

CHEA'S RISK MANAGEMENT PLAN

CHEA's program operations are the ongoing, re-occurring activities that achieve outcomes. Participants, however, cannot be expected to accept the challenges presented by our adventure programs and take risks if they are concerned about their safety. As a result, zip line guides must facilitate activities and serve as the supervisors who establish rules, minimize risk, and control actions to protect everyone involved. Zip Line Guides have a moral and legal responsibility to care for participants and should always consider situations with risk management in mind.

CHEA's Risk Management Plan is to serve as a proactive document that complements the reactive Emergency Response Plan that follows. CHEA managers will do their best to ensure that all hazards associated with each work activity are identified, the associated risks assessed, and measures for eliminating or minimizing and monitoring the risk are developed, documented and implemented.

FALL ARREST POLICY

The Fall Arrest Policy is the first part of our Risk Management Plan and is one of the most critical. 20% of all lost time injuries are related to falls in the workplace. The majority of falls occur on the same level (trips and snags); however, although falls from height to a lower level are less common, they are typically more serious. As we operate in nature and at heights, there is plenty of potential for falls of all types to occur on a regular basis. This is why fall arrest training and fall arrest system competence is critical for all staff at CHEA.

In Canada, anytime a worker is exposed to falling from a height of 3 meters or greater to a position below which he or she is situated, the employer (CHEA):

- Must ensure the worker is adequately protected from a fall
- Has a responsibility to provide adequate information, instruction, and supervision
- Must ensure workers using a fall protection system are properly instructed by a competent person
- A fall protection system is used when working at height involves a risk of injury
- Must ensure the components of the fall arrest system are adequate to protect the worker
- Work surfaces are kept clean and clear of slip and trip hazards

In an effort to abide by these responsibilities, CHEA requires all staff to successfully complete an online fall arrest course, which is legislated in the Province of Saskatchewan. As an employer, we also give practical hands on instruction on the use of fall protection systems, maintain our gear and other components of the fall arrest protection system, and do our best to ensure platforms are clean and grip tape is added where necessary.

Our Canopy Tour Operating Procedures and the training that accompanies it are our safe work procedure for each position and they must be followed as closely as possible to maintain safety. We will review procedures on a continual basis during our initial training and also during our CTR sessions.

Our course contains several "approved anchorage points" or "tie-off points" that must be used at all times. Staples found on the poles are NOT approved anchorage points. There are only three approved anchorage points on the Canopy Tour. They are:

1. "Leap anchors" (positioned at the termination of all zip lines and also placed up the center of every access pole between the staples at 40" on center)
2. Belay cables
3. Zip lines

RISK MANAGEMENT PLAN CONTINUED...

All of the approved anchorage points are easily identifiable with a fluorescent dot; they are capable of supporting at least 10,000 lbs per worker; they are placed as such that when the worker is completing a task, he or she is positioned directly below the anchorage point; and, they are located high enough to prevent a falling worker of making contact with a lower level or cable.

Employees are encouraged to think about the risks before ever getting right into a job. As well, it is the responsibility of the employees to:

- Follow instruction and training
- Recognize and report fall hazards
- Use the fall protection equipment properly
- Report any defects in equipment directly to the manager on duty

PRE-USE SITE INSPECTION

The set-up for all activities must begin before participants arrive. During the set-up time staff will need to complete a pre-use inspection of the environment, equipment, and elements used during the program. This also refers to a course check of the Canopy Tour, inspection of the slackline area, daily check of the climbing wall and climbing area, and inspection of the Mini-zips for Kids area. If staff members or managers identify any problems, the program or activity may need to be put on hold or altered until the problems are corrected. As well as:

- Prepare the elements that are going to be used during the day
- Removing site security systems
- Securing the rope ladder on the Canopy Tour
- Walking all of the slacklines
- Completing the Canopy Tour, Climbing Wall and Mini-zips for Kids checklists
- Setting up the low ropes elements
- Removing all hazards from the area (i.e.- loose sticks and rocks) and identify irremovable ones
- Organize the equipment that will be used by participants and inspect all gear thoroughly.

HARNESSES INSPECTION

These procedures refer to ALL harnesses that are used on site at CHEA. These checks must be done prior to EACH use (i.e.- before every single tour and before harnessing a guest on the climbing wall). Participants are not permitted to use their own climbing gear or ziplining gear on our site unless a manager approves it. The following are the steps required to check all harnesses:

- Examine the belay loop of the climbing harness. Scrutinize it for any fraying, corrosion, stains, splitting seams or other visible signs of damage. Run the belay loop through your hands to feel for any inconsistencies. Look for signs of weathering, such as faded coloring or lack of suppleness in the webbing.
- Inspect the tie-in area of the climbing harness using the same methods described for the belay loop.
- Examine the harness belt as carefully as you examined the belay loop and tie-in area.
- Scan the leg loops of the harness, including the attachment points in front and back, for any signs of fraying or wear. This includes elastic that has lost its stretch, which increases its danger of snapping.
- Inspect the metal portions of the harness for grooving, warping or other signs of wear. This includes the belt buckle, as well as leg loop buckles and connectors should the harness have these.

RISK MANAGEMENT PLAN CONTINUED...

ROPE INSPECTION

The following procedures apply to all rope used by CHEA staff. This includes climbing rope as well as rescue rope. The following are the steps required to check all rope:

- Look for frayed and abraded sections of the sheath. If you can see any of the white inner core, decommission the rope immediately.
- Run your fingers along the rope where it looks worn and frayed. Feel for soft spongy sections of the rope's core. Feel for flat spots where the inner core has flattened out from repeated falls or a long fall. Feel for nicks in the sheath that might indicate a potential core shot, where the sheath will wear all the way through to the core. Feel for a dry stiffness rather than a supple elasticity. If any of these factors are present, we will retire the rope.

MEDICAL SCREENING

The goal of medical screening is to prevent injuries that may be caused by pre-existing conditions such as:

- Pregnancy – due to enlargement of the uterus, the harness may cause uterine injury. The potential for injury exists up to six weeks post-partum
- Transplant recipients – in participants with kidney or liver transplants, there is the potential of damage to the new organ
- Atlantoaxial instability – increased mobility between the first and second vertebrae may lead to excessive slippage that is severe enough to cause spinal cord injury. Some 2% of individuals with Downs Syndrome may have AAI which is diagnosed using X-rays
- Abdominal organ enlargement – conditions such as hepatitis and mononucleosis cause enlargement of the liver and spleen respectively. Wearing a harness may damage these organs
- Active orthopedic problem – recent or reoccurring problems affecting bones or joints (including the back) present the potential for injury. Participants should consult with their doctor if they have fractures or joints that are in the process of healing
- Cardiac disease – heart attacks are the largest single cause of death on adventure courses. Although some participants may be unaware they have heart disease, others may have been diagnosed with a heart condition and advised to limit physical activity

FINALLY, any condition that a physician has determined creates a significant limitation for physical activity must also be considered. Ideally, medical screening will be completed before the group arrives so that Zip Line Tour Guides are aware of any specific needs and do not need to make decisions about who can safely participate; however, this is not always the case.

PARTICIPANT PREPARATION

- Long hair should be tied back, and clothing with drawstrings should not be worn
- Participants should remove jewelry including watches, rings, bracelets, and necklaces
- Sharp objects must be removed from pockets
- Close-toed footwear is required
- Participants must be briefed appropriately. They should understand their responsibilities and agree to behave appropriately. Participants must not be under the influence of alcohol or drugs.
- Participants may not smoke near climbing/ziplining equipment as ash may damage equipment

CHEA'S EMERGENCY RESPONSE PLAN

CHEA's emergency response plan contains reactive protocols and technical information to be used by zip line guides should an emergency situation arise.

EMERGENCY RESPONSE PROTOCOLS

As a Zip Line Guide, you may be required from time to time to respond appropriately and quickly in an emergency situation. Some emergency situations are minor and require limited corrective first aid actions in order to tend to them; others are extremely serious and we will touch on those first.

Although there may be other serious emergency situations that occur, these are the main ones you need to be aware of:

- A guest or guide is injured to the point that they are unable to move on their own
- Violent weather approaches quickly and all tours need to be evacuated
- Mechanical failure causes a guest or guide to be seriously injured

In all emergency situations where you feel immediate assistance and action is required, first:

- Assess the scene and start administering immediate first aid
- Contact BaseCamp via radio or telephone and let the manager know:
 - What happened
 - Who is involved
 - Where on the course you are located (platform #)
 - If emergency services need to be notified
 - If assistance is required
 - What you require to deal with the situation (first aid kit, manager's assistance, crowd control, etc.)

Should the emergency situation be diagnosed as serious or life threatening to one of the guests or guides, once the manager at BaseCamp receives radio or telephone communication, they must immediately:

- Contact emergency services by dialing 911 and provide them with the following information:
 - State the name of the business: Cypress Hills Eco-Adventures Ltd.
 - State the nature of emergency
 - Give directions: 28 km south of Maple Creek in Cypress Hills Interprovincial Park
 - GPS coordinates: 49.66155° -109.506817°
 - State number of people injured
 - State other problems if any
- Alert park office (306) 662-5411 and tell them to direct emergency services if necessary
- While waiting for Emergency Services:
 - Continue first aid if appropriate.
- When Emergency Services arrive, they will take control
 - Give them details of the incident & any further actions you have taken and
 - Assist as directed with traffic control etc.
- As soon as practicable report on the incident using CHEA's Accident/Incident Report form

Please note: there are five access points to our site, which come into contact with main roads. They are identified on the map found on the next page with a "blue paw print". Please remember these access points in the case of an emergency.

EMERGENCY RESPONSE PLAN CONTINUED...

CHEA COURSE ACCESS POINTS



In order from bottom left to top right, the access point names are:

1. BaseCamp
2. Platform #1
3. Platform #2 & #3
4. The Woodlands Trail
5. End of the MACRO Line

Please learn the access point names and refer to them by their names in ALL situations, especially during an emergency.

**IN CASE OF AN EMERGENCY
DIAL 9-1-1**

FOREST FIRE EMERGENCY

A loud siren will alert everyone in the Cypress Hills Interprovincial Park should there be a legitimate threat of a fire. In the case of a forest fire, evacuate tours immediately and lead all guests to go back to BaseCamp. Once back at BaseCamp, we will ensure that all guests and guides currently registered on tours are accounted for. From there we will load up into vehicles and follow the emergency fire evacuation plan by following the routes outlined by the Cypress Hills Interprovincial Park Fire Evacuation Map located in the main yurt. The muster point is at the intersection of highway #21 and highway #221. Once we are all there, we will do a quick head count and await instruction from emergency services.

MINOR FIRST AID EMERGENCIES

For the purpose of distinguishing between types of injuries and emergencies that we may encounter on a daily basis, the following injuries have been labeled as “minor” in this manual. However, although it may appear to be a minor injury, it still could have major consequences; so please approach these the same way you would a “major” emergency.

Follow these steps:

- Assess the scene and start administering immediate first aid
- Contact BaseCamp via radio or telephone and let the manager know:
 - What happened
 - Who is involved
 - Where on the course you are located (platform #)
 - If emergency services need to be notified
 - If assistance is required
 - What you require to deal with the situation (first aid kit, manager’s assistance, crowd control, etc.)

EMERGENCY RESPONSE PLAN CONTINUED...

AGGRAVATION OF PRE-EXISTING INJURY

Let the participant know the risks of continuing and encourage them to stop the tour if the injury could be worsened. If the participant chooses to stop the lead guide must radio for ground support and belay the guest to the ground at whichever platform they are at.

ASTHMA AND ALLERGIES

Any participating guests that have asthma or allergies are advised to bring their medication with them on a tour. If guests do not have their medication they are advised not to participate.

Signs and symptoms of asthma:

- Wheeze when exhaling
- Gasping for air or unable to breath
- Upset and anxious
- Feeling chest tightening or/and tingling in feet and hands

In the event that someone is having an asthma attack and their medication is not present, radio for ground support and advise them to call 911. Belay the participant to the ground as quickly as possible.

Signs and symptoms of Anaphylaxis Allergy Reactions

- Flushed itchy skin, welts or hives
- Swollen face, lips or tongue, watery eyes, scratchy throat
- Impending sense of doom, runny nose, chest tightness, coughing, wheezing, general respiratory distress, unable to speak more than a few words at a time
- Nausea, vomiting, cramps, and unconsciousness

Many other first aid scenarios are possible at CHEA. Review your first aid material and practice rescue scenarios weekly to be prepared for any possible circumstance. Guides should recommend any guests with moderate – severe injuries to see a physician as soon as possible.

FIRST AID KITS

A Saskatchewan No. 2 first aid kit is located behind the employee entrance of the main yurt, underneath the electrical panel. All rescue bags also contain minimal first aid supplies.

NOTE: Always replace any items taken from a first aid kit after a tour.

FIRST AID RESPONSE

All workers who hold a valid First Aid Certificate will be identified prior to the first tour of the day and their name will be written on the whiteboard, which is located inside the main yurt to the right of the staff entrance. If an incident occurs, these workers should take the lead if at all possible when any participant or staff member requires first aid treatment.

INCIDENT REPORTING PROCEDURES

We must report all incidents at CHEA for a couple main reasons. Firstly, failure to report an incident could result in someone else being put at risk in the future. Secondly, to protect the company, its directors, and the staff from legal action should someone decide to bring that forward after an incident occurs.

EMERGENCY RESPONSE PLAN CONTINUED...

There are two main categories for which an Incident Report Form needs to be completed. They are:

1. For each occasion involving verbal abuse, aggressive behaviour, physical assault (or threats of), mischief, and/or destruction of equipment or property (or threats of); and
2. For each occurrence that results in minor injuries requiring first aid or major injuries requiring medical assistance

Please note: a separate form must be completed for each incident and this **MUST** be done within 3 days of the incident occurring.

A book of blank Incident Report Forms is located inside the main yurt, in the top drawer of the filing cabinet, to the right of the pay window. Retrieve a blank Incident Report form, complete all sections that are applicable to the specific incident, and then submit it to the Manager on Duty. The Manager on Duty will debrief the staff and also, if possible or appropriate, the participants or spectators; then file the completed Incident Report.

A NOTE ON POLICIES, PROCEDURES, AND PRACTICES

The written policies and procedures found in this manual, specifically those found in sections for the Risk Management Plan, the Canopy Tour Operating Procedures, and the Emergency Response Plan, provide guidelines that create buffers between people and unsafe conditions. While this manual establishes guidelines for operation, common sense and good judgment remains important. The information contained in these manuals is intended to serve as a guide and reference for the vast majority of situations – not as a replacement for the skill, knowledge, and experience of a competent Zip Line Canopy Tour Guide.