are medically evaluated, then seen by a physician for follow-up if deemed necessary by the medical evaluation.
- Ensure that investigations of first aid attendants' exposure incidents to blood or OPIMs are conducted, and corrective actions are taken to prevent similar incidents from occurring.
- Review the exposure control plan annually and update it, as necessary.

The first aid attendants' supervisor, _____ (*name*), will:

- Supervise first aid attendants with respect to biological agent hazards.
- Ensure that first aid attendants use engineering controls and follow safe work practices and written work procedures.
- Ensure that first aid attendants wear appropriate personal protective equipment.
- Ensure that first aid attendants receive education and training on biological agents and the exposure control plan initially and biannually (at the time of first aid certification and renewal).
- Ensure that the post-exposure health management procedure is followed for first aid attendants' exposure incidents to blood or OPIMs.
- Initiate investigations of exposure incidents to blood or OPIMs.

The first aid attendants will:

- Use the provided engineering controls.
- Follow safe work practices and written work procedures.
- Wear the appropriate personal protective equipment provided.

- Attend education and training (first aid training courses and additional company training sessions).
- Follow the post-exposure health management procedure in the event of an exposure incident to blood or OPIMs.
- Participate in investigations of exposure incidents to blood or OPIMs.

2. Risk identification and assessment

All first aid attendants have the potential for occupational exposure to biological agents. first aid attendants may have harmful contact with blood or OPIMs via the following:

- Percutaneous injury
- Mucous membrane contact
- Non-intact skin contact

It is reasonably anticipated that such contact may occur when attendants are providing first aid to co-workers, including rendering first aid and performing post-treatment and incident scene cleanup.

3. Control procedures

Engineering and safe work practice controls are the preferred means to eliminate or minimize first aid attendants' exposure to biological agents at this worksite. If such controls are unavailable or impracticable, or do not completely eliminate exposure, first aid attendants will wear the appropriate personal protective equipment provided.

Engineering controls

Although first aid kits and equipment contain only a few items that could break through the skin, first aid attendants must always watch out for other sharp objects that may be encountered and pose a risk of percutaneous injury (e.g., contaminated broken glass at an accident site).

Sharps disposal containers are located in the _____ (state location, e.g., first aid room and first aid kit) for discarding disposable, contaminated[5] sharp items.

Pocket masks with one-way valves are available in the _____ (state location, e.g., first aid kits) for first aid attendants to use when ventilating patients. These masks should not be shared before they have been washed and disinfected. If there is insufficient time to do this between uses by different individuals, the valves should be changed.

Work practice controls and written work procedures

First aid attendants will do the following:

- Follow infection-control precautions.

- Use pocket masks with one-way valves when ventilating patients.
- Follow safe sharps handling procedures, such as discarding any disposable, contaminated sharp items in sharps disposal containers as soon as possible.
- Wear waterproof, disposable medical examination gloves when assessing and treating patients (if there is potential contact with patients' blood, body fluids, secretions, excretions, mucous membranes, or non-intact skin), and when touching contaminated items or surfaces.
- Also wear such gloves if they have non-intact skin on their hands, after first covering the affected skin with a waterproof dressing.
- Replace gloves as soon as practical if they are torn, cut, punctured, or leaking, and when they become contaminated or damaged such that their ability to function as a barrier is in question.
- Use disposable gloves only once.
- Follow the procedures for glove removal and handwashing.
- Follow the cleanup procedures for spills of blood and OPIMs that minimize splashing.
- Ensure food or drinks are not stored or consumed in first aid facilities.
- Follow the post-exposure health management procedure, if they have an exposure incident to blood or OPIMs.

_____

5. Contaminated: The presence or the reasonably anticipated presence of blood or OPIMs on an item or surface.

Personal protective equipment

All personal protective equipment for biological agents used at this worksite will be provided by the company at no cost to our first aid attendants.

Waterproof, disposable medical examination gloves are available in the _____ (state location, e.g., first aid room and first aid kits). They will be worn and used as specified in the manual and training guides, and the safe work practices and written work procedures outlined above.

Eye and/or face protection in the form of _____ (specify type, e.g., safety goggles and face shield) is available in the _____ (specify location, e.g., first aid room). They will be worn by first aid attendants when it can be reasonably anticipated that the mucous membranes of the eyes, nose, or mouth may be splashed or sprayed with blood or OPIMs (e.g., relieving subungual hematomas).

Gowns and protective footwear in the form of _____ (specify type, e.g., washable cloth or disposable paper gowns, rubber boots) are available in the

_____ (specify location, e.g., first aid room). They will be worn by first aid attendants when it can be reasonably anticipated that their skin or clothing may come in contact with blood or OPIMs (e.g., during blood spill cleanup).

Housekeeping, laundry, and waste

All reusable first aid equipment _____ (specify, e.g., metal instruments, pocket masks) and environmental working surfaces _____ (specify, e.g., counters in the first aid room) will be decontaminated as soon as possible after contamination with blood or OPIMs, as well as on a routine basis, as specified in the manual and training guides.

Laundry soiled with blood or OPIMs will be treated as specified in the manual and training guides.

Sharps disposal containers will be securely closed and replaced when they are two-thirds full. They will then be sent to _____ (specify) for disposal.

Universal precautions

first aid attendants will treat all blood and OPIMs as though they are known to be infected with biological agents, and will follow infection-control precautions and procedures as specified in the manual and training guides. This includes the following:

- Following precautions to prevent sharps injuries
- Using resuscitation devices
- Wearing personal protective equipment
- Following handwashing procedures

4. Education and training

All first aid attendants will be educated and trained regarding biological agents before their initial assignment to work as a first aid attendant. The different levels of first aid training have different degrees of education and training. Some of the education and training will have been provided by the first aid training course and materials _____ (specify first aid school, course, and materials). First aid courses provide a basic foundation and cover items such as the following:

- An explanation of blood-borne diseases and modes of transmission
- An explanation of the appropriate methods of recognizing tasks and activities that may involve exposure to blood and OPIMs
- An explanation of engineering and safe work practice controls that will prevent or reduce exposure to biological agents, including their use and limitations

- Information on personal protective equipment, including appropriate selection, use, removal, handling, cleaning, decontamination, inspection, maintenance, storage, disposal, and limitations
- An explanation of the post-exposure health management procedure for a first aid attendant to follow if an exposure incident to blood or OPIMs occurs

Additional worksite-specific orientation, education, and training will be provided by _____ (specify individual within the company) and will include the following:

- Applicable sections of the Occupational Health and Safety Regulation
- An explanation of this company's exposure control plan regarding biological agents and where to access it
- Control procedures specific to the worksite (e.g., location of sharps disposal containers, pocket masks, and wash facilities; types and location of personal protective equipment)
- Information on the hepatitis B vaccine, including information on its benefits, effectiveness, safety, method of administration, and availability

All first aid attendants will receive biannual refresher training regarding biological agents and the exposure control plan at the time of renewal of their first aid certificate.

5. Hygiene facilities and decontamination procedures

Handwashing facilities are located in the _____ (specify, e.g., restrooms and first aid room) and are available to first aid attendants for handwashing. first aid attendants will follow handwashing procedures as specified in the manual and training guides.

Waterless hand cleansers or towelettes (specify which) are also provided for use if handwashing facilities are not immediately available. They are located in the _____ (specify, e.g., first aid room and first aid kits). first aid attendants will wash their hands with mild soap and running water as soon as possible after the use of the cleanser or towelette (specify which).

If a first aid attendant has an exposure incident to blood or OPIMs, the post-exposure health management procedure will be followed for decontamination.

6. Health monitoring

Hepatitis B vaccination (pre-exposure health management)

First aid attendants will be offered the hepatitis B vaccination at no cost to them, upon request. The vaccination (a series of shots given at 0, 1, and 6 months) will be started within 10 working days of their initial assignment as a first aid attendant. It will be administered by

_____

(specify, e.g., travel clinic, workers' family doctors).

First aid attendants may decline the hepatitis B vaccination. This refusal will be recorded. If they later change their mind and wish to have the vaccination, it will be provided to them at no cost.

Health protection (post-exposure health management procedure)

For the initial management of an exposure incident to blood or OPIMs, the first aid attendant will do the following:

- Immediately self-administer first aid.
- Report the incident to _____ (specify the supervisor).
- Go to _____ (specify nearest hospital emergency department) within two hours of the incident for a medical evaluation. (The reporting must not cause delay in seeking medical attention.)

The follow-up management after an exposure incident to blood or OPIMs will include the following:

- First aid attendant referral to a physician for follow-up, if deemed necessary by the medical evaluation
- Appropriate documentation of the exposure incident (first aid records, incident reports, and WorkSafeBC claim forms)
- An investigation to prevent similar exposure incidents to blood or OPIMs from occurring

7. Record keeping

Occupational exposure records will be kept that identify all first aid attendants as having potential occupational exposure to biological agents in providing first aid to co-workers.

Exposure incident records (such as first aid records, incident investigation reports, WorkSafeBC claim forms, and health records) will be kept for all specific first aid attendant exposure incidents to blood or OPIMs.

Records will be kept documenting first aid attendant education and training on biological agents and the exposure control plan (i.e., dates, type of session and contents or summary, names of attendees, names, and qualifications of trainers).

Appendix C — Patient Handouts (for at-home care)

- Small wounds and cuts
- Sprains
- Tendonitis
- Flash burns — Snow blindness
- Minor burns
- Minor back strain

Small wounds and cuts

You have an open wound.

With proper care it should start to feel better in about three to four days.

The healing process will be more effective by following this advice:

- Keep dressing clean and dry.
- If skin closures have been applied, they are to remain in place 7–10 days.
- When bathing or showering, cover dressings to prevent moisture from entering.
- You should notice some redness around the wound, which is the natural healing process.
- You may also notice slight pain the day following the injury; this is also part of the natural healing process.
- Report to first aid within 24 to 48 hours after the injury.
- First aid will reassess and re-bandage.

If at any time you notice that pain, redness, and swelling increase significantly, or if there is pus or red streaks coming from the wound, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Sprains

A sprain is stretching, or a partial or complete tear, of a ligament at a joint. You have recently suffered a mild sprain involving a stretching of the ligaments. With proper care it should start to feel better in about three to four days. The healing process will be more effective by following this advice:

- Whenever possible, elevate the limb.
- Continue to apply cold for 20 minutes on, 5 minutes off.
- Remove the crepe bandage for sleeping.
- You may notice some pain the following day when bearing weight; with the crepe removed you may notice some increased swelling when the limb is not elevated.
- Report to first aid at the start of your next shift; the first aid attendant will reassess and re-bandage if necessary.

You may need to discuss altering work activity with your supervisor.

If at any time you become unable to bear weight or the pain and swelling increase significantly, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Tendonitis

Tendonitis is the inflammation of the tendon.

You have tendonitis (also called RSI, repetitive strain injury) from excessive, unaccustomed activity.

With proper care it should start to feel better in about three to four days. The healing process will be more effective by following this advice:

- Avoid motion that aggravates the tendons.
- If a small working splint was applied, keep it in place as much as possible; remove the splint for sleeping.
- Continue to apply cold for 20 minutes on, 5 minutes off.
- Alternating cold and heat may also assist in healing.
- You may notice minor pain the following day.
- Report to first aid at the start of your next shift; the first aid attendant will reassess and reapply the splint if necessary.

You may need to discuss altering work activity with your supervisor.

If at any time pain and swelling increase significantly, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Flash burns and — snow blindness

Flash burn and snow blindness are burns to the surface of the cornea.

Direct or reflected ultraviolet light from an electric arc, welding torch, or sun (UV) exposure may cause a flash burn or snow blindness. Corneal burns become more painful after some hours, depending on the severity and length of exposure.

Although flash burns and snow blindness are very uncomfortable, they are not serious and usually heal in 12 to 24 hours.

The healing process will be more effective by following this advice:

- Cold compresses at night for pain.
- Avoid bright lights as this may aggravate the flash burns and snow blindness.
- Wearing dark glasses may relieve some of the pain.
- Avoid rubbing your eyes.
- Remove contact lenses (wear glasses if available)
- Mild pain medication (ASA or acetaminophen) may help you sleep at night.
- You may notice minor pain the following day. This is normal.
- Report to first aid at the start of your next shift.
- First aid will reassess and document any symptoms you are experiencing.

You may need to discuss altering work activity with your supervisor.

If at any time the pain increases significantly, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Minor burns

You have a minor burn.

The reddening of your skin indicates a first-degree burn and if there are small blisters, that indicates a second-degree burn.

The healing process will be more effective by following this advice:

- Keep the burned area covered.
- Ensure the dressings stay dry and clean.
- You may notice minor pain the following day. This is normal.
- Report to first aid at the start of your next shift.
- First aid will reassess and document any symptoms you are experiencing.

You may need to discuss altering work activity with your supervisor.

If at any time the pain increases significantly, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Minor back strain

You have strained the muscles or tendons in your back.

With proper care it should start to feel better in a few days to a week.

The healing process will be more effective by following this advice:

- Avoid motion that aggravates the muscles and tendons.
- Continue to apply cold for 20 minutes on, 5 minutes off for the first 24 hours.
- After 24 hours, the application of heat may also assist in healing.
- You may notice minor pain the following day.
- Report to first aid at the start of your next shift; the first aid attendant will reassess your back which will include a range of motion check, and will document any symptoms you are experiencing.
- You may need to discuss altering work activity with your supervisor.
- Although moving around may be uncomfortable, it is important to keep active without aggravating the injury. This will help relieve muscle spasms and help strengthen the back muscles.

If at any time the pain increases significantly, report to first aid, who may refer you to medical aid. If the condition becomes significantly worse while you are not at work and you decide to seek medical aid, notify the first aid attendant as soon as possible.

Appendix D — Records

- Sample of completed first aid record for arm laceration (Participant practice 4-01)
- Completed first aid record for arm laceration follow-up (Participant practice 4-02)
- Blank first aid record
- Sample safety data sheet (SDS)

First aid record

This record must be kept by the employer for three years

Sequence number
20240016

Name	Occupation
Mary George	Millwright
Date of injury or illness 2024-02-01	Time of injury or illness 2:35 PM
Initial reporting date and time 2024-02-01 at 2:40 PM	Follow-up report date and time ☐
Initial report sequence #	Subsequent report sequence number(s)

A description of how the injury, exposure, or illness occurred (What happened?)

Worker was reaching down into the motor on power unit 16, tightening the exhaust manifold. She cut her left arm on a sharp piece of heat-shielding metal when she pulled her arms out of the power unit.

A description of the nature of the injury, exposure, or illness (What you see — signs and symptoms)

ABCs all normal; no allergies; 2 cm long laceration to the upper inside area of the left forearm.

Laceration is just through the thickness of the skin. Minimal bleeding and pain; no swelling; wound appears clean; normal circulation and nerve function beyond the injury.

A description of the treatment given (What did you do?)

Assessed ABCs; supported arm and covered wound with sterile gauze. Examined arm from shoulder to fingertips. Cleaned the wound by prolonged flushing of the wound with tap water.

Applied skin closures. Dressed with four layers of sterile gauze and absorbent dressing; bandaged with crepe roller.

Name of witnesses	
1. Anna Prentice was working with Mary George	

Arrangements made relating to the worker (return to work, medical aid, ambulance, follow-up)

Return to work. Discussed worker handout sheet. Advised to keep dressing clean and dry and to return to first aid immediately if gets wet or dirty or pain increases. Must return at start of next shift (Feb 2, 2024) for redressing.

Provided worker handout	☒ Yes	☐ No
Alternate duty options were discussed	☐ Yes	☒ No
A form to assist in return to work and follow-up was sent with the worker to medical aid	☐ Yes	☐ No

First aid attendant's name (please print)	First aid attendant's signature
Lee Lewis	*Lee Lewis*
Patient's signature *Mary George*	

This form must be kept at the employer's workplace and is not to be submitted to WorkSafeBC.

First aid record

This record must be kept by the employer for three years

Sequence number
20240018

Name	Occupation
Mary George	Millwright
Date of injury or illness 2024-02-01	Time of injury or illness 10:02 AM
Initial reporting date and time 2024-02-01 at 10:05 AM	Follow-up report date and time ☒ 2024-02-02 at 8:10 AM
Initial report sequence # 20240016	Subsequent report sequence number(s)

A description of how the injury, exposure, or illness occurred (What happened?)

See report on Sequence #20160016

A description of the nature of the injury, exposure, or illness (What you see — signs and symptoms)

ABCs all normal; 2 cm long laceration to the upper inside area of the left forearm. Laceration is beginning to heal. Skin closures still in place. Minimal redness and pain; no swelling or pus; normal circulation and nerve function beyond the injury.

A description of the treatment given (What did you do?)

Assessed ABCs; supported arm and removed old bandage and dressing. Examined arm from elbow to fingertips. Cleansed around wound with water or sterile saline, cleaned over wound with sterile saline. Left skin closures in place. Dressed with four layers of sterile gauze and absorbent dressing; bandaged with crepe roller.

Name of witnesses	
1. Anna Prentice — was working with Mary George	

Arrangements made relating to the worker (return to work, medical aid, ambulance, follow-up)

Return to work. Discussed worker handout sheet. Advised to keep dressing clean and dry and to return to first aid immediately if gets wet or dirty or pain increases. Must return at start of next shift in two days (Feb 2, 2024) for redressing.

Provided worker handout	☒ Yes	☐ No
Alternate duty options were discussed	☐ Yes	☒ No
A form to assist in return to work and follow-up was sent with the worker to medical aid	☐ Yes	☐ No

First aid attendant's name (please print)	First aid attendant's signature
Lee Lewis	*Lee Lewis*
Patient's signature *Mary George*	

This form must be kept at the employer's workplace and is not to be submitted to WorkSafeBC.

First aid record

Sequence number

This record must be kept by the employer for three years

Name	Occupation
Date of injury or illness	Time of injury or illness
Initial reporting date and time	Follow-up report date and time ☐
Initial report sequence #	Subsequent report sequence number(s)

A description of how the injury, exposure, or illness occurred (What happened?)

A description of the nature of the injury, exposure, or illness (What you see — signs and symptoms)

A description of the treatment given (What did you do?)

Name of witnesses	
1.	

Arrangements made relating to the worker (return to work, medical aid, ambulance, follow-up)

Provided worker handout	☐ Yes	☐ No
Alternate duty options were discussed	☐ Yes	☐ No
A form to assist in return to work and follow-up was sent with the worker to medical aid	☐ Yes	☐ No

First aid attendant's name (please print)	First aid attendant's signature
Patient's signature	

This form must be kept at the employer's workplace and is not to be submitted to WorkSafeBC.

Safety Data Sheet

1 - Identification

Trade Name: WD-40® Smart Straw Multi-Use Product Aerosol **Product Use:** Lubricant, Penetrant, Drives Out Moisture, and Protects from Corrosion **Restrictions on Use:** None identified **SDS Date of Preparation:** October 9, 2023	**Canadian Office:** WD-40 Products [Canada] Ltd. P.O. Box 220 Toronto, Ontario M9C 4V3 **Information Phone #:** (416) 622-9881 **Emergency Phone # 24 hr: Chemtrec: 1-800-424-9300** Designated for use only in the event of chemical emergencies involving a spill, leak, fire exposure or accident involving chemicals. **Medical Emergency:** 1-888-324-7596

2 – Hazards Identification

WHMIS 2022/GHS Classification:
Flammable Aerosol Category 1
Aspiration Toxicity Category 1
Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the Consumer Chemicals and Containers Regulations (CCCR) which take precedence over WHMIS 2022 labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Label Elements:

DANGER!
Extremely flammable aerosol. Pressurized container: may burst if heated.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.

Prevention
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Avoid breathing mist or vapors.
Use only outdoors or in a well-ventilated area.
Response
IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you fell unwell.
Storage
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.
Disposal
Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	WHMIS 2022/ GHS Classification
LVP Aliphatic Hydrocarbon	64742-47-8	45-50%	Aspiration Toxicity Category 1
Petroleum Base Oil	Mixture	<35%	Not Hazardous
Aliphatic Hydrocarbon	64742-47-8	<25%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Carbon Dioxide	124-38-9	2-3%	Simple Asphyxiant

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.
Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.
Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.
Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.
Signs and Symptoms of Exposure: Harmful or fatal is swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye irritation. Inhalation of mists or vapors may cause nasal and respiratory tract irritation and central nervous system effects such as headache, dizziness and nausea. Skin contact may cause drying of the skin.
Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.
Specific Hazards Arising from the Chemical: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.
Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.
Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure limits
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA (Inhalable) ACGIH TLV (as Mineral oil) 1 mg/m3 TWA Canada- Québec (as oil mist, mineral) 5 mg/m3 TWA (Inhalable) Canada- Ontario (as oil mist, mineral) 1 mg/m3 TWA British Columbia (as Oil mist-mineral, severely refined)
Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 5000 ppm TWA, 30,000 ppm STEL Canada-Ontario 5000 ppm TWA, 30,000 ppm STEL Canada-Québec 5000 ppm TWA, 15,000 ppm STEL British Columbia

The Following Controls are Recommended for Normal Consumer Use of this Product
Appropriate Engineering Controls: Use in a well-ventilated area.
Personal Protection:
Eye Protection: Avoid eye contact. Always spray away from your face.
Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended
Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.
Personal Protection:
Eye Protection: Safety goggles recommended where eye contact is possible.
Skin Protection: Wear chemical resistant gloves.
Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved organic vapor/particulate or supplied air respirator in accordance with local and national regulations. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.
Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Physical State:	Liquid	Particle Characteristics:	Not applicable
Color:	Light green to amber	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F
Odor Threshold:	Not established	Relative Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	138°F (59°C) Tag Closed Cup (liquid)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Kinematic Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	24.1%	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions
Chemical Stability: Stable
Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.
Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.
Incompatible Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:
Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.
Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
Chronic Effects: None expected.
Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.
Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:
Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms
Persistence and Degradability: Components are readily biodegradable.
Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.
Mobility in Soil: No data available
Other Adverse Effects: None known

13 - Disposal Considerations

Aerosol containers should not be punctured, compacted in home trash compactors or incinerated. Empty containers may be disposed of through normal waste management options. Dispose of all waste product, absorbents, and other materials in accordance with applicable Federal, state and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty
(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)
Canadian TDG Classification: Limited Quantity
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY
ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

Special precautions in connection with transport or conveyance either within or outside the premises: No data available

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

National Pollutant Release Inventory (NPRI): This product contains the following chemicals that are listed on the NPRI Substance List: LVP Aliphatic Hydrocarbon (64742-47-8) 45-50%, Aliphatic Hydrocarbon (64742-47-8) <25%

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not require a California Proposition 65 warning.

WD-40 Specialist® products, WD-40® Multi-Use Products, and 3-IN-ONE® products do not require warnings against carcinogenicity, reproductive toxins, or germ cell mutagenicity

16 – Other Information

HMIS Hazard Rating:
Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: October 9, 2023 Supersedes: June 26, 2023

Prepared by: IHSC, LLC. Milford, CT, USA

Reviewed by: I. Kowalski Regulatory Affairs Dept.

4012200/No.0060608

Appendix E — Mental Health and Self-Care

Mental Health and Self-Care

PTSD, critical incident stress, and anxiety are mental health issues that can develop in a first aid attendant during the undertaking of their role.

Mental health and self-care are important aspects of the first aid attendant role.

Definitions

PTSD — post traumatic stress disorder

Posttraumatic stress disorder (PTSD) can develop after a person has experienced or witnessed a traumatic or terrifying event. PTSD is a lasting consequence of traumatic ordeals — such as a sexual or physical assault, the unexpected death of a loved one, an accident, war, or natural disaster — that cause intense fear, helplessness, or horror.

Families of victims can also develop PTSD, as can military personnel, emergency personnel and rescue workers, first responders, and journalists, to name a few. (Reference: PTSD association of Canada)

Critical incident stress management (CISM)

Critical incident stress management (CISM) is an effective approach because it empowers individuals, in the context of their workplace, to define and maintain their own and others' health through education, communication, and enhanced social support. The CISM approach allows individuals to verbally express stress reactions and share coping strategies after a traumatic incident.

While the evidence is still varied about whether the CISM approach prevents PTSD, it should be maintained in the workplace as part of a broader approach to health promotion. Debriefing also provides an opportunity to explore lessons learned and what could be done differently in the future. Organizations need to determine their own policies as to when CISM is mandatory and when it is voluntary. There should also be a distinction made between defusing and debriefing and when one or the other is appropriate.

CISM services are valuable in circumstances such as:

- Death of a colleague in the line of duty
- Hostage taking
- Death or injury of any person during use of force in the conduct of duties
- Witnessing of another person being mutilated or dying
- Being the victim of physical violence

- Receipt by an employee of any serious threat to their physical well-being or that of their family, arising from the employee's employment
- Having to work in an area where a critical incident is occurring, even though not directly exposed to this situation
- Suicide of a colleague
- Suicide of an offender
- Any incident where there is intensive or negative media coverage
- Any other incident deemed critical by management in joint consultation with the workplace-provided EAP coordinator (if available) and a critical incident mental health professional

Reference: Critical Incident Stress Management — BC First Responders' Mental Health (bcrespondersmentalhealth.com)

Anxiety

Feeling worried or nervous is a normal part of everyday life. Everyone frets or feels anxious from time to time. Mild to moderate anxiety can help you focus your attention, energy, and motivation. If anxiety is severe, you may have feelings of helplessness, confusion, and extreme worry that are out of proportion with the actual seriousness or likelihood of the feared event. Overwhelming anxiety that interferes with daily life is not normal. This type of anxiety may be a symptom of generalized anxiety disorder, or it may be a symptom of another problem, such as depression.

Anxiety can cause physical and emotional symptoms. A specific situation or fear can cause some or all of these symptoms for a short time. When the situation passes, the symptoms usually go away.

Physical symptoms of anxiety include:

- Trembling, twitching, or shaking
- Feeling of fullness in the throat or chest
- Breathlessness or rapid heartbeat
- Light-headedness or dizziness
- Sweating or cold, clammy hands
- Feeling jumpy
- Muscle tension, aches, or soreness (myalgias)
- Extreme tiredness

- Sleep problems, such as the inability to fall asleep or stay asleep, early waking, or restlessness (not feeling rested when you wake up)

Anxiety affects the part of the brain that helps control how you communicate. This makes it harder to express yourself creatively or function well in relationships. Emotional symptoms of anxiety include:

- Feeling restless, grouchy, or on edge or keyed up
- Worrying too much
- Fearing that something bad is going to happen; feeling doomed
- Not being able to concentrate. You may feel like your mind goes blank

Reference: HealthLink BC

Signs of stress

Physical

- Shock
- Palpitations
- Jumpiness
- Fatigue
- Digestive or intestinal problems
- Dizziness
- Headache
- Aches and pains

Emotional

- Anxiety
- Helplessness
- Moodiness
- Feeling overwhelmed
- Anger
- Hypersensitivity or insensitivity

Cognitive

- Poor judgment
- Trouble concentrating
- Negative thinking

Behavioural

- Irritable or short tempered
- Sleep disturbances
- Using alcohol/drugs to cope

Interpersonal

- Withdrawal
- Isolation
- Increased dependence on others

Spiritual

- Questioning life's purpose or meaning
- Shifts in faith practices or rituals
- Questioning of basic beliefs

Reference: Disaster worker self-assessment and self-care, 2024 (Province of British Columbia)

Self-care

- Pace yourself; strive for a work–life balance
- Make time for yourself
- Maintain your health
  - Get enough sleep
  - Eat properly
  - Be active
  - Use stress management or relaxation techniques
- Find support ahead of time from a:
  - Co-worker
  - Supervisor
  - Friend
  - Peer "buddy" support system
  - Social connections
  - Family
- Use humour
- Recognize successes

If you find yourself experiencing stress or anxiety, reach out, talk to someone, and ask for support. You can also call the B.C. crisis and information line: 1.800.784.2433 (1.800.SUICIDE).

Appendix F — Secondary Survey

Secondary survey

The secondary survey is similar to the primary survey, except it's more detailed and takes longer.

A secondary survey is a thorough assessment of the patient. The purpose is to determine the full extent of the developing injury or illness, and to identify any other injuries or illnesses that may not have been previously discovered during the primary survey.

- Vital signs– required if they are going to medical aid
    - Level of consciousness — (AVPU)
    - Breathing: — fast, slow, deep, shallow, gaspy, laboured, difficult
- Skin
    - Colour — normal, pale, red, blue
    - Temperature — warm, hot, cool, cold
    - Condition — wet, clammy, sweaty, dry
- History
    - What happened (mechanism of injury), allergies, medications taken, medical problems, chief complaint(s), any pertinent medical history
- Head-to-toe examination
    - Examine the injured worker’s body or limb (if the worker only received trauma to part of a limb) more thoroughly looking for signs of injury like bleeding, bruises, contusions, abrasions, burns, fractures, swelling, deformity, etc.
    - Is the treatment provided still effective? (e.g., is the bleeding still controlled with the bandage or has the blood soaked through?)
    - Are there any changes to the injured area?

Appendix G — Prescription and Non-Prescription Drugs and Medications, Naloxone

Prescription and Non-Prescription Drugs and Medications in the Workplace

Prescription drugs and medications

Prescription drugs and medications can be obtained only with a prescription from a physician. Such prescriptions will be specific to a worker.

For the first aid treatment of a specific worker — e.g., for angina or diabetes — a letter from the prescribing physician must identify the following for the prescribed drug or medication:

- The name of the worker to whom it is prescribed
- Its specific use expiry date and storage
- Possible and expected reactions to the medication
- Possible complications or side effects
- The dose and method of application

Non-prescription drugs and medications

Non-prescription products are those that may be purchased "over the counter" by any person.

An employer may choose to purchase non-prescription drugs or medications to address common ailments. The first aid attendant should have control over supplying the drugs and/or medications to the workforce. Several steps must be followed prior to supplying drugs or medications to a worker.

The first aid attendant must:

- Be familiar with the indications for use, contraindications, and side effects listed by the manufacturer of each drug or medication kept in stock. Of particular concern are drugs or medications that cause drowsiness or interfere with manual dexterity required by workers to perform their duties safely.
- Check and strictly adhere to the expiry date of the drugs or medications.
- Obtain a history of events that led up to the worker asking for relief.
- Determine if the worker is currently taking any medication, and if so, the appropriateness of taking additional medication, with possible interactions.
- Inform the worker of the side effects and contraindication (reasons why they should not take it) of the medication to be taken.
- Make an entry in the first aid record.
- Be familiar with the route of administration. Not all medications are taken orally.

Naloxone

The purpose of this first aid advisory is to provide information about the drug called naloxone and how the provision of naloxone may fit into an employer's workplace emergency response plan. We recognize the significance of the opioid overdose crisis and understand that employers may want their first aid attendants to be able to respond to a suspected opioid overdose at the workplace. In October 2016, regulations under the *Health Professions Act* and the *Emergency Health Services Act* were amended to enable anyone to administer naloxone, regardless of the administration route. Naloxone is available over the counter without a prescription.

What is naloxone?

Naloxone is a medication that can reverse the effects of overdose from opioids, including fentanyl. It is a safe medicine with no abuse potential. Naloxone is an opioid antagonist, which means it ejects opioids from receptors in the brain, reversing the respiratory depression caused by an opioid overdose. The medication works within minutes to restore breathing — returning the victim to consciousness.

Why use naloxone?

An opioid overdose is a very serious condition. It may cause death or severe brain, heart, or lung damage. Similar to using an epinephrine auto-injector for an allergic reaction, anyone can administer naloxone intramuscularly (into the arm or leg, with a syringe), or intranasally (spraying with an atomizer up the nose) with brief and basic training.

Are first aid attendants permitted to administer naloxone?

Yes, the provision of over-the-counter medications is within the scope of services that may be provided by first aid attendants. We recognize that this is a significant source of concern for many of our stakeholders.

The following points are considerations for employers, including the provision of the drug naloxone in emergency response procedures:

- The first aid attendant must receive training to prepare the injection site and administer an intramuscular injection. This training could be the same training that a member of the public would receive to administer naloxone.
- The employer has included the provision of this and any other over-the-counter medications supplied (e.g., epinephrine, acetylsalicylic acid) in the emergency response plan.
- The employer has included the provision of first aid to members of the public in the emergency response and first aid procedures, and has considered the risks to the attendant of providing this service.

For more information about naloxone and opioid overdose, visit www.healthlinkbc.ca/healthlinkbc-files/naloxone-treating-opioid-overdose.