# Cardiff University Students’ Union Mountaineering Club Activity Risk Assessment

Please read the guidance notes, or visit a member of the Activities staff team, for assistance to complete. Useful guidance can also be found from your relevant National Governing Body.

THIS IS A LIVE DOCUMENT THAT NEEDS REGULARLY REVIEWING AND UPDATING.

1. **General Information:**

|  |  |  |  |
| --- | --- | --- | --- |
| Club / Society: | Cardiff University Mountaineering Club | | |
| Name of most recent assessor / reviewer: | Rebecca Carman | Date of most recent review: | 13/09/2024 |
| Committee position of most recent assessor / reviewer: | Secretary | Date of original assessment: | 13/09/2024 |

1. **Description of Activity:**

|  |
| --- |
| **What is the activity?** Attach any routes and maps if applicable.  Outside sport climbing involves someone lead climbing up the rock attaching quickdraws to bolts in the rock and then clipping the rope into the other end of the quickdraw. This climber is tied into one end of the rope (typically using a figure 8 knot and always into both loops on their harness) and a belayer lead belays the climber by attaching the rope to their belay device which then gets attached to the belay loop on their harness. For sport climbing, harness, helmets, quickdraws and personal protection (such as a sling or adjust) are required.  The climber should attempt to follow set routes that can be found in guidebooks, on the UKC website etc. Once the climber reaches the top of the climb, they can either be lowered to have someone else second or top rope the route or they should clean the route. Cleaning the route involves the climber clipping themselves to the bolts using a sling or similar, they will then follow a set order of actions to remove the gear and rope from the anchor. Following the set order ensure that the climber always remains safe whilst collecting all the gear from the wall. The climber is then lowered by the belayer, collecting the remaining quickdraws on the way down.  Some sport climbs are multipitch, meaning that there are multiple anchors along the route requiring the climber to clip themselves into the anchor using personal protection before belaying up the second climber from the top. Once the second climber reaches the anchor and clips themselves in they can then belay the first climber up the next section of the wall. Often these anchors or on ledges where the belayer can sit or stand whilst the other person is climbing.  Climbers who are doing outside sport climbing or belaying should have been signed off for indoor lead climbing or belaying prior to doing outside sport.  **Location / address of the activities:**  Crags local to Cardiff, crags local to the bunkhouse or campsite that is being used by the Club on residential trips.  **Approximately how many people are involved?**  9-20 people on day trips and each day on weekend residentials, depending on demand and transport capabilities  **Approximate duration of the activities:**  08:00 to 20:00, 12 hours. Typically our outdoor activities are done for as long as is permitted by the daylight and weather at the crag. |

1. **Hazard Assessment:**

Please continue this assessment for as many pages as required.

If your National Governing Body or managed facility provider have their own Risk Assessment, please attach and reference it within your assessment. Ensure that you act on any control measures that require implementation as a result of this assessment.

A hazard is anything that has the potential to cause harm, for example, a hole in the playing surface.

A hazardous event takes place when someone or something interacts with the hazard. Every hazardous event has a likelihood and a consequence.

Likelihood is a measure of the chance that a hazardous event will occur.

The consequence / severity is the most likely outcome should the hazardous event occur.

Risk is a combination of the likelihood of a hazardous event occurring, with the consequence / severity of the event.

Use the scales below (1-3) to complete the risk matrix.

*Areas for consideration (non-exhaustive list):*

* *Activity that has the potential to cause injury to those participating.*
* *Different levels of ability.*
* *The safe use of equipment required to do activity.*
* *Facilities / location where the activity takes place on/in/at, for example, surfaces, fixtures and fittings.*
* *Environmental factors that would impact the activity, for example, lighting and temperatures.*
* *Risk to both participants and non-participants from each other’s interaction.*
* *Appropriate leadership and information distribution / collecting, for example, participants brief and medical details.*
* *Transport / getting to and from the activity.*

|  |  |
| --- | --- |
| **LIKELIHOOD** | **CONSEQUENCE / SEVERITY** |
| **1** = unlikely the event will happen, although conceivable. | **1** = unlikely for an injury to occur, although conceivable, and minor if so. For example, minor cut / graze. |
| **2** = the event could occur sometimes and is fairly likely. | **2** = something more than a ‘scratch’ or ‘bruised ego’. A ‘three day’ injury, requiring further medical assistance. For example, cuts needing stitches. |
| **3** = it is likely the event would occur quite easily / regularly. | **3** = a major injury. For example, broken bones, loss of consciousness, loss of limbs, death. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **INJURY**  What type of injury / damage can occur? | **HAZARD**  What is the hazard that can cause the injury? For example, activity, equipment, procedure, location, environment, participants. | **EXISTING CONTROL MEASURES**  What measures are currently in place to reduce the risk of injury? | **LIKELIHOOD** of injury, taking account of existing control measures  (use scale 1-3). | **SEVERITY** of injury, taking account of existing control measures (use scale 1-3). | **RISK**  = Likelihood X Severity. |
| Traffic collision | Not following the Highway Code and Road Traffic Act 1988 while driving | All drivers must have passed the necessary driving tests that are provided SU Transport | 1 | 3 | 3 |
| Climbing under the influence of alcohol | Drinking alcohol before competing in any sport activity impairs the participants ability to safely complete the activity | Ensure that all members do not drink alcohol before any sport activity | 1 | 2 | 2 |
| Spread of sickness | Attending group activity while sick and can infect other members and cause them to also become sick | Encourage any member who is showing signs of sickness to stay away from activity until signs have gone | 1 | 2 | 2 |
| Climber falling because of belayer error and taking a larger fall as a result, potentially hitting the ground | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | A mentor will tail or use a ghost rope when the belayer is a novice. Climbers are encouraged to ‘buddy check’ before each climb to ensure belayer has set up equipment correctly. | 1 | 3 | 3 |
| Climber falling because of personal equipment failure | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Regular inspection of club kit to be carried out by instructors, the elected Gear Secretary and other experienced committee members. Any faulty or expired equipment will be removed immediately from the kit store. Club members should be regularly inspecting any personal equipment for damage and should avoid using equipment past its expiration date. | 1 | 3 | 3 |
| Climber falling because of personal knot failure | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Climbers are encouraged to ‘buddy check’ before each climb to ensure that all knots have been tied correctly. | 1 | 3 | 3 |
| Climber falling because of failure of belayers equipment | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Regular inspection of club kit to be carried out by instructors, the elected Gear Secretary and other experienced committee members. Any faulty or expired equipment will be removed immediately from the kit store. Club members should by regularly inspecting any personal equipment for damage and should avoid using equipment past its expiration date. | 1 | 3 | 3 |
| Climber injured because of being lowered off too quickly | Broken limbs, sprains, bruises, dislocations, shock | Everyone who belays a sport climber should be approved to lead belay inside first by a member of committee or experienced mentor. | 1 | 2 | 2 |
| Inversion occurs when falling | Broken limbs, bruising, sprains, dislocations, loss of consciousness, shock | Climbers are encouraged to ‘buddy check’ before each climb to ensure that the climber is correctly tied in (i.e. tied into both loops of belay point). Ensure the climber knows what can lead in inversion upon falling. | 1 | 2 | 2 |
| Stuck climber | Stress/anxiety | Participants correctly briefed on the activity beforehand, climbers can be lowered to the ground but may require downclimbing until they are below the last quickdraw they are clipped into. Climbers should not attempt climbs far beyond their limit. | 1 | 1 | 1 |
| Belayer or spectator injured by falling climber | Broken limbs, sprains, bruising, loss of consciousness, dislocations, shock. | Ensure belayers know where to stand. Ensure spectators are not standing in the ‘drop zone’ . | 1 | 2 | 2 |
| Climber stranded because of jammed belay device | Stress/anxiety of both climber and belayer.    Other injuries (bruising, shock, sprains) may occur depending on the circumstances of the jam | Ensure long hair is tied back, tuck in hoodie strings, remove all jewellery before climbing, keep fingers a safe distance away from belay device, all to ensure they do not get caught when belaying. Ensure rope is running through belay device correctly before the climber starts climbing | 1 | 1 | 1 |
| Entanglement or entrapment in ropes | Friction burns, stress, anxiety | Clothing to protect body from fiction burns, ensure belays know not to step on any rope. Ensure people do not twist the rope around themselves. Excessively loose clothing should be avoided. Ensure climber flake out the rope at the start of session and as necessary throughout/ | 1 | 2 | 2 |
| Climber falling due to rock breaking | Sprains, bruises | The rope and belayer should catch the fall. Ensure climbers know that rock can break whilst climbing. Don’t climb on gritstone or sandstone whilst it is wet as it is far more likely to break. Ensure everyone stood at the bottom of the rock or climbing wears a helmet to reduce the risk of head injury from falling rock. | 2 | 1 | 2 |
| Rope slips through belayers hands during a catch of a falling climber | Shock, anxiety    Broken limbs, bruising dislocations, sprains for climber    Rope burn on palms and fingers for belayer. | Ensure that the belayer has been taught how to correctly catch a climber. Ensure that the belayers attention remains on the climber for the entirety of their climb | 1 | 2 | 2 |
| Rope climber and belayer collide following a fall from a low height | Bruising, sprains, concussion, dislocations | Climbers and belayers will be taught the importance of climbing with someone of a similar weight,and should understand the dangers of falling low down. Belayers should wear appropriate shoes to prevent foot injury if they hit the wall during a catch. | 1 | 2 | 2 |
| Slipping and/or sprains from approach to crag or when at crag | Broken limbs, dislocations, sprains, bruising | Appropriate footwear to be worn for the approach, taking into account weather conditions and length/difficulty of approach. Avoid having equipment dangling across the body that could limit leg or arm movement. | 2 | 2 | 4 |
| Injury on sharp segments of rock | Cuts, scratches | Clothing can be used to protect knees, elbows and other body parts from the rock. Climbing specific finger tape can be used to protect hands from particularly sharp bits of rock. | 2 | 1 | 2 |
| Changes in body temperature do to long periods of time spent outside in rain/sun/wind/snow | Hypothermia, hyperthermia, shock, stress, heat stroke , dehydration | Appropriate clothing brought for weather conditions with enough spare layers. Water bottles to be bought to crag. Committee to make participants away of the weather predictions and inform them on what suitable clothing should be bought. Enough First aiders will be present in all groups and trips, and all groups will have adequate first aid kits provided. | 1 | 2 | 2 |
| Rings getting caught on rock and causing injury | Degloving of skin on fingers | Dangers of climbing with rings on will be explained to climbers, climbers will not be allowed to climb with rings on. | 1 | 2 | 2 |
| Rope breaks due to sharp rocks or friction against rocks | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Rope protection such as carpet or specially made product will be used to reduce the friction on the rope if it is sitting against the rock. Sideways motion of the rope under weight should be avoided | 1 | 3 | 3 |
| Bolt fails causing climber to take a large fall, potentially hitting the ground | Shock, dislocations, sprains, broken limbs | Bolts are maintained by the BMC, local climbers or land owners, website such as UKC can be used to see when routes last had their bolts replaced. Climbers should look at the bolts before they climb ensuring that non are missing, or excessively rusted or loose. | 1 | 2 | 2 |
| Rope or other equipment lands of someone stood at the bottom of the rock after being dropped | Bruises, cuts, loss of consciousness | Everyone at the bottom of the rock or climbing will be wearing helmets. Loose | 1 | 2 | 2 |
| Someone falls off the top of the climb whilst cleaning the anchor | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Only those with experience cleaning anchors should do so where possible. People without experience should be taught how to clean anchors on the ground beforehand. | 1 | 3 | 3 |
| Lead climber injured due to failure to clip protection point | Broken limbs, sprains, bruising, dislocations, shock | Climbers doing sport climbing should already know about the best clipping positions whilst climbing to reduce the distance of falling. Not climbing beyond your limits reduces the chance of falls. | 1 | 2 | 2 |
| Lead climber injured due to failure to clip first or second protection point | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Belayers will spot the climber up until they clip the first bolt. Climbers doing sport climbing should already know about the best clipping positions whilst climbing to reduce the distance of falling. | 1 | 3 | 3 |
| Lead climber falling because rope is too short and slips through belay device | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Always check using UKC, Rockfax or guidebooks what the height of the route is, ensuring that the rope used is more than twice the length of the route or length of longest pitch in multipitch climbing. Tying a safety knot in the end of the dead rope to ensure it does not slip through the belay device. | 1 | 3 | 3 |
| Injury due to overexertion without a proper warm up or strengthening plan, climbing injuries for these reasons notably occur to fingers, wrists and shoulders | Temporary muscle or joint pain when doing activity, ligament, muscle or tendon damage | Participants should ensure that they are suitably warmed up before attempting technical or strenuous climbs. Training guidence can be provided by the Training and Competition Secretary. Participants should stop any activity which causes them pain and seek medical advice. | 2 | 2 | 4 |
| Bleeding from a graze or cut, bleeding due to climbing can commonly occur on fingers or hands | Spread of disease or illness | Participants should use a plaster, bandage or climbing tape to prevent the spread of blood to any climbing surface. Participants should tape any skin that is close to bleeding before it happens. | 2 | 2 | 4 |

**ADD MORE ROWS IF REQUIRED, THIS SPACE IS NOT LIMITING.**

1. **Risk Evaluation:**

|  |  |
| --- | --- |
| Risk factor from assessment matrix | Level of risk |
| 1 - 2 | **LOW RISK:** no further control measures should be required at this time but ensure any in place are maintained and reviewed. |
| 3 - 4 | **MEDIUM RISK:** ensure that the suitable control measures are in place as described in the hazard assessment. You must continuously consider and implement additional control measures where possible. Do not do the activity if you are uncomfortable with the equipment, guidance and support available. |
| 6 - 9 | **HIGH RISK: DO NOT DO ACTIVITY** until risk has been considered, reduced and additional control measures have been enforced. You must identify the additional, necessary control measures and re-evaluate the activity to understand if it is appropriate. Speak to the Activities department for advice. |

1. **Supervision / Safety of the Activity**

|  |
| --- |
| **What supervision is required for the activity?** Coach / leader registration via the student portal is to be completed for all coaches and activity leaders, including volunteers and current students.  Mentors will be used to teach climbers how to clean anchors at ground level before they do it at the top of a climb. Mentors nominate themselves for this position, experienced committee members then decide whether they have the correct knowledge and skills to teach based on the guidelines that have been previously decided upon. Qualification is not required to be a mentor however it is advised. Climbers will have been previously taught how to lead climb and belay indoors by a mentor. A mentor should be watching a beginner sport climber whilst they do their first few climbs to ensure that they can do so safely, particularly when the climber is cleaning the route.  **What appropriate ratio of coach / leader to student is required for the activity?**  1:6  **What First Aid provision is required?** If not required within the student group, how / where can you access this?You can source assistance with First Aid training from the Activities department if it is identified that provision is needed.  Each group should have there own first aid kit in one member’s bag, other group members should know whose bag this is. Each group will have at least one, but ideally multiple trained first aiders within the group. Group members should know how to call for emergency services.  **What safety equipment do you need to provide for this activity to go ahead?**  Harnesses, helmets, belay devices, ropes, personal protection for cleaning anchors   * Ensure that you and your members are aware of the Cardiff University Students’ Union Emergency Procedures – these can be found on ‘committee resources’ on cardiffstudents.com. * **All incidents, accidents and near misses** are required to be reported / recorded to the Activities department as soon as possible after the event. |

1. **IMPLEMENT THE CONTROL MEASURES** detailed in this assessment and communicate the findings to members via Operating Procedures. A template can be found on ‘committee resources’ on cardiffstudents.com.

|  |
| --- |
| **What do you need to tell your members / the participants following this assessment? Where can they find your Operating Procedures?**  Make them aware of where to find the risk assessment (web page), this is also where the operating procedure will be.  Ensure that members are aware of the risks associated with climbing. |

1. **Review**

All safety-related documents must be reviewed each year by incoming committees and activity leaders. They also need reviewing in the event of a serious accident / incident or should any hazards / control measures change.

Each time this document is reviewed or updated, please complete and sign the below. Within the document, please note any additions with the date it was updated in brackets.

|  |  |  |
| --- | --- | --- |
| **NAME** | **COMMITTEE POSITION** | **REVIEW DATE** |
| Rebecca Carman | Secretary | 11/09/2024 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. **Activities Department Contacts for Student Groups**

Athletic Union – [AthleticUnion@cardiff.ac.uk](about:blank)

Guild of Societies – [Societies@cardiff.ac.uk](about:blank)

Volunteering – [Volunteering@cardiff.ac.uk](about:blank)

1. **Enjoy your activity!**