|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity: Non-technical Caving** | Version: | 1 | Date: | December 2021 | Next review date: | August 2022 |

|  |  |  |
| --- | --- | --- |
| **Value of this activity – what do we hope to achieve?** | |  |
|  |  | |
|  |  | |
|  |  | |
|  |  | |
|  |  | |
|  |  | |
|  |  | |
|  |  | |

Note: this Risk Assessment is ***NOT*** comprehensive. You should complete a risk assessment of your ***specific*** area, activity, and group then add the hazards you identify.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **General Risk Assessment** | | | | | |
| **Harm**  What could go wrong? | **Hazard**  Why would this happen? | **Risk Rating?**  How serious? | **Controls**  How can it be prevented?  First try to e)liminate, then m)inimise the risk  Who is responsible for implementing the control? | **Check**  Controls implemented?  Reviewed? | **Residual Risk Rating?** |
| Fatality / Serious Injury | Rocks falling onto head  Person falling – onto head | **High** | **Organisation**  Ensure leader has sufficient competence and experience to manage group in cave (m)  Provide (or ensure) clear operating procedures e.g., use of helmets handlines, spotting (m)  **Leader**  Know where the falling hazards are and actively supervise and coach participants at those points (m)  Provide close supervision of participants and spotters throughout the cave – to manage fall lines, loose rock and scrambling (m)  Provide clear instruction, practice and monitoring of spotting techniques (m)  Set up and manage handlines where appropriate (m)  Ensure helmets are worn and correctly fitted (m)  **Participant**  Follow instructions, participate fully, remain attentive and spot effectively as required (m)  Wear helmet and appropriate footwear as instructed (m)  Be careful to not dislodge rocks, and be aware of people below (m) |  |  |
| Slips, trips falls |  | As above and:  **Organisation**  Provide (or ensure) at least one good light per participant, not hand held (m)  **Leader**  Coach participants to stay low, use hands and have three points of contact when moving through cave (m)  Move one at a time through / around obstacles (m)  **Participants**  Follow instructions, and pass instruction up and down the line (m) |  |  |
| Drowning  – water rising  - flooding  - cold water shock |  | **Organisation**  Check weather forecast. (m)  Consider cancelling cave trip when heavy rain forecast. (e)  Have an evacuation plan e.g., communication, escape routes, high water mark. (m)  **Leader**  Be familiar with the high water / flood line and escape route (m)  Brief participants what to do if need to evacuate. (m)  Travel against the current (upstream) (m)  If moving downstream, keep group tighter (m)  Ensure participants are dressed appropriately (m)  Identify participants’ swimming ability and water confidence (m) |  |  |
| Entrapment | Squeeze too tight  Collapse  Fatigue – not strong enough to move forwards | **High** | **Organisation**  Ensure leader is familiar with location, and is experience managing groups in squeezes (m)  Assess the appropriateness of cave to the group, and plan alternative routes/ activities if squeeze is mandatory (m)  **Leader**  Assess each squeeze, and your ability to assist a participant if stuck (m)  Consider the effect of gravity on participant and manage squeeze accordingly (m)  Note any new loose rock and avoid if there is potential for further collapse (m)  Have appropriate person in front and behind to route find and manage group (from b  Be aware that small people (children) can get into small places that adults can’t get to – so don’t allow them to go ahead where they could get stuck (m)  Actively coach participants on body position and technique to get through squeeze (m)  If participant is likely to get stuck (e.g., size, fatigue, will power) coach them to take alternative route (e)  **If an entrapment occurs:**  Recognise when you need to call for external help, sometimes quickly – the participant will remain stuck while waiting for the emergency response to arrive.  Communicate to Cave SAR how serious the entrapment and what tools may be required, e.g., drill, stretcher  **Participant**  Follow instructions (m)  Don’t give up (m)  Ask for help if feeling fatigued (m) |  |  |
| Missing person | Taking wrong turn - when ahead of group  - when left behind | **High** | **Leader**  Regularly account for everyone, especially after junctions (m)  Be familiar with cave and know where participants could take wrong turn (m)  Ensure a responsible person tells everyone which fork to take at junctions (m)  Brief on what to do if separated and how to avoid it (m)  **Participant**  Communicate instructions up and down the line (m)  Know where your buddy is at all times. Wait for them and tell group to wait too (m) |  |  |
| Whole group getting lost | To / from cave  -unfamiliar with entrance/exit  -tired,wet,cold and dark at end of the day  Within cave  -torch failure  -taking wrong turn |  | **Organisation**  Have an emergency plan if group not out by certain time (m)  Ensure group has sufficient light source to last duration of trip and emergency time (m)  Provide a cave map (m)  **Leader**  Be familiar with entrance and exit, and route back to vehicle (m)  Be familiar with any other access routes in/out of cave (m)  Manage tomos and slippery ground on access routes (m)  Have a buddy system, so no one person is left behind (m)  Wait at junctions, and account for everyone (m)  Carry spare lights and batteries, and do a pre-use check (m) |  |  |
| Hypothermia (too cold) | Inadequate clothing  Waiting  Unintentional submersion  Inappropriate clothing | **High** | **Leader**  Be aware of signs of hypothermia and the need to keep energy level high (m)  Keep participants dry for as long as possible - avoid submersions early in trip (m)  Minimise time spent waiting – keep moving to stay warm (m)  Ensure participants are wearing appropriate clothing for nature and duration of cave, e.g,, polypro layers top and bottom, wooly hat under helmet, (m)  Ensure group has extra warm layers in cave and clothes to change into afterwards (m)  Have method of rewarming, e.g, warm layers, thermos, cooker (m)  **Participant**  Wear appropriate clothing as instructed (m)  Speak up and let leader know if feeling cold (m) |  |  |
| Injury – fractures, cuts, grazes, burns, bruises etc | Slips, trips and falls | **Medium** | As above, and  **Organisation**  Ensure behavioural expectations are clear to participants, leaders and supervising helpers (m).  **Leader**  Provide appropriate supervision and reinforce behavioural expectations (m).  Minimise waiting time, when participants may get bored (m). |  |  |
| Emotional distress | Fear of dark  Claustrophobia | **Medium** | **Organisation**  Collect accurate medical/behavioural information, discuss with participant and/or caregiver (m)  **Leader**  Allow time for participants to disclose fears, and discuss management strategies with them (m)  Supervise participants with potential phobic reactions closely (m)  Encourage a supportive group culture, and acceptance of other people’s fears (m)  **Participant**  Speak up if feeling scared and in need of support (m)  Be supportive of peers and accepting of other’s reactions (m)  Always know where your buddy is and speak up if they need support (m) |  |  |
| Environmental Damage | Toileting  Food/rubbish  Damage to formations | **High** | **Organisation**  Have a caving specific environmental protection plan, that all staff adhere to (m)  Provide poo pots if trip is several hours long (m)  **Leader**  Educate and help participants appreciate the fragile nature of the caving environment (m)  Include a toilet opportunity before entering cave (m)  Educate participants on appropriate toileting in cave (m)  Ensure no rubbish or food scraps are left behind (m)  Provide education on how formations are damaged and monitor  Minimise waiting times and boredom, supervise when waiting as this is when damage is more likely (m)  Keep group within stringlines, and instruct to only touch formations that are key safety holds (m)  Do not allow mud flicking or the building of mud ‘snowmen’ (e)  Participants  Respect the fragile caving environment and follow instruction to minimise damage (m) |  |  |
| Medical Incident | Pre-existing Medical Condition | **High** | **Organisation**  Collect accurate medical information, discuss & ensure info tagged to right person (m)  Ensure participant carries appropriate medication & that others know how to administer (m)  Ensure appropriately competent staff – current First Aid minimum (m)    **Leader**  Ask participants to verbally disclose any new or updated medical information (m)  Ensure updated information shared with staff who will be supervising those participants (m)  **Participant**  Honestly disclose pertinent medical information (m) |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Reviewed by:** |  | **Date:** |  | **Approved by:** |  | **Date:** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site Specific Hazard Analysis:** | By: |  | Date: |  |

|  |  |
| --- | --- |
| Site Specific Hazards  What else could go wrong (at this site)? | Management - How can we control this? |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Specific Hazards on the Day  What could go wrong at this site?  1. On this day (weather, ground surface etc)  2. With these people (participants, staff etc) | Management - How can we control this? |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Past Incidents  Any learnings to note? | Management - How can we control this? |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Leadership and Supervision plan:** | By: |  | Date: |  |

|  |  |  |
| --- | --- | --- |
| Supervision Requirements | Consider the risk assessment and staff required to manage this activity safely | Contact details (mobile phone no./radio no. etc) |
| Who is in charge of the activity? (the leader) |  |  |
| Who are assisting the leader? |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Staff Competency  Names | Are there any designated roles based on skills/competency (e.g. first aider, cook, driver etc) |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |
| --- |
| **Group members requiring specific management strategies:** Provide **specific management strategies** for participants requiring special attention |
| **Health** (e.g. asthma, allergies, medical conditions, current injury) |
| **Behaviour** (e.g. poor listeners, ADHD, socially inept, short tempers, disobedience/untrustworthy) |
| **Capabilities** (e.g. swimming ability, physical disability) |

|  |
| --- |
| **Staffing and Supervision Structure:** Specifically describe the **supervision structure** required for the event |
| Supervision structure (includes allocation of roles and allocation of students to supervisors)  (e.g. Number of groups and size, number of supervisors/leaders per group, leaders not directly supervising a group and their role) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Emergency Communication Plan:** | By: |  | Date: |  |

*This component should help users of the guide to consider site specific characteristics of their activity including details about evacuation procedure, communications (cell coverage), emergency resources and options that are available at the site.*

|  |  |  |  |
| --- | --- | --- | --- |
| Assistance | | | |
|  | Detail | Location | Phone |
| Emergency | **Police, Fire or Ambulance** |  | 111 |
| Police | **Non-emergency** |  | 105 |
| Police | from **Sat Phone** | North Comms (covers New Zealand north of Turangi): | +64 9 571 2800 |
| Central Comms (covers North Island south of Turangi): | +64 4 381 2000 (ask for Comms) |
| South Comms (whole of the South Island): | +64 3 363 7400 (ask for Comms). |
| Xxxx Hospital |  |  |  |
| Nearest Medical Centre | Open hours? |  |  |
| 24 Hour Surgery | 24 hrs |  |  |
| Urgent Pharmacy |  |  |  |
| Poison Centre |  |  | 0800 POISON (0800 764 766) |

|  |  |  |  |
| --- | --- | --- | --- |
| Organisation contacts | | | |
|  | Name | Email | Phone |
| Organisation | Office Ph  Sat Phone |  |  |
| Duty Manager | Names of people who will need to know about an emergency (who are not next of kin) |  |  |
|  | On Call Phone |  |  |
| Legal |  |  |  |
| Insurance |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Participant details/register:**  All participants including leaders, assistants, parents, helpers | | | | | | | By: |  | | Date: |  |
|  | | | | | | |  |  | |  |  |
| Participant Name | Role | Emergency Contact (next of kin, guardian, spouse etc) | Address | Phone | | | Critical Personal information | | |
|  | | e.g. participant, leader, parents/guardians, |  |  |  | | | Allergies, disabilities, medical conditions, medications carried etc | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |
|  | |  |  |  |  | | |  | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site/Area Map:** | By: |  | Date: |  |

**Site/Area Map.** *Draw, paste or attach in a map, diagram or photo of your site and note the following (if relevant): access points, hazard/out of bounds areas, emergency evacuation/exit points, key locations, locations of landline phones/areas with/without cell reception, emergency service access points and addresses/heli landing area, traffic/parking areas, toilets, water sources, emergency meeting areas, activity areas, drinking water sources, flammable storage areas.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Resources and Equipment:** | By: |  | Date: |  |

*A summary of the resources and equipment that are essential for running the activity safely and distinct from generic outdoor activity equipment. Add to these for the specific event.*

* Participant
* Group
* Leader
* Emergency

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Post Event Review:** | By: |  | Date: |  |

|  |  |
| --- | --- |
| Post Trip Review  Critical learnings from this trip and previous trips. |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |