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ICELAND RISK ASSESSMENT

Risk identification, mitigation and control measures: a practical guide for teachers to manage risk and hazards on tour











INTRODUCTION

The aim of this Handbook is to provide all group leaders with suggestions to:

- Help raise awareness to risk;
- To suggest control measures to help mitigate the risk; and
- To manage risk pro-actively.

This handbook takes many of the component parts of an Iceland Geography Tour, identifies potential risks and suggests control measures to manage them. The handbook is effectively a lot of "handy hints".

Please allow all members of staff and adults who are accompanying your tour to read and absorb the contents of this Handbook. The suggestions made in this handbook are intended to be helpful, realistic and practical and may be a useful addition to your own risk assessments.

All these aspects of risk are the responsibility of everyone. Being alert to risk and thinking and looking ahead are crucial for all participants on your tour.

The format of this handbook is as follows:

- A list of excursions and/or destinations has been identified (see contents on page 2);
- For each excursion/destination identified, a synopsis has been written about it;
- Following which, a list of hazards, potential risks and control measures are offered for consideration.

IMPORTANT NOTICE

Our risk assessments relate solely to the activities, services and facilities we plan and provide for you as part of your tour. They will not apply in respect of any alternative arrangements you may make or if you deviate from the planned itinerary. You must carry out your own risk assessments in respect of any such alternative arrangements and ensure that any risks and/or hazards specific to your group are identified and managed appropriately.

Our risk assessments are based on our knowledge and experience, however we cannot, guarantee that our risk assessments identify every possible risk and eventuality which may arise. Whilst our risk management handbook may minimise the risks or hazards on tour, it is important to remember that factors can and do change and it is therefore imperative to continually monitor the situation.

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Iceland: Generic

A guide for teachers to manage hazards and mitigate risks whilst in Iceland. It is recommended that you download the following apps to a smart phone if possible:

Veður – Icelandic Meteorological Office – forecasts and weather warnings.

Iceland 112 – official app for Iceland's emergency services – sends SMS to emergency services with the phones GPS location, before calling 112.

| Hazard | Potential Risk | Control Measures |
|-----------------------------|--|---|
| Winter Weather Icy surfaces | Slips and falls – minor injuries, strains, | Be aware that many surfaces can be slippery. Wear appropriate footwear and |
| Tey surfaces | fractures | keep hands free for balance. Watch step and proceed slowly. Don't run or slide. |
| Icicles | May detach causing minor or severe injuries | Keep well back from such features and don't linger underneath. Be aware of possible detachment and keep watch. Don't touch or detach icicles or throw any object towards ice face or icicle. Don't shout or make loud noises. |
| Snow cover | Slips and falls. Hidden hazards – minor or severe injuries | Consider the conditions and appropriateness of proceeding. Where snow is more than ankle deep consider not undertaking walk. Place a teacher at the head of the group to ensure route is firm and secure and group to follow route in single file. Only walk where there is known to be a recognized path/track beneath. Be aware that might be covering puddles, streams, thin ice and other potential hazards. Never walk over areas of drifted snow or on top of snow banks. |
| Snow overhangs | Unsupported – falls and injuries, minor/severe | Keep well back from all edges where snow overhangs may have formed. |
| Frozen bodies of water | Falling through. Hypothermia. Drowning | Never walk over ice on puddles, pools, lakes, rivers etc. |

Iceland: Generic (cont.)

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| General Weather Extremes of climate – high and low temperatures | Heat stroke /dehydration / hypothermia / sunburn | Wear suitable clothing and carry sufficient water, extra layers, hat and sunscreen |
| Rain – getting wet | Discomfort / hypothermia | Carry waterproofs and extra layers of clothing. |
| Sudden changes in weather/storms and high winds | Reduction in visibility / lightning strikes / unable to keep upright | Obtain professional weather forecast and only proceed if conditions appropriate. Stick to route and follow marked paths. Leave high ground immediately if lightning. |
| Traffic | | |
| Moving vehicles in car parks | Collision with pedestrians – injuries/fatalities | Be aware of moving vehicles and anticipate vehicles beginning to move. Exit coach on the "away" side from traffic. Stay well away from roadside. |
| Road traffic | | Stay on pavement. Face oncoming traffic. Use "Green Cross Code". Use crossings where available and do not cross between parked vehicles. Be aware that cars drive on right hand side and approach from opposite direction. |
| Slips and trips | | |
| Rough surfaces | Injury from fall – minor cuts and | Watch where putting feet. Wear appropriate footwear and ensure laces tied. |
| Slippery surfaces | abrasions, more severe strains or fractures | Stick to prepared paths and walkways. Keep hands free and out of pockets to aid balance. |
| Steps and stairs | | Use handrail if appropriate. Don't push or jostle |
| Becoming lost | Accidents whilst alone | Stay as one group and keep all members in sight. Place a teacher at the front and rear of group to keep together. Stick to marked paths or routes. Provide contact number or make sure students know where to find a member of staff. Regular head counts. |

Iceland: Generic (cont.)

| Hazard | Potential Risk | Control Measures |
|---------------------------------------|--|--|
| Members of public | | |
| Crowded pavements | Spilling onto roadway – collision with vehicles – injuries/fatalities. | Don't block easy movement of other pedestrians. Don't spill into roadway. Anticipate oncoming pedestrians and stand on building side to let pass. |
| Unknown locals/ visitors/ tourists | Conflict/confrontation. | Remain in groups of at least 3 persons or more. Don't approach members of the public unnecessarily. Know location of staff. |
| Insects/midges | | |
| Bites | Irritation and allergic reaction | Carry insect repellent or something to cover exposed skin. Apply antihistamine to irritating/itchy bites if appropriate. |
| Distractions | May lead to loss of footing, falls and minor/severe injuries. | Be aware of position and potential hazards. |
| Additional hazards and risks | | Additional hazards and risks can emerge at any time. Be alert at all times not only to the hazards and risks identified but to additional hazards and risks that might be present. |
| | | Always carry a mobile phone that works outside the UK and ensure fully charged each day. |

The Blue Lagoon

Synopsis: Visiting the Blue Lagoon, an outdoor swimming area, in a well-managed environment. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---------------------------------------|---|
| Wooden walkways Wet Covered in fine grit | Slips – minor injuries | Don't run. Walk slowly, taking small steps. Use handrails |
| Limited visibility Steam haze across pool Unclear/ opaque water | Not visible to life guards | Remain in groups of at least 3 persons. Always keep head above water. Do not be completely submerged. |
| Depth of pool Shallow depth | Scrapes to limbs and banging head. | No diving, jumping in or "bombing". Be aware when swimming that knees might scrape floor. |
| Rock protrusions on floor | Stumping toes | Walk slowly through pool and tread carefully. Have hands ready to aid balance. All Blue Lagoon Staff are first aid trained. |
| Heat Hot water of swimming area Steam room and sauna Hot water areas | Heat exhaustion and dehydration Burns | Limit time in Lagoon and spend no more than 15 mins in steam room and sauna. Remain in groups of a minimum of 3. Rehydrate from fresh water fountains. Obey all signs and do not go into areas that are off limits. |
| Silica mud Entering eyes | Eye irritation | Try to keep mud away from eyes when applying to face. Use fresh water fountains to rinse eyes. |
| Surrounding walls of lava rocks Jagged and sharp rocks | Cuts and grazes | Don't climb over walls and rocks. Move slowly and use hands to feel way. Leave water if cut and seek assistance from member of staff. |

Boat Trips: Puffin Express and Whale Watching

Synopsis: Both trips are taken from Reykjavik harbour. The Puffin Express takes you towards Akurey Island, where a talk is given about the 15,000 puffins that nest here. The trip last 1-1½ hours. The Whale Watching trip is accompanied by a guide and usually last about 3 hours. Both activities are **easy.**

| Hazard | Potential Risk | Control Measures |
|--|---|---|
| Port Activity Traffic and pedestrians | Collisions and accidents – minor/severe injuries/fatalities | Be aware of the movements of people and vehicles. Stand to one side to allow safe passage. Don't approach any port operations (e.g. loading/unloading). |
| Quayside Unguarded edges | Falls leading to minor/severe injuries | Keep back at least 2m from edge. Be aware of trip hazards e.g. ropes and cables. Don't board any craft. |
| Embarking/Disembarking Gangway | Slips and minor injuries | Only enter when directed to do so. Use handrail. Walk directly to/from the boat in single file. No jostling/pushing. Be aware of trip or slip hazards e.g. cables/ropes or grease. Don't board or approach other boats. Be aware of gap between boat and quay and take assistance offered to board or disembark. |
| Boat trip On board | Slips and falls – minor injuries. Falling overboard – hypothermia, drowning | Put on life jacket securely and don't remove until end of trip. Listen to and follow the instructions given by the crew. Observe all signage. Don't stand on or lean over the sides of the boat |
| Sea conditions | Falls and minor injuries. Sea sickness. Getting cold and wet | Be aware of movement of the boat and anticipate changes. Remain seated at all times the boat is moving under engine power. When moving around do so with caution and keep hands free to aid balance – walking and standing with legs apart can assist balance. Anticipate breaking waves and spray and take cover. Identify students with sea sickness and take medication in advance if available. |
| Weather conditions | Getting cold and wet. Sunburn | Wear warm, windproof and waterproof clothing. Apply sun cream and wear hat. |

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Diamond Day: Þjofafoss

Synopsis: A straightforward, quick stop to view a waterfall and take photographs. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|---|
| River Fast flowing water. | Falling in, getting cold and wet – hypothermia and drowning | Keep at least 3m back from river's edge. Don't go from level ground to steeper slopes that go down to the river bank/edge. Don't attempt to get into the water. |
| Steep edge | Falls – injuries –minor/severe | |
| Unguarded edges Crumbling rock | Falls – injuries – minor/severe | Keep at least 3m back from the edge. Use a zoom to take photos rather than getting too close. |
| Boundary fence Wire | Cuts and grazes. Snagged clothing | Only cross fence by provided gate, not over the wires. |
| Open space Getting lost | Accidents whilst unsupervised | Don't wander off or explore the area. Return straight to bus once viewed. |

Diamond Day: Hekla Centre

Synopsis: A straightforward, short visit to an educational exhibition building about Hekla Volcano. The car park is immediately adjacent to the building. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|----------------------------------|--|
| Exhibition hall Dim lighting Steps at entrance Irregular slope to floor | Trips and falls – minor injuries | Allow eyes to adjust before walking around the display area. Always look where you're going. Be aware of wide steps and watch footing. Be alert to unexpected changes in slope of floor. |

Diamond Day: Hekla Pumice Quarry

Synopsis: A roadside stop to look at the contrasting forms of Hekla and Búrfell. Opportunity to study pumice rock and good location to discuss natural hazard of Hekla volcano, likely impact of an eruption and monitoring and mitigation measures. This activity is easy.

| Hazard | Potential Risk | Control Measures |
|---------------------------------------|---|--|
| Land surface Uneven | Trips and falls – minor injuries. | Wear appropriate footwear and ensure laces are tied. Watch step and don't run or push. Keep both hands free to maintain balance. |
| Slopes Unconsolidated pumice deposits | Possible rock falls/slides – minor injuries | Don't stand close to the base of such slopes. Don't walk up, down or across them. Don't remove or dislodge stones from the slope and don't throw any stones or objects on to the slopes. |
| Dust | Eye irritation | Be aware of wind gusts and face away from oncoming wind. Carry fresh water or eye wash in first aid kit to wash or bathe eyes. |
| Heavy plant Lorries and machinery | Collisions and accidents – minor/severe injuries/ fatalities. | Don't approach, interfere with or attempt to operate and equipment. Give all vehicles a wide berth and stand to one side to allow them to pass safely. |
| Road Traffic | Collisions and accidents – minor/severe injuries/fatalities | Exit the coach on the side away from traffic. Group well away from the roadside. Be alert to the movement of traffic. |

Diamond Day: Haifoss

Synopsis: A stop to view a waterfall and take photographs. A short walk (approx. 150m each way), along a made up path, is required to reach the official viewpoint. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|-------------------------------------|--|---|
| Path Gravel Lined by large boulders | Slips, trips and falls – minor injuries | Wear appropriate footwear with laces tied. Watch step and proceed carefully. Don't run or push. Remain on official path at all times. Don't stand or climb on boulders. Don't veer off to unofficial viewing points. |
| Official viewing point | Falls from height – severe injuries/ fatalities | Remain behind the loose rock walls. Don't attempt to climb, stand or sit on this wall. |
| Precipitous edges Unguarded Wind | Falls from height – severe injuries/ fatalities | Keep back at least 2m from the edge. Be alert to crumbling edges and avoid these areas. Don't throw stones or other items over the edge. Be alert to blowing/gusting wind and be prepared to cancel the visit if conditions deem it to be unsafe. |
| Vertigo | Falls – minor/severe injuries/ fatalities | Identify those persons suffering and designate a member of staff to remain with student in a safe area. |

Diamond Day: Gjain

Synopsis: A short walk from the car park down into a wide, basin shaped hollow, through which a small river (in its torrent stage) flows and there are waterfalls along its course. The path is initially made-up brick/block and then becomes gravel/earth. This activity is **easy/moderate**.

| Hazard | Potential Risk | Control Measures |
|--|--|---|
| Path Uneven surface Large paving blocks | Slips, trips and falls – minor injuries | Wear appropriate footwear with laces tied. Watch step at all times and keep both hands free to aid balance. Don't run or push. |
| Gravel | | Keep to official path at all times for as long as possible. Don't veer off well established paths to unofficial viewing points. |
| Unguarded edges | | |
| Unstable | Falls – minor/more severe injuries | Keep back at least 2m from all edges. Be alert to crumbling edges and avoid these areas. Be aware that vegetation might mask the presence or danger of an |
| Hidden from view | | edge so proceed with care. Don't throw stones or other items over the edge. |
| River | | |
| Fast flowing water | Falling in. Getting cold and wet. Drowning | Keep back at least 2m and observe from a distance. Do not approach, attempt to enter or cross the river. |
| Waterfalls | | Don't approach waterfalls. |
| Rocky outcrops/caves | | |
| Loose rocks | Rock falls – minor/severe injuries | Don't climb or scramble over outcrops. Don't enter caves or walk beneath overhanging rock. |
| Vegetation cover Hidden streamlets and fissured ground | Falls and minor/more severe injuries | Be alert that vegetation can mask these hazards. Tread carefully and proceed with care. Stick to marked path where possible. |

Diamond Day: Stong (Original)

Synopsis: A short walk from the car park up a grassy path (approx. 100m) to the original farmhouse remains. The main visit takes place within the building but there are some outbuildings in close proximity. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|-------------------------|--|
| River Water | Falling in. Getting wet | Cross using the provided footbridge only. Don't approach the water or enter/paddle in river. |
| Approaching building Rough surface | Slips and trips | Wear appropriate footwear with laces tied. Watch step and keep to the pathway provided. |
| Within the building Low door lintel | Bumps | Be aware and watch head on entering and exiting. |
| Uneven floors | Slips and trips | Watch step and tread carefully. |
| Interior turf walls | Falls | Don't sit or climb on walls. Always remain at ground level. |

Diamond Day: Stong (Reconstructed)

Synopsis: A short walk from the car park to the reconstructed farmhouse (approx. 100m). The visit takes place within the building. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|-----------------|---|
| Within the building Dark exhibition hall Steps and high boards Uneven floors | Trips and falls | Allow eyes to adjust to gloom before walking around Be aware of steps at entrances to rooms. Don't push or jostle in doorways. Always look where you're going. Be alert to unexpected changes in slope of floor |
| Low headroom | Bumps | Be aware and watch head on entering and exiting rooms. |

Diamond Day: Hjalparfoss

Synopsis: A straightforward stop to view a waterfall and take photographs. A short walk (approx. 100m) may be taken into the bowl of land in front of the waterfall. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|--|---|
| Path into bowl Uneven surface | Trips and falls – minor injuries | Wear appropriate footwear with laces tied. Watch step. Keep to official path at all times. |
| Plunge pool and river shoreline Unguarded edges | Falling in. Getting cold and wet. Drowning | Remain at least 2m from the edge. Don't attempt to enter the water. Don't throw any items into the water. |
| Rocky outcrops/cliffs Unguarded edges | Falls – minor/severe injuries | Don't approach or attempt to climb. Remain on official path at all times. |
| Overhangs | Rock falls -minor/severe injuries | Don't stand beneath rocks or overhangs. |

Eyjafjalajokull Eruption – 2010: Viewpoint on "261" road

Synopsis: A stop at a viewpoint in Flótshlíð Valley. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|------------------------|--|---|
| Road Traffic | Collisions and accidents – injuries/ fatalities | Be alert to all moving vehicles and aware that traffic drives on the right. Teachers to supervise alighting and boarding of coach. Group in an area well away from the road. |
| Horses | Bites and kicks | Don't approach, pat or feed. |

Eyjafjalajokull Eruption – 2010: Old River Bridge

Synopsis: A stop at a disused river bridge over Markarfljót River for observation and recording. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Embankments Steep sides | Falls – minor injuries | Only ascend/descend with permission and under supervision of teachers. Use the roadway to access, not the grassy banks. Once on top of embankment remain on flat surface and keep back at least 1m from edges. Don't jostle or push or throw anything from the embankment. Don't walk over or sit on the stones of the embankment's riverside edge. |
| Bridge Unmaintained | Risk of collapse – minor/ severe injuries | View from a short distance away. Don't approach or walk on the bridge. |
| River banks/deposits Unstable | Falls and slips – minor injuries. | Only view from afar or from top of embankment. Don't approach or try to walk on. |
| Gravel/grassy slopes Unconsolidated | Slips and falls – minor injuries | Only walk on with teacher's permission and under supervision. Step carefully and keep both hand free to aid balance. |
| Water gauging building Unsupervised | Slips, trips and falls – minor injuries | Don't approach or attempt to enter. |
| Ground Marshy and puddles in areas | Getting wet/muddy and cold. | Don't approach. Keep to dry, firm gravel paths. |

Eyjafjallajokull Eruption – 2010: New River Bridge

Synopsis: A stop at the new river bridge over Markarfljót River for observation and recording, parking in the lay-by at the west end of the bridge on the south side of the road or at the east end of the bridge at the turn off to Seljalandsfoss. This activity is easy.

| Hazard | Potential Risk | Control Measures |
|------------------------------------|--|--|
| Road Traffic | Collisions and accidents – injuries and fatalities | Park either in lay-by at west end of the bridge, south side of the road or lay-by at east end of bridge, at turn off to Seljalandsfoss. Be alert to all moving vehicles and aware that traffic drives on the right. Teachers to supervise alighting and boarding of coach. Remain in lay-by and don't attempt to cross the road. Group in an area well away from the road. |
| River Banks and embankments | Falls and slips – minor injuries | Don't approach or attempt to climb. |

Golden Circle: Þingvellir National Park

Synopsis: A walk along a fissure canyon of the Mid Atlantic Ridge; approaching a waterfall; walk through the Althing Canyon; viewing Thingvallavatn from a viewing platform. This activity is easy to moderate.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Fissures Deep Some water filled | Falls and injury – severe/fatalities | Do not enter, climb down into or up fissure walls, caves or crevasses. Don't throw coins or objects into them. |
| Steep Canyon Walls Lose boulders Overhanging rocks | Injury from falling rocks | Don't approach walls or attempt to climb. Be alert to potential of dislodged boulders. Don't stand beneath overhangs. Keep to paths and walkways. |
| Grassy Surfaces Slippery when wet Hidden mini fissures beneath vegetation | Slips and falls – minor injuries | Always walk on footpaths and walkways |
| Waterfall and River Spray | Getting wet and cold – Hypothermia | View from wooden platform area only. |
| Falling in | Drowning | Don't approach river. Use official bridges only to cross. |
| Paths and walkways Rough paths | Slips, trips and falls – minor injuries | Wear appropriate footwear, laces tied. Watch step and keep hands free for balance. |
| Irregular stone steps Wooden walkways | Slippery when wet | Walk towards centre of walkway. |
| Railings/barriers | Collapse and falls – minor injuries | Don't climb on or lean on. Remain on correct side. |

Golden Circle: Geysir

Synopsis: A walk around the geothermal fields to view hot springs, fumaroles, mud pools and geysers. Possible time in gift shop and café. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Main road Crossing from car park to geothermal area | Accidents and collisions – minor/severe injuries or fatalities | Use official crossing only. Check carefully for approaching vehicles. Remember vehicles drive on right hand side of road. Only cross the road when directed to do so by teacher. |
| Geysers Standing too close to eruption | Burns. Getting wet/spayed by water. | Remain behind all roped off areas. Check wind direction and stand upwind. |
| Hot springs and streams Scalding water | Burns | Remain behind roped off areas. Don't approach or touch. |
| Slippery surfaces Sinter rock surfaces Muddy paths Wet paths | Slips, trips and falls – minor injuries | Tread carefully. Anticipate slips. Have hands free to aid balance. No running. |
| Block paving Unstable edges and uneven surfaces | Trips and falls – minor injuries | Tread carefully and walk towards the centre of path where possible. Have hands free to aid balance. No running. |

Golden Circle: Gullfoss

Synopsis: Viewing Gullfoss from several different levels ending at a rock platform at the lip of the waterfall. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Wooden boardwalk Slippery if wet | Slips, trips and falls – minor injuries | Walk carefully, no pushing or jostling. Stay towards centre of boardwalk to avoid slips from edge. Stand to one side to let others pass. |
| Metal Steps Slippery if wet | Slips, trips and falls – minor/severe injuries | Tread carefully and watch step. Don't push or jostle. Hold hand rail for balance. |
| Path Steeply sloping Rough May be muddy or icy | Slips, trips and falls – minor injuries | Wear appropriate footwear – laces tied. Walk carefully, no pushing or jostling. Keep hands free to aid balance. Do not venture onto lower path if sign says closed or chain/gate is across. |
| Cliff edges and precipices Steep drops Unguarded edges | Falls - severe injury/fatalities | Remain on marked paths and behind fences and barriers. Don't approach edges. Don't climb on or over fencing or barriers. |
| Rock platform at lip of waterfall Slippery rock Uneven surface Steep drop to falls | Slips, trips, falls minor/severe injuries /fatalities | Tread carefully and watch where putting feet. Be aware of other people and avoid pushing and jostling. Wear appropriate footwear – laces tied. Always face the waterfall when approaching and be aware of position when taking photos. Remain behind barriers and ropes. Keep back at least 2m from edges. |

Golden Circle: Kerið Crater (not on all itineraries)

Synopsis: A short walk around a lake-filled volcanic crater. The path is clearly marked and easy to follow. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Crater rim Unguarded edges | Falls – severe injuries/fatalities | Stick to paths. Don't approach edges too closely. Don't climb down into crater. Tread carefully and watch where putting feet. Don't push or jostle. Wear appropriate footwear – laces tied. Be aware of position when taking photos. |
| Uneven footpath. Loose rocks and stones | Slips and trips – minor injuries | Be aware of loose nature of ground. Don't throw stones. |
| Crater lake Water hazard | Falling in, getting cold and wet. Drowning | Only approach by obvious footpath at NE end. Don't enter the water. Don't walk around the lake. Return to main path the same route as descended. Don't throw stones. |
| Frozen in winter | Falling through ice - hypothermia | Don't go onto ice if lake frozen. |

Golden Circle: Faxafoss Waterfall (not on all itineraries)

Synopsis: A short walk to view the waterfall, this may be from above or it's possible to walk down to the level of the falls. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|-------------------------------|------------------------------------|---|
| Waterfall Unguarded | Falling in. Getting wet. Drowning | View from the level of the car park or remain at least 3m away from edge of falls. Don't throw items over edge. Don't stand on picnic table to get a better view. |
| Steep drops Unguarded edges | Falls – severe injuries/fatalities | Stay back from edge. Don't push or jostle. Don't throw stones. |
| Paths Uneven Muddy Indistinct | Slips and trips – minor injuries | Walk in single file. Take care with footing. Keep hands free for balance. Be aware that some paths end suddenly. |

Golden Circle: Ljosafoss Power Station (not on all itineraries)

Synopsis: A visit to an indoor exhibition about renewable energy and electricity. It is also possible to view the exterior of the power station and the discharge of water. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---------------------------------|--|---|
| River Fast flowing water | Falling in – minor/sever injuries/drowning | Don't approach the river and stay well back from the water's edge. Don't climb on railings or walls. Don't throw objects into river. |
| Exhibition | | |
| Lift | Getting stuck. Trapped items of clothing/body parts. | Only use if unable to use the stairs and under teacher supervision. Make sure all items of clothing, baggage and body parts are clear of closing doors. Don't overload and follow all instructions given. |
| Spiral stairs | Trips and falls - minor injuries | Tread carefully and watch step. Don't push or jostle and don't run. Use handrail for balance. |
| Displays | Falls | Don't attempt to climb on displays. |

Greenhouse Visits

Synopsis: A visit to a working greenhouse, either Friðheimar, Akur or Ösp, some with hot springs/mud puddles in the vicinity. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|--------------------------------------|---|
| Glass Loose panes Broken glass | Cuts and injuries | Heed all warning signs. Don't walk under broken panes of glass. Avoid walking over broken glass and do not touch. Don't lean on glass panes. Be aware some doors are made of glass and unmarked. |
| Farm equipment / chemicals / machinery | | |
| Moving parts/machines | Physical injury | Students supervised at all times and follow instructions of greenhouse staff. Don't touch equipment or chemicals. Wash area immediately if contact made |
| Ingestion of chemicals | Sickness | with chemicals. |
| Hot water or steam pipes | Burns | Don't touch, lean on or sit on pipes. Stay 10m away from steam. |
| Bees and insects Loose in greenhouse | Stings, bites and allergic reactions | All members of group with allergies to stings identified prior to visit and remain outside of greenhouse in a safe area. Don't approach, disturb, agitate or touch. Seek medical help at clinic if necessary. |
| River | | |
| Flows by some greenhouses | Falling in. Getting cold and wet | Stay away from river. Don't stand on bank or enter the water. |
| Soil | | |
| Hekla ash/pumice | Infection/sickness | Wash hands before eating if contact made with soil. |
| Heat Hot temperatures inside greenhouse | Overheating, fainting, dehydration | Remove outer garments e.g. coats, hats and gloves on entering greenhouse. Inform member of staff if feeling unwell and go outside. |

Greenhouse Hot Springs/Mud Puddles Hazard **Potential Risk Control Measures** Hot springs and mud puddles Boiling water/mud Remain behind barriers and no closer than 2m. Don't touch. Burns Volcanic gases Breathing difficulties Stand upwind of gases and don't inhale. **Gates/fences/barriers**

free for balance.

Don't lean on or try to climb over.

May be flimsy and unstable

Slippery underfoot

Mud

Falls and injury

Slips and falls

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Don't walk on un-vegetated soils. Tread carefully and walk slowly. Keep hands

Heimaey

Synopsis: A short ferry crossing (approx. 35 mins) from Landeyjahöfn to the island of Heimaey; a walk around the island and the town of Vestmannaeyjar, across lava flows and ascending the cinder cone crater of Eldfell Volcano; optional visits to the Eldheimar museum, swimming pool, a boat trip or bus tour of the island. The activities are **moderate**.

| Hazard | Potential Risk | Control Measures |
|--------------------------------------|--|---|
| Ferry terminal Moving traffic | Collisions/accidents - minor and severe injuries | Disembark bus away from traffic. Be aware of moving vehicles. Use designated walkways and pedestrian routes. Go directly to terminal and remain inside whilst waiting for ferry. |
| Harbour walls | Falls – minor/severe injuries | Don't approach quayside edges or climb up on breakwaters and harbour walls. |
| Embarking/disembarking | Students getting left behind – accidents whilst unsupervised Trips – minor injuries | Keep together as a group. Don't loiter at embarkation point whilst waiting for permission to board. Listen for official announcements. Only embark/disembark when instructed by ferry staff and teachers. Use the enclosed aerial walkways. Be aware of high steps. Be aware of slight rolling motion when boarding. |
| Journey | Falls and accidents – minor/severe injuries Falling overboard - drowning | Observe all official information and don't go in to those areas not open to the public. Be aware of the rolling motion of the ferry and remain seated as much as possible. Make full use of all banisters and hand rails when moving around and changing decks. Be aware of steep steps and keep hands free to aid balance. Don't climb on or lean over railings. Don't go down to vehicle deck |
| | Travel sickness | Identify likely sufferers. Take medication before boarding if required. Monitor throughout journey. |
| Lava Flow | | |
| Uneven, with hidden fissures | Slips, trips and falls – minor/severe injuries | Only walk on recognised paths. Don't walk on or climb over the rocks. |

Heimaey (cont.)

| Hazard | Potential Risk | Control Measures |
|---|----------------------------------|--|
| Volcano – Eldfell Cinder path – unguarded edges, loose material | Falls and injury | Stick to the path at all times. Don't take short cuts. Wear appropriate footwear – laces tied. Have hands free to aid balance. Walk slowly, in single file and don't push or jostle. Stay several steps behind person in front. |
| Steep gradients | Breathlessness and asthma attack | Walk slowly and take frequent stops to maintain steady breathing. Carry inhalers and spares for those in need. |
| Dust | Eye irritation and dry mouth | Be aware of dust kicked up by walkers. Carry water to drink or rinse eyes. |
| Exposed summit and narrow ridge | Gusts of wind and falls | Only go as high and stay as long as the weather dictates. Ensure one teacher at front and one at rear of group. Walk slowly in single file and watch step. No pushing or jostling. Ensure all clothing and belongings are well secured. Keep at least 2m from edges. |
| Solfataras and fumaroles Mineral deposits | Sulphur contamination | Don't touch or collect deposited minerals. Wash hands as soon as possible if in contact. |
| High temperatures | Burns | Don't approach steam vents. Sit on cool rocks not warm/hot ones. |
| Eldheimar Museum Dim lighting Steps | Trips and falls – minor injuries | Allow eyes to adjust before walking around the display area. Always look where you're going. Be aware of steps, watch footing and use hand rails for support. Follow advice of information signs. |

Heimaey (cont.)

| Hazard | Potential Risk | Control Measures |
|--|---|---|
| Boat trip (optional) Harbour | Falls and accidents – minor or severe injuries | Keep 2m back from quaysides. Don't touch or board any vessels. Don't walk on to floating jetties. |
| Boarding/disembarking | Slips, trips and falls – minor injuries | Only board or leave boat when instructed to do so. Walk slowly without pushing or jostling. Use official gangplank and hold handrails for stability. Don't jump on or off. |
| Moving boat | Falls. Falling overboard - getting cold and wet | Follow all instructions given by boat staff. Keep inside guardrails. Hold on as you move about and anticipate motion of boat. Don't climb on or lean over railings. Ensure clothing warm, waterproof and windproof. |
| | Sea sickness | If required take medication at appropriate time before boarding boat. Inform member of staff if feeling unwell. Look straight ahead at horizon. |

Hellisheiði Geothermal Power Station

Synopsis: A guided visit to the geothermal power station. Most of the visit is indoors but there is an outdoor viewing platform at the rear of the exhibition. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Landscaped area Decorative lava blocks | Trips and falls – minor cuts and abrasions | Walk on the paved areas only. Don't take shortcuts across lava blocks. Don't stand or walk on blocks. Be aware they may be hidden by snow. |
| Central staircase | | |
| High central steps | Trips and falls – minor injuries, strains and fractures | Use the side staircases (normal rise) to ascend/descend. Only sit in central area with oversized steps if instructed to do so by guide. |
| Internal viewing platform | | |
| Automatic doors to machine room | Trapped fingers | Don't place fingers or hands on glass doors or through the opening. Be aware they may open or close without warning. |
| Railings | Fall from height – severe injuries | Don't lean over the railings. Don't push or jostle. |
| High temperatures | Fainting and heat exhaustion | Don't stay on viewing platform for long periods. Remove warm outdoor clothing to avoid overheating. Leave area if feeling unwell. |
| External viewing platform | | |
| Perimeter walls | Falls from height – severe injuries | Don't lean over or attempt to climb on perimeter walls. |
| Slippery surface if wet or icy | Slips – minor injuries/strains | Wear appropriate footwear with laces tied. Keep hands free for balance. Proceed with care. |
| Large step to enter/exit | Trips – minor injuries | Be aware of large step up/down to viewing platform. Don't push or jostle. Proceed in single file. |

Hellisheiði Geothermal Power Station (cont.)

| Hazard | Potential Risk | Control Measures |
|------------------------------------|--|---|
| Rock Samples Dust and contaminants | Illness | If touching rock samples, wash or sanitise hands as soon as possible afterwards |
| Dust and Contaminants | 1111 1655 | and before eating or touching mouth. |
| Exterior | | |
| Plant and machinery | Minor injuries/burns | Don't explore the area around the power station or approach any equipment or machinery. From the car park proceed directly into the visitor centre and return |
| Moving vehicles | Collisions and more severe injuries/fatalities | directly to the coach. |

Soil Erosion and Desertification: Gunnarsholt

Synopsis: A visit to the Soil Conservation of Iceland's offices and then visiting the surrounding area with a scientist to view examples of soil erosion and soil conservation projects in the field. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|----------------------------------|---------------------------------|---|
| Soil Handling | Accidental ingestion – sickness | Wash hands as soon as possible and before eating. |
| Windblown dust | Eye irritation | Be alert to possibility. Carry fresh water or eyewash in first aid kit to clean eyes. |
| Out in the Field Getting lost | Accidents whilst alone | Stay as a group and follow instructions of guide. Regular head counts. |
| Soil banks Unstable | Risk of collapse | Don't approach or attempt to climb. |

Landmannalaugar: Volcanic Landscapes

Synopsis: This environment consists of fissures, craters, volcanoes, lava flows and geothermal features. The Laugahraun to Graenagil walk can be undertaken. This is straightforward, along a clearly marked trail around the edge of an old lava flow, passing several fumeroles/solfatara features, through the lava flow and along the side of a stream. It is possible to bathe in the naturally heated stream. This activity is **moderate.**

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Landmannalaugar Area | | |
| Campsite Guy ropes and boulders around tents | Trips and falls – minor injuries | Be alert and watch step. Try to avoid walking through camping area. |
| Barbeques | Burns | Don't approach or use the barbeques. |
| Toilet block/changing rooms Raised platforms | Trips – minor injuries | Step carefully and don't run. |
| Slippery when wet | Slips – minor injuries | |
| Rope Fences | Trips and falls – minor injuries | Be aware of their presence and alert others |
| Laugahraun and Grænagil Trail Weather and ground conditions | Poor visibility. Changing conditions Getting lost or stranded | Obtain a professional weather forecast before proceeding. Ask the advice of ranger or warden in Information Building. Leave details of group, contact number, route and expected return time at Ranger's Station. Inform of return of group before leaving area. |

Landmannalaugar: Volcanic Landscapes (cont.)

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Uneven rock steps | Trips and falls – minor injuries | Walk in single file and let other users pass safely. Keep hands free to aid balance. |
| Rough, muddy paths | Slips and stumbles – minor injuries | Wear appropriate footwear with laces tied. Watch step and keep hands free to aid balance. |
| Gradient | Breathlessness and asthma attacks | Take frequent stops to regain breath. Carry inhalers and spares for those in need. |
| Rough lava with caves and fissures. | Trips and falls. Rock falls. Minor injuries | Remain on marked trail. Don't approach or enter caves and fissures. Don't throw stones. |
| Wind-blown or kicked up dust | Eye irritation | Carry fresh water or eye wash in first aid kit. Be aware and try to avoid kicking up dust. |
| Fumaroles/Solfataras Scalding steam, boiling water, hot mud | Burns. Reduced visibility | Don't approach too closely or attempt to touch. Remain on footpath |
| Gas emissions | Breathing difficulties | Stand upwind of steam/gas vents and don't linger in the vicinity for too long. |
| Caustic rocks | Burns and contamination | Don't pick up or touch rocks. Wash hands as soon as possible if touched. |
| Scree slopes | Rock slides – minor/severe injuries | Don't approach/walk on. Don't sit or linger beneath. Don't remove/throw stones |

Landmannalaugar: Volcanic Landscapes (cont.)

| Hazard | Potential Risk | Control Measures |
|--|--|---|
| Snow patches on ground | May conceal steep drops. Slippery. Falls – minor/severe injuries or fatalities | Don't walk over if fresh snow is untested by previous walkers. Don't walk over if boots sink in deeper than twice the depth of the soles or if section of snow exceeds 20m. Don't approach if snow is deep and extensive. Don't detour around snow on rough surrounding lava. If there is a doubt over safety then retrace steps and retreat. |
| River | Falling in | Don't enter, paddle or wade in the river. Keep to the marked trail and well back from the river banks. Don't throw stones. Don't drink from the river. |
| Horses | Bites and kicks | Stand still and to one side to allow them to pass. Don't make sudden noises or movements in their vicinity. Don't approach, pet or feed or attempt to ride. |
| Bathing area in stream Narrow wooden boardwalks – slippery when wet | Slips and falls – minor injuries | Take care to let others pass safely. Don't run or push and watch step. |
| Marshy surrounding areas | Getting cold and wet | Remain on the boardwalk. Don't step off to allow others to pass or to view/explore. |
| Changing area | No security – low risk of theft | May want to designate someone to be in charge of valuables. |

Landmannalaugar: Volcanic Landscapes (cont.)

| Hazard | Potential Risk | Control Measures |
|--------------------------|---|---|
| In the stream | | |
| Stony stream bed | Scrapes and cuts | Walk slowly. Keep hands free for balance. May want to wear flip flops or sandals. |
| | | |
| Shallow water | Bumps and bangs | No jumping, diving or bombing. |
| Hot water/steam emerging | Burns | Be aware and be ready to move away quickly or stand up. Test the temperature |
| from stream bed | Sums | of the water before getting in. Keep within designated area for bathing. |
| | | |
| Steep banks and slippery | Slips and minor injuries | Use wooden steps to get into river and hold onto handrail. |
| rocks | | Try to avoid stepping on rocks covered with weed or algae. Tread carefully. |
| Dond wood and algae | Clippon, minor injurios | Don't go honouth water drink water or let it touch your line. Wash hands and |
| Pond weed and algae | Slippery – minor injuries. Bacterial growth - sickness | Don't go beneath water, drink water or let it touch your lips. Wash hands and face as soon as possible after bathing and before eating. |
| | Dacterial growth - sickless | face as soon as possible after battling and before eating. |

Power Plant Earth

Synopsis: A visit to an indoor exhibition at a geothermal powers station with an option to add a short walk to an outdoor viewing platform as well as a walk along a concrete path (approx. 300m) to the shoreline where the hot water is discharged. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Walking towards shoreline | | |
| Protrusions in concrete path | Slips, trips and falls – minor injuries. | Watch step and avoid protruding metal bolts in concrete surface. |
| Hot water spurts from tunnels beneath metal grills | Burns | Watch for hot water spurts as you walk over the metal grills. Look down to gauge danger and avoid. Don't linger over grill and don't attempt to touch. |
| Rough ground Loose lava blocks | Slips, trips and falls. Minor injuries and cuts | Walk on provided concrete path only. Don't step off onto surrounding lava field. Don't walk on or over, stand on or try to move lava blocks. Be aware that rough edges are sharp. |
| Ocean Water | Falling in - getting cold and wet, drowning Dragged off feet | Only approach as close to the shoreline as wind, weather and wave conditions sensibly allow. Don't approach the shoreline edge and don't touch or enter water. Don't throw stones or objects in to water. Don't lean or climb on fence at end of concrete walkway. When close to shoreline face the coastline/sea at all times. |
| Water discharged from power station | Dragged on reet | when close to shoreline race the coastille/sea at all times. |
| Hot water and steam. Erratic spurts | Burns | Don't touch water or steam. Remain behind barriers and fences and keep to marked footpaths. Read and heed all signage. Be aware that water can spurt erratically and jets of steam can be emitted randomly so keep well back. |

Power Plant Earth (cont.)

| Hazard | Potential Risk | Control Measures |
|--------------------------------|---|---|
| Viewpoint Loose lava blocks | Slips, trips and falls – minor injuries | Remain on prepared pathways. Don't walk over or stand on lava. Don't try to move or pick up blocks. |
| Wooden steps | Trips and falls – minor injuries | Use handrails and don't all use at same time. Watch footing. |
| Wooden railings | Falls – minor injuries | Don't climb, stand on or move beyond railings around platform or steps. |
| Dust | Eye irritation | Carry fresh water or eye wash in first aid kit. |

Reykjadalur Hike

Synopsis: A walk through the geothermal area behind the town of Hveragerdi (approx. 7km in total). The path is straightforward and easy to follow and passes hot springs and mud puddles. An option to swim in the naturally heated river. This activity is **moderate**.

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Weather conditions Snow cover on path | Unable to see route. Risk of stepping into hot springs - burns | If uncertain check with Tourist Information in Hveragerði before starting hike. Don't proceed if path is obscured by snow. Obtain professional forecast before proceeding. |
| Wooden bridges No railings Uneven/lose planks underfoot | Trips and falls – minor injuries Falling in river – getting cold and wet | Walk in single file, towards the middle of the bridge, make sure oncoming walkers have cleared bridge before attempting to cross. Watch step and keep hands free to aid balance. |
| Cattle grid Slippery when wet | Slips, trips and falls, resulting in injury | Use adjacent gate where possible. If there is need to cross the grid itself, do so slowly, watch step and keep hands free to maintain balance. |
| Footpath Narrow in parts with steep sides and unguarded edges. Lose stones underfoot in parts. | Falls – minor or severe injury | Ensure there's always a teacher at the beginning and rear of the group. Stick to the path at all times. Wear appropriate footwear – laces tied. Have hands free to aid balance. Walk slowly, in single file on narrow sections and don't push or jostle. Stay several steps behind person in front and be aware of oncoming pedestrians. |
| Steep gradient | Breathlessness and asthma attack | Walk slowly and take frequent stops to maintain steady breathing. Carry inhalers and spares for those in need. |

Reykjadalur Hike (cont.)

| Hazard | Potential Risk | Control Measures |
|--|---|---|
| Geothermal springs | | |
| Unguarded edges | Falls – burns and injuries | Keep back at least 2 metres from edge of hot springs and fumaroles. |
| Scalding steam Boiling water Hot mud | Burns Reduced visibility from steam | Remain on formal paths and do not cross into roped off areas. Don't touch or approach too closely. Be aware of hot water spurts and mud spurts. Don't throw anything into pools or mud pots. Stop and wait for visibility to clear before proceeding. Heed all warning signs. |
| Gas emissions | Breathing difficulties | Be aware of wind direction and stand upwind for fresh air. Don't linger too long in areas of gas emissions. |
| Unstable crust | Potential collapse of crust. Injuries and burns | Remain on path at all times. Keep back from edges (at least 2 metres). Be aware of potential slips or trip hazards. |
| Other users | | |
| Mountain bikes | Collision and injuries | Be aware of other users. Keep ears free of headphones so hearing not impaired. Stand to one side of path to let pass. |
| Horses | Kicks and bites | Don't approach or make loud noises or sudden movements. Always walk in front of a horse. Don't attempt to touch or feed horses. Stand to one side of path to let pass. |
| Bathing in river | | |
| Wooden boardwalk – slippery when wet | Slips – minor injuries | Take care to let other users pass. Walk slowly. Don't run. |
| Outdoor changing area – no security | Low risk of theft | May want to designate someone to be in charge of valuables. |

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Reykjadalur Hike (cont.)

| Hazard | Potential Risk | Control Measures |
|--------------------|---|--|
| Entering the water | Slips and falls – minor injury Ingesting water - illness | Tread carefully when entering stream. Be aware banks and bed may be slippery. Keep hands free for balance. Only swim in the areas adjacent to the boardwalks. Don't go beneath the surface of the water. Don't drink the water or let it touch lips. No eating or drinking in the river. |
| Hot water | Burns | Check the temperature of water before getting in. Be aware the temperature can change in different sections of the river. |
| Stony bed | Scrapes and cuts | Walk slowly in water. May want to wear flip flops or sandals. |
| Shallow depth | Bangs and bumps | No diving, jumping or bombing. |

Reykjanes Peninsula: Bridge Between Two Continents

Synopsis: A short walk from the parking area to a bridge crossing a fissure on the Reykjanes Peninsula. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---------------------------|------------------------------------|---|
| Deep fissure | | |
| Unguarded edges | Falls – severe injury or fatality | Keep back at least 2 metres from edge. Move carefully and avoid pushing and jostling. |
| Rock overhangs | Rock falls – minor/severe injuries | Do not climb on fissure walls, remove rocks or throw rocks. Watch for loose rocks and don't stand beneath overhangs. |
| Narrow paths and walkways | Slips and trips – minor injuries | Walk in single file and be prepared to let others pass safely. |
| Blocky lava | | |
| Uneven | Trips and falls - minor injuries | Wear appropriate footwear and make sure laces tied. Watch step and don't run or push. Keep hands free to aid balance. |
| Fissures of all sizes | Falls – minor/severe injuries | Stick to marked path where possible. |
| Bridge | | |
| Crossing | Falls - severe injury or fatality | Keep within retaining walls, don't climb on sides or lean over, don't jump or try to sway the bridge. |
| Sand | | |
| Wind blown | Eye irritation | Be aware of wind gusts. Carry fresh water to bathe eyes. |

Reykjanes Peninsula: Stampar Craters

Synopsis: A very short walk across a lava flow to the crater. It is possible to climb to the top of the crater in a few minutes. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|--|--|
| Lava Flow Uneven Loose rocks and fissures | Slips and trips – minor injuries | Wear appropriate footwear with laces tied. Watch step and place feet carefully. Be aware of trip hazards and keep hands free for balance. |
| Crater Path Loose rocks/gravel on steep gradient | Slips and falls – minor injuries/cuts and grazes | Tread carefully and take time. Keep hands free for balance. Don't push, jostle or run. |
| Crater Rim Unguarded edges Crumbling rock | Falls – minor/sever injuries | Ensure there is always a member of staff at the front and rear of the group. Keep well back from edges and don't overstretch for view. Be aware of position when taking photos. |
| Dust Wind blown | Eye irritation | Be aware of wind gusts. Use fresh water to bathe eyes if necessary. |

Reykjanes Peninsula: Gunnuhver & Krýsuvík Geo-thermal Areas

Synopsis: Short walks on wooden paths around geothermal areas. This activity is **easy.**

| Hazard | Potential Risk | Control Measures |
|---|--------------------------------------|---|
| Paths, walkways and steps Narrow with some unguarded edges Wooden – slippery when wet | Trips and slips – minor injuries | Keep in single file. No pushing or running. Allow people to pass Watch step and use handrails if present. |
| Unstable crust Fragile, crumbly edges to landform features | Falls and injuries. Burns | Don't stray from formal paths and walkways. Keep back from edges (at least 2 metres). Be aware of potential slip or trip hazards |
| Geo-thermal activity Scalding steam Boiling water Hot mud | Burns. Reduced visibility from steam | Don't touch or approach too closely. Be aware of hot water spurts and mud spurts. Don't throw anything into pools or mud pots. Remain on formal paths and do not cross into roped off areas. Stop and wait for visibility to clear before proceeding. |
| Gas emissions | Breathing difficulties | Be aware of wind direction and stand upwind for fresh air. Don't linger for too long in areas of gas emissions. |
| Fences and railings Not as supportive as they appear | Falls and injuries | Don't put weight on them and don't climb on them. |
| Rocks Hot Caustic | Burns | Don't touch, disturb or collect rocks. Don't put into pockets or bags. If touched do not touch eyes and wash hands immediately. Seek teacher help if needed. |

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Reykjanes Peninsula: Reykjanes Lighthouse

Synopsis: This is a coastal area with cliffs, wavecut platforms and beaches. It is possible to view the coastal features and take a short walk in the area. This activity is **easy.**

| Hazard | Potential Risk | Control Measures |
|---------------------------------------|---|--|
| Parking area Moving vehicles | Collision with vehicles – minor/severe injuries | Take care when alighting from bus and watch for moving vehicles. Move to the side of parking area to gather group. |
| Ground surface Uneven and rocky | Slips, trips and falls | Wear appropriate footwear with laces tied. Tread carefully and watch step. Keep hands free for balance. Don't stand on large blocks as may be unstable. |
| Cliff edges Unguarded Crumbling edges | Falls – minor/severe injuries/fatalities | Keep at least 3m back from edges. Avoid overstretching for view and be aware of position when taking photos. Don't climb the steep, high cliffs along the coast line (Valahnukur). Heed all path closures and information given. |
| Rock falls | Injuries – minor/severe | Check for lose rocks on cliffs before proceeding and try to avoid walking under overhanging rock. Don't climb cliff faces, remove rocks or throw stones. Stick to marked trails. |
| Shore line Waves and strong currents | Caught by tide – getting cold and wet/drowning. | Keep well back from water's edge and don't turn back to sea. If tide is high or stormy conditions don't go onto beach/wavecut platform. Don't enter the water or throw stones. |

Reykjanes Peninsula: Eldborg Crater

Synopsis: A short but steep walk up the sides of the crater to the rim, at a height of approximately 100m. This is a **moderate** activity.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Path from car park Rough and uneven track | Slips, trips or falls – minor injuries | Stick to clearly marked track. Watch step. Ensure shoe laces are tied and hands are free for balance. |
| Lava Flow Rough and uneven Loose rocks and hidden fissures. | Slips, trips and falls – minor injuries Cuts and grazes | Ensure shoelaces are tied and hands free for balance. Watch step and check for lose rocks when placing feet. Avoid walking over areas covered by vegetation so can see underlying rock and avoid hidden pot holes and ruts. Try to avoid touching sharp blocks of lava. |
| Path to crater Loose rocks and stones. | Slips, trips and fall – minor injuries and cuts and grazes. | Assess the conditions before ascending crater. Do not attempt the climb if there are very wet or icy conditions or in a strong gale. |
| Unconsolidated material | Rocks and stones displaced by footfall. | Stick to the clearly marked trail. Wear appropriate footwear with shoelaces securely tied and hands free for balance. Take time and use short steps on the descent, don't jostle and push and keep a short distance from person in front to avoid any dislodged rocks. Don't throw or kick stones. |
| Steep gradient | Breathlessness and breathing difficulties. | Walk slowly and take frequent stops to maintain breathing. Ensure inhalers and spares carried for those in need. Allocate a member of staff to remain with any participant who can't continue. |
| Crater Rim Unguarded edges Loose material | Slips, trips and falls – minor/severe injuries. | Ensure there is always a teacher at the front of the group and students are supervised at all times. Stay well back from crater edge – at least 2m. Take care when walking around and be aware of lose rocks beneath feet, especially when |
| Strong winds | Loss of footing | taking photographs. Be aware of potential strong gusts of wind and if weather conditions appear to be deteriorating, descend immediately. |
| Vertigo | Unsteady on feet – slips, trips and falls | Identify those likely to be affected before the start of the climb. Assess whether appropriate to continue. Ensure teacher supervision of non-participants. |

Reykjanes Peninsula: Raufarhölshellir, The Lava Tunnel

Synopsis: A guided caving visit to a lava tube. Helmets and head torches are provided. The cave is wide and walkways and steps make navigating through the lava tube straightforward. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Entrance to cave. Unguarded edges | Falls and injury | Only approach cave when instructed to do so by qualified guide. Follow the path to the main entrance and don't deviate from it. Keep back at least 2 metres from unguarded edges. Avoid pushing and jostling. |
| Inside Cave | | |
| Loose rocks | Injury from rock fall | Wear helmet at all times when inside the cave and make sure it's secured. Don't remove or dislodge stones or rocks. Don't throw stones or shout. Never enter the cave without a qualified guide. |
| Uneven ground conditions and unstable rocks | Falls and injuries | Keep to path where possible. Tread carefully to test stability of rocks. Wear appropriate footwear and make sure laces tied. Watch step and don't run or push. Keep hands free to aid balance. Raise awareness of loose rocks to others. |
| Steps and stairways | Slips, trips and falls – minor injuries | Tread carefully and watch step. Use handrails for balance where available. Be aware may be slippery when wet. |
| Icy or wet conditions | | |
| Slippery underfoot | Falls and injuries | Be aware rocks may still be slippery even in dry conditions due to water infiltration through rocks. |
| Icicles | May detach and cause injury | Be aware of their presence. Judge their security and don't approach if appear unstable or likely to detach. |

Reykjavik

Synopsis: A walking tour of the city centre to visit landmarks and shops. May be done as a group or as individuals. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|--|---|
| Traffic Crossing roads Driving on right | Collisions and accidents - injuries to pedestrians – minor/ severe/ fatalities | Follow the "Green Cross Code". Use designated crossings. Don't cross between parked vehicles and anticipate vehicles beginning to move. Be aware that vehicles drive on the right hand side of road. |
| Crowded Pavements Spilling onto road | Injuries to pedestrians – minor/ severe/ fatalities | Anticipate on-coming pedestrians and stand on building side of pavement to let people pass. Don't block easy movement of other pedestrians when standing on pavement. Be aware of potential distractions that might put safety at risk. |
| Unknown Population | Conflict/confrontation | Students remain in groups of at least 3. Teachers circulating to monitor procedures. Students know where a member of staff can be found. |
| Hallgrimskirkja Lift Vertigo | Claustrophobia. Getting stuck Falls | Determine those who suffer and consider if appropriate to continue. Arrange for supervision of any non-participants. Follow instructions in lift and don't overload |
| Stairways | Slips, trips and falls | Take one step at a time, watch step and don't jostle. Use handrail. |
| Metal railings/grids | Trapping limbs/body parts – minor injuries | Don't put any parts of body through. |

Reykjavik (cont.)

| Hazard | Potential Risk | Control Measures |
|--|--|---|
| Perlan | | |
| Stairs | Slips, trips, falls – minor/severe injuries | Take one step at a time, watch step and don't jostle. Don't lean over bannister. |
| Viewing platform and railings | Vertigo and falls – severe injuries and fatalities. Trapping limbs/body parts. | Determine sufferers and consider if appropriate to continue. Arrange supervision of non-participants. Don't climb on or lean over railings. Don't put body parts through. |
| Low beams in café | Bangs and scrapes – minor injuries | Be aware and take care when sitting down or standing up. |
| Glaciers and Ice Cave Exhibition | | |
| Cold temperature in cave (-10°C) | Getting cold | Wear warm clothing and if necessary use the vest provided as an extra layer. Don't linger in the ice cave for too long. |
| Low ceiling height | Bumps and bangs | Be aware of low ceiling height in some places and take necessary precautions to avoid. |
| Narrow corridor | Claustrophobia | Be aware of anyone who might suffer and decide if appropriate to continue. Supervise any non-participants. |
| Lake Tjörnin Pedestrian bridge Frozen water | Falling in – getting cold and wet, drowning | Don't lean over or climb on railings or approach water's edge. Don't attempt to walk on frozen surface of lake. |

Secret Lagoon

Synopsis: A visit to a naturally heated outdoor pool in Fludir. There are hot springs and a geyser in the vicinity. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Walkways in main building and around lagoon Wet or icy Uneven surface | Slips trips and falls – minor injuries | Walk slowly and don't run. Anticipate possible slip/trip hazards. Wear appropriate footwear with laces tied. |
| Steps into lagoon | | Tootwear with faces tied. |
| Slippery surface | Slips and falls – minor injuries | Walk slowly. Use hand rails. Take one step at a time. Don't jump from steps. |
| Rough, uneven edges Protruding pipes and rocks | Scratches and cuts | Don't lean or rest on edges of pool. Take care when in vicinity of edges. Don't climb on walls. |
| Uneven floor to lagoon Rocks and stones on floor | Stubbing toe and scrapes | Walk slowly through pool and tread carefully. Have hands ready to aid balance. May want to consider wearing flip flops or sandals. |
| Hot springs High temperatures | Burns | Only bathe in regulated pool area and obey all signs. Remain on footpaths at all times and don't cross roped off areas or barriers. Move away from source for cooler water. |
| Steam haze | Obscured from view | Remain vigilant and in small groups (at least 3), keeping each other in sight. |
| Depth of pool Shallow | Scrapes to limbs and banging head – minor/severe injuries | No diving, jumping in or "bombing". Be aware when swimming that knees might scrape floor. |

Snaefellsnes Peninsula: Gerðuberg Basalt Cliffs

Synopsis: A stop to view a cliff lined with basalt columns. There is a short walk from the parking area to get closer to the cliff face. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Parking area Moving traffic Crossing to cliffs | Collisions and accidents – minor/sever injuries | Be aware of other vehicles when alighting from bus. Move away from moving vehicles and gather in a safe area away from traffic. Look in both directions before crossing track to access the cliffs. |
| Uneven ground Loose rocks and boulders | Trips and falls – minor injuries | Wear appropriate footwear and ensure laces are tied. Watch step and walk carefully. Try to stick to marked trail and avoid standing on rocks and boulders. Keep hands free for balance. |
| Basalt cliffs Loose rocks and rock falls | Injuries – minor/severe | Don't approach too close to the cliff face and be aware of possibility of rock falls. Check for loose rocks above. Don't remove rocks from cliff or throw stones. |

Snaefellsnes Peninsula: Rauðamelskolkelda

Synopsis: A 10 minute walk, on a marked path, through a moss covered lava flow to access both a waterfall and mineral spring. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|-----------------------------------|---|---|
| Footpath Uneven surface | Slips, trips and falls – minor injuries | Wear appropriate footwear and make sure laces are tied. Watch step and be aware of possible trip hazards and loose stones. |
| Lava field | | |
| Exposed lava | Cuts and grazes | Be aware that lava is sharp. Don't lean on lava blocks or use them for balance or |
| Loose rocks | Falls – minor injuries | support. Don't attempt to climb on the lava flow. Stick to the marked trail and |
| Hidden crevasses | | avoid standing on large rocks that may be unstable. Be aware fissures and holes may be covered by vegetation. |
| River | | |
| Flowing water | Falling in – getting cold and wet | Keep back from the edge of the river. Don't attempt to enter the water and don't |
| Unsupported banks | | throw stones/pebbles. |
| | | Use the bridge to cross the stream. Don't attempt to jump/paddle across the channel. |
| Bridge crossing | | Don't climb on the railings of the bridge. |
| Waterfall | | |
| Spray and falling water | Getting cold and wet | Don't approach the falls too closely. |
| Loose rocks underfoot | Slips, trips and falls – minor injuries | Stick to the path and watch step. Be aware rocks may be slippery when wet and unstable. |
| Spring | | |
| Filling water bottles from spring | Loss of balance. Slips and falls – getting cold and wet | Ensure students are supervised if undertaking this activity. Choose a level area of ground on which to stand. Use others for support and balance when leaning towards the spring. |

Snaefellsnes Peninsula: Ytri Tunga

Synopsis: The yellow sand beach is well known for its seal colony. The best time to see the seals is June and July. It is a short walk from the parking area to the beach. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|----------------------------|---|---|
| Shoreline Uneven ground | Trips and falls – minor injury | Wear appropriate footwear and ensure laces are tied. Watch step. |
| Beach | | |
| Waves and tide | Caught by tide/Washed off feet – getting cold and wet/drowning. | Stay well back from the water's edge, well above the tide line and ebb and flow. Don't turn back to the waves or throw stones/pebbles. Don't go on to the beach |
| Wind-blown sand | Eye irritation | at high tide. Be aware of possible wind gusts. Use bottled water to rinse eyes if necessary. |
| Slippery rocks | Slips and falls – minor injuries | Be aware rocks may be slippery even in dry conditions. Don't climb on or scramble over rocks. |
| Seals | | |
| Wild animals | Bites | Don't approach the seals or attempt to touch/feed them. |

Snaefellsnes Peninsula: Bjarnafoss

Synopsis: This is a photo opportunity to view the 80m high waterfall from the parking area. Direct access to the falls is restricted as it is on private farmland. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--------------------------------------|---|---|
| Parking area Moving vehicles | Collisions – minor/severe injury | Be aware of traffic when alighting from bus. Move to the side and away from vehicles to gather the group and take photos. |
| Uneven ground Loose rocks and gravel | Slips, trips and falls – minor injuries | Watch step and tread carefully. Keep hands free for balance and be aware of position when taking photos. |

Snaefellsnes Peninsula: Rauðfeldsgjá

Synopsis: A short 10 minute, uphill walk leads to the entrance to the gorge. It is possible to use stepping stones in the river to enter the gorge itself. This activity is **moderate**.

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Footpath Uneven surface Loose rocks and stones Slopes and cliff faces. | Trips and falls — minor injuries Slips and trips — minor injuries Falls — minor injuries | Wear appropriate footwear and ensure laces are tied. Watch step and tread carefully. Don't climb up or down slopes on either side of path or cliffs at entrance to gorge. |
| River | | |
| Flowing water | Falling in – getting cold and wet | Stick to marked path on way to gorge entrance. Only enter gorge if river level |
| Stepping stones | Slips – minor injuries | and weather conditions are deemed appropriate. Check stability of stepping stones before proceeding. Keep hands free and use walls of gorge for balance if needed. Carry spare socks in case feet get wet. |
| Gorge | | |
| Cliff walls | Falls – minor/severe injuries | Don't climb the walls inside the gorge. Check for loose rocks and avoid standing |
| Rock falls | | under overhangs. Don't proceed any further into the gorge than the platform just after the entrance. Don't enter the river inside the gorge. |

Snaefellsnes Peninsula: Arnarstapi Coastal Walk

Synopsis: A well maintained, gently undulating path leads along the coastal cliffs from the harbour. The hiking trail continues for 2.5km, across lava fields, to the town of Hellnar. Part or all of the trail may be completed. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Cliffs Blow holes Unsecured edges Crumbling rock | Falls – severe injuries/fatalities Rock falls | Stay back at least 2m from cliff edges. Be aware of position when taking photos. Be aware of the possibility of strong gusts of wind and move further back from cliff edges if necessary. Remain on footpath. Don't attempt to climb down to beaches or enter caves or stand beneath overhangs. |
| Ponds Deep water | Falling in – getting cold and wet/drowning | Don't approach the ponds and keep well back from edges. Don't attempt to swim or paddle and don't throw stones. |
| Harbour area Walls Boats Harbour side equipment/machinery | Falls/Falling in water – minor/severe injuries Injuries | Don't climb or sit on harbour walls. Stay back at least 2m from harbour edge. Don't attempt to board any vessels in the harbour. Don't touch or interfere with and equipment/machinery. Give a wide berth to any moving vehicles. |

Snaefellsnes Peninsula: Lóndrangar

Synopsis: The rock pillars are believed to be the remains of ancient volcanic plugs. They can be viewed from a distance by walking 250m from the parking area to the viewing platform. It is possible to get closer by undertaking a circular walk of about 1km. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Viewing platforms Cliffs Fences and railings | Falls – minor/severe injuries/fatalities. | Follow the path and remain on the viewing platform. Don't approach the cliff edges. Don't climb or lean on fences. Be aware of position when taking photos. Don't throw stones |
| Footpath to Lóndrangar Uneven ground Fissures Loose rocks | Trips and falls – minor injuries | Wear appropriate footwear and keep hands free for balance. Remain on footbath and avoid walking over lava flow or standing on large blocks that may be insecure. Be aware fissures and holes may be hidden by vegetation. |
| Cliffs Unsecured edges Crumbling rock | Falls –severe injury/fatalities | Remain on footpath at all times. Don't approach cliff edges or throw stones. Keep back at least 3m. Be aware of position when taking photographs. |
| Lóndrangar Loose rocks | Rock falls – minor/severe injuries | Be aware of possibility of loose rocks. Don't stand under overhangs. Remain on footpath. |

Snaefellsnes Peninsula: Djupalonssandur

Synopsis: A 2 minute walk takes you to a viewing platform and a 10 minute walk takes you down to the black pebble beach. The beach is a protected area and it is forbidden to remove pebbles from the beach. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Parking area Moving vehicles | Collisions – minor/severe injuries | Be aware of vehicles when alighting from bus. Move to a safe area, away from traffic to gather the group. |
| Footpath Uneven ground Loose rocks Lava formations | Trips and falls – minor injuries Cuts and grazes | Wear appropriate footwear with laces tied. Watch step and keep hands free for balance. Don't kick or throw rock/stones. Don't climb on lava. Remain on the marked path. |
| Lagoons Deep water | Drowning | Don't approach the lagoon or throw stones/pebbles. |
| Beach Deep water Large waves Strong sea currents Ship wreck remains | Drowning Sharp and rusty - cuts and grazes | Remain above the ebb and flow and away from breaking waves even on a calm day. Don't attempt to enter the water or throw stones/pebbles. Keep back at least 20m. Don't turn back on the sea and constantly monitor the changing swash and backwash. Don't attempt to touch or move the remains of the ship wreck. |
| Cliffs and rock formations Steep drops | Falls – minor/severe injuries | Don't climb on any of the rock structures. |

Snaefellsnes Peninsula: Saxhóll Crater

Synopsis: A 5 minute walk up a path of metal steps takes you to the top of this 109m high crater. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|--|---|
| Path Metal steps | Slips, trips and falls – minor injuries | Be aware steps may be slippery when wet. Wear appropriate footwear and ensure laces are tied. Tread carefully and walk in centre of step to avoid edge of path. Keep hands free for balance. Assess weather conditions before proceeding. |
| Crater Loose rocks | Slips and falls – minor injury Rock falls | Remain on path at all times. Don't kick or throw rocks. Don't remove rocks from crater. |
| Crater rim Steep gradient Unguarded edges Crumbling rock | Falls – minor/severe injuries/fatalities | Keep back at least 2m from crater edge and even further if strong winds. Stick to the path and avoid narrow ridges. Don't throw stones. |
| Strong winds | Loss of balance | Be aware of possibility of strong winds and descend immediately if weather conditions deteriorate. |

Snaefellsnes Peninsula: Baejarfoss, Olafsvik

Synopsis: This waterfall, in the town if Olafsvik, is easily accessible. It is only a short walk from the parking area next to the hospital. To cross the river there are stepping stones over a shallow section of the channel or there is a road bridge further downstream to a well maintained footpath. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| River Flowing water Stepping stones | Falling in – getting cold and wet Slips – minor injuries | Only attempt to cross the river at the stepping stones if river conditions are appropriate. Don't cross at any other point other than the road bridge. Use the rope fence as a guide and for support if needed. Wear appropriate footwear and ensure lace are tied. Keep hands free for balance. Be aware stones may be slippery when wet. If in any doubt about safety, use the road bridge further downstream. |
| Rock dam Climbing hazard | Slips and falls – minor injuries | Don't attempt to climb or walk on the rock dam structure. View from the banks of the river. |
| Steep slopes Rock falls Avalanches | Minor/severe injuries | Check the slopes surrounding the waterfall as you approach. Be aware of the possibility of rock falls/avalanches and don't approach if any concern. Only climb as high as the footpath extends. Don't attempt to climb the steep slopes leading directly to the base of the falls. Don't kick or throw stones. |

Snaefellsnes Peninsula: Kirkjufellfoss

Synopsis: There is a short, uphill walk towards the waterfall from the parking area. It is possible to cross the river, using a bridge, for views of the falls and Kirkjufell mountain. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Parking area Moving vehicles Road | Collisions – minor/severe injuries Fast moving traffic – severe injury/fatalities | Be aware of other vehicles when alighting from the bus. Move to a safe area away from traffic to gather the group. Don't attempt to cross the road. |
| Footpath | | |
| Uneven ground | Trips and falls | Wear appropriate footwear and ensure laces are tied. Keep hands free for balance. Only walk on the marked path. |
| River | | |
| Fast flowing water | Falling in – getting cold and wet/drowning | Don't approach the banks of the river or attempt to enter/paddle in the channel. Stick to the marked path. Don't throw stones. Only cross the river using the bridge. |
| Bridge | Falls – minor/severe injuries | Don't lean against or climb on railings or lean over for views. Be aware of position when taking photos. |
| Waterfall | | |
| Unguarded edges | Falls – minor/severe injuries | Keep back at least 2m from cliff edges. Be aware of position when taking photos. Be aware that edges may be unsupported and liable to collapse. Do not leave the path to approach the waterfall or try to walk behind the falls. |

Snaefellsnes Peninsula: Vatnshellir Lava Tube

Synopsis: The cave is 200m long and extends about 35m below ground. The cave is easily accessible and generally has a high ceiling height and width. A spiral staircase is used to enter the cave and there are some steps throughout. This activity is easy.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Entrance to cave Stone steps Uneven ground Spiral staircase | Slips, trips and falls – minor/severe injuries | Wear appropriate footwear and ensure laces are tied. Keep hands free for balance. Be aware surface may be slippery when wet/icy. Tread carefully and watch step. Use handrail on spiral staircase for balance. Walk slowly and don't push or jostle. Don't try to cross on the staircase. Only move towards the entrance under the instructions of the qualified guide. |
| Inside the cave Uneven surface Steps | Trips and falls – minor injuries | Follow all instructions issued by guide and heed safety briefing. Don't enter the cave without the guide and equipment and ensure helmet is worn at all times and securely fastened. Wear appropriate footwear and ensure laces tied. Keep hands free for balance. Watch step and tread carefully, using head torch to light way if necessary. Don't attempt to cross on steps and don't push/jostle. |
| Sharp rock | Cuts and grazes | Don't lean on rocks and lava formations in the cave. Wear gloves to protect hands. |
| Dark/dim light Confined space | Disorientation. Claustrophobia | Use head torch to light way. Alert guide if starting to panic. Identify those participants likely to be affected and assess whether appropriate to continue. Make guide aware of any concerns. Ensure any non-participants are supervised. |
| Cold temperatures Rock falls Getting lost | Hypothermia Minor/severe injuries Panic. Accidents whilst alone | Ensure warm clothing worn before entering cave. Follow instructions of guide, remain behind barriers and wear helmet at all times. Remain with group at all times. Don't wander off alone or cross into any roped off areas. If separated, don't panic, stay put and wait for guide to find you. |
| Lava field Hidden fissures and loose rock | Falls – minor/severe injuries | Remain on path. Don't wander away from guide or attempt to explore surrounding lava field. |

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South Coast Landscapes: LAVA Centre

Synopsis: A visit to an indoor, interactive exhibition about Iceland's volcanic activity. The car park is immediately adjacent to the building. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Car Park Moving vehicles | Collisions – minor/severe injuries | Check for moving vehicles as alighting from coach. Gather students away from vehicles in safe areas. |
| Exhibition rooms and corridors Dim lighting Displays and railings | Trips and falls – minor injuries Falls – minor injuries | Allow eyes to adjust before walking around the display area. Always look where you're going and watch footing. Don't attempt to climb on any of the displays or railings. |
| Ash Corridor Very dark and foggy. Slippery floor if wet | Slips, trips and falls – minor injuries Disorientation | Be prepared for corridor to be dark and foggy. Tread carefully and move slowly towards the exit. Supervise students moving through and use light from phone/torch if needed. |

South Coast Landscapes: Seljalandsfoss

Synopsis: A short walk to a waterfall and it is possible to follow a circular route which takes you behind the falls. The path is mostly easy to follow and a small section requires some scrambling over rocks. This activity is **easy to moderate.**

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Path Wet and icy Rough and uneven Rocky scrambles Rock falls from cliffs | Slips, trips or falls – minor/severe injuries Injuries – minor/severe. | Wear appropriate footwear – laces tied. Walk slowly, in single file, taking small steps. Have hands out of pockets and use for steadying. Ensure a member of staff is at the front and back of the group and able to offer a helping hand over rocky area if required. Be aware of possibility and check for lose rocks before proceeding on path. Don't venture off the path. Don't remove rocks from cliffs or throw stones. Heed any warning signs and don't continue if path is closed. |
| Steps – wooden and metal | Slips trips and falls – minor injuries | Walk slowly and use handrail. Some risers are higher than others. Be aware may be slippery due to spray or ice accumulation. Don't climb on wooden supports. |
| Snow/ice covered | Slips and falls – minor/severe injury | Only proceed as far along the path as conditions make it safe to do so. Retrace steps if necessary. Heed all warning signs and don't continue if path is closed. |
| Steep edges Unguarded | Falls – severe injuries/fatalities | Keep well back – at least 2m. Be aware of position when taking photos. |
| Waterfall Spray | Getting cold and wet | Wear waterproof coat and trousers to go behind the waterfall. Don't stand under falling water. |
| Plunge pool Outflow river | Falling in - drowning | Keep 2m back from edge. Don't go to shoreline or banks. No swimming or paddling. Don't throw stones. |
| Icicles May detach | Injuries | Be aware of their presence. Judge their security and don't approach if likely to detach or there's evidence of such. |

South Coast Landscapes: Skógafoss

Synopsis: A short, easy walk from the parking area towards the falls. There is an optional route up the steps to a viewing platform overlooking the falls. This option is **easy to moderate**.

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Waterfall | | |
| Spray | Getting cold and wet | Wear waterproof jacket and trousers to approach the waterfall. Stay back at least 1m from edge of bank. Don't enter. No paddling/swimming. |
| Plunge pool, falling water, outflow river and small stream | Falling in – getting cold and wet/drowning | Use wooded bridge to cross stream from and to car park. Don't approach falls too closely. Don't go beneath the falling water. Don't throw stones or other objects. |
| Falling stones | Minor injury | Keep away from gorge walls. |
| Path to top of falls | | |
| Uneven steps | Slips, trips and falls – minor/ severe | Wear appropriate footwear – laces tied. Keep hands out of pockets to aid |
| Steep, grassy slopes | injuries / fatalities | balance. Keep to recognised pathways and behind fencing and barriers. Tread |
| Narrow path | | carefully. Use handrail on steps. Do not veer away from steps. |
| Viewing platform | | |
| Slippery | Slips and falls – minor injuries | Be aware that platform may be wet due to spray, even in dry conditions. Watch step and proceed carefully. |
| Railings | Falls – severe injuries/fatalities | Don't lean on/over or climb on railings. Be aware of position when taking photos. |

South Coast Landscapes: Solheimajökull

Synopsis: A walk from the parking area along a well-marked path along the side of the valley to view the snout of the glacier. This activity is **moderate.**

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Small streams Fording stream | Getting cold and wet | Identify a safe and narrow point for whole group to cross. Don't paddle. |
| Moraine Loose hills – unsupported edges | Collapse – minor/severe injuries | Only walk on paths that already exist. Don't walk on sloping ground of moraine deposits or loose material. Don't throw stones. Don't shout. |
| Buried ice blocks/rotting ice – liquefaction | Submergence in "quicksand" – severe injuries | Do not walk in areas where there are no paths. Keep away from low hollows. Be aware of possible presence and don't approach. Frequency increases with proximity to the glacier. Keep to paths where evidence of walking is seen. |
| Glacier Crevasses | Falls and injury – severe injuries/fatalities | Don't go on to the glacier or approach crevasses. |
| Ice caves and cliffs Movement Melting | Collapse – minor/severe injuries | Don't go towards or enter caves or beneath ice cliffs or overhangs. Be aware that sudden movement can occur with no warning leading to collapse of ice faces Be aware that glacier is currently in retreat and there is the potential for ice blocks to collapse or detach at any time. Avoid areas of newly detached ice. Approach glacier from first car park. Head up towards right hand side of glacier following the path. Don't head directly for the snout. Follow the contour above the right hand side of glacier. Don't be tempted to go down towards the glacier over recent moraine deposits. Don't approach the edge of the ice. Heed all warning signs. Ensure there's a member of staff at the front and rear of the group. |

South Coast Landscapes: Solheimajökull (cont.)

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Meltwater river and glacial lagoon Deep, cold water Fast flowing Unconsolidated banks | Falling in. Getting cold and wet. Drowning | Don't go near. If viewing river/lagoon keep back at least 2m from edge. Look towards the water on approach. |
| Erratic blocks Unstable | Falls - injury | Don't approach or attempt to move or climb on. |
| Cliffs and scree slopes Loose rocks | Rock falls - injury | Don't approach. Keep an eye out for loose material in cliff face. Don't walk over scree, remove stones or throw stones or any other object. |
| Volcanic activity Melting of the ice causing sudden flooding Gas emissions | Injury – severe/fatalities Breathing difficulties | Scientists constantly monitor the activity. Heed any warning signs about possible activity and safety. Approach from first car park so above the glacier (see above) Avoid hollows and low ground. Seek out windy area if possible. Leave area as soon as possible. |

South Coast Landscapes: Solheimajökull Glacier Walk

Synopsis: A guided walk on Solheimajokull, an outlet glacier of Myrdasjokull. All safety equipment is provided by the guides. This activity is **moderate**.

| Hazard | Potential Risk | Control Measures |
|---|---|---|
| Walking on glacier Slippery underfoot | Falls and injury – minor/severe | Only go onto glacier with a qualified guide. Use correct equipment – crampons and ice axe. Equipment checked by guide before going on to ice. |
| Crevasses and ice collapse | Falls and injury – severe/fatalities | Stay behind the guide and follow their route in single file. Stay 2 metres from the edge of crevasses in ice. Be alert to possibility of ice falls. |
| Getting lost | | |
| Becoming separated from the group | Falls and injury – minor/severe/fatalities Hypothermia and frostbite | Listen carefully to safety briefing from guide. Larger groups split into groups of max of 10. One teacher to go with each group. All members of group dressed appropriately for conditions on glacier — warm clothing, waterproofs, walking boots, gloves and hat. If group is moving too fast to keep up shout loudly to alert guide. If separated from group, stay put and wait for guide to find you. |
| Equipment Accident with ice axe Crampons caught in trousers and shoe laces | Injury –minor/severe Trips and falls and minor injury | Demonstration by guide: how to hold and carry ice axe and how to walk on crampons. Ensure crampons are fitted correctly and ties are secure. Get guide to check before proceeding on to ice. |
| Walking on moraine Possibility of loose material and rotting ice/"quicksand". | Submergence in to "quicksand". Falls - minor/severe injuries | Tread carefully, follow route of guide and stick to paths where evidence of walking is seen. Do not walk over moraine unless directed by guide. |
| Volcanic activity Melting of the ice causing sudden flooding | Injury | Scientists constantly monitor the activity. Guide will offer advice. Do not go on to glacier if recommendation from authorities is to stay away. |
| Gas emissions | Breathing difficulties | Avoid hollows and low ground. Seek out windy area and leave area as soon as possible. |

South Coast Landscapes: Dyrhólaey

Synopsis: A short walk from the lower car park to view vertical sea cliffs, arches, stacks and blowholes. There is also a broad route down to the sea from the car park. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|--|--|
| Uneven ground Gravel and stones Grass – slippery when wet | Slips, trips or falls – minor injuries | Wear appropriate footwear – laces tied. Watch step and tread carefully. Keep hands out of pockets to aid balance. Anticipate possibility of slips. |
| High sea cliffs Crumbling edges Unguarded | Falls – severe injuries/fatalities | Keep well back from the edge – at least 3m if onshore wind and at least 6m if offshore wind. |
| Puffins | | Don't overstretch to view. Be aware of your position if viewing through camera. |
| Fencing/Railings/Chains Broken Loose wire | Cuts and falls – minor/severe injuries / fatalities | Don't approach or cross over. Don't assume their strength. Don't climb, sit or lean. |
| Wind Strong | Unsteady footing – minor injuries Loss of belongings | Appreciate its power. Remain on coach if conditions dictate. Secure all items of clothing and belongings at all times. |
| Lower shore Waves Swash and backwask Loose, unconsolidated beach material | Dragged off feet - drowning. Cold and wet Hinders movement away from waves Slips, trips and falls. | Heed all warning signs and don't venture beyond barriers into fenced off areas. Be aware of wave power. Always keep eyes looking towards sea. Keep away from breaking waves. Don't venture to water's edge. Don't skim stones. Be aware that lack of support underfoot hinders speed of movement away from advancing waves. Try to remain on beach deposits that are far above breaking waves or moving water. |
| Changing tides Caves and cliffs collapse / rockfalls | Caught in water – drowning Injury – minor/severe | Constantly monitor the position of the changing swash and backwash and stay at least 20m back from breaking waves. Don't enter or climb up. Keep back from steep cliff faces especially where there's evidence of recent collapse. |

South Coast Landscapes: Reynisdrangur / Reynishverfi

Synopsis: A beach location from where it's possible to view offshore stacks and a cliff face consisting of basalt columns. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|---|
| Dogs (usually friendly) Loose | Allergic reaction / phobia Bites | Don't antagonise. Handle with care if they approach. Be aware of allergies or phobias and keep away. |
| Basalt columns | | |
| Uneven Collapse | Falls – minor/severe injuries | View from a distance. Look above before moving forward to inspect columns. Don't climb on the columns. |
| Beach | | |
| Rogue waves Strong currents Steep shelf | Dragged off feet. Unable to get back to shore. Drowning | Remain above the ebb and flow – even when calm. Don't venture to water's edge – keep back at least 20m. Never turn back on the sea. Don't enter water. |
| Loose, unconsolidated beach material Tides | Hinders movement away from waves | Be aware that lack of support underfoot hinders speed of movement away from advancing waves. Try to remain on beach deposits that are above breaking waves or moving water. |
| | Caught in water – getting cold and wet | Constantly monitor the position of the changing swash and backwash. |
| Sea cave around headland Cut off by tide | Caught in water – getting cold and wet/drowning | Don't go around the headland to view cave. |
| Collapse | Injury – minor/severe | Don't enter the cave, or walk or stand beneath entrance. |
| Cliffs Rockfalls | Injury – minor/severe | View from a distance. Don't walk beneath or climb on cliff face. Be aware of loose rocks above. Don't remove rocks from cliff or throw stones. |

Stora Dimon

Synopsis: A short, steep climb up a small volcanic outcrop to a height of 178m. This activity is **moderate/difficult.**

| Hazard | Potential Risk | Control Measures |
|--|--|--|
| Slopes Steep grassy slope Narrow path can get muddy. | Slips, trips or falls – minor/severe injuries | Only proceed if conditions suitable. Wear appropriate footwear – laces tied. Walk slowly, in single file and watch step. Follow the path in a zig-zag – avoid shortcuts. Return using same path as for ascent. Don't run or slide downhill. Remain on feet at all times. |
| Cliff edges Unguarded at top and along slope | Falls- severe injuries/fatalities | Avoid craggy areas. Stay at least 2m from edge. Sit down rather than stand once at the top. Be alert to strong winds and gusts of wind. |
| Vertigo | Panic attacks/Falls – severe injuries/fatalities | Identify those likely to be affected before starting the climb. Assess whether participation is appropriate. Assign member of staff to remain with non-participants if needed. |
| Rapid but short ascent Breathlessness | Breathing difficulties | Walk slowly and take frequent stops to maintain steady breathing. Inhalers and spares carried for those that need them. Assign member of staff to remain with any participant who can't continue. |

Super Jeep Adventure

Synopsis: Travel by Super Jeep to one of three possible locations – Fimmvorduhals (walk approx. 3km each way to reach area of new lava/cones, site of 2010 eruption), Eyjafjallajokull (view sumit crater from a distance) or Thorsmork (low level walks are possible). This activity is **moderate.**

| Hazard | Potential Risk | Control Measures |
|--|----------------------------------|--|
| Travelling in super jeep Rough terrain Fording rivers | Bumps and falls – minor injuries | Listen to and heed all safety advice given by the leader/driver. Wear seat belts at all times when vehicle is in motion. Look ahead at the route to anticipate any bumps and dips. Use grab handles or similar for extra stability. Secure all personal items. |
| Getting lost or left behind | Accidents whilst alone | Once allocated to a vehicle remain with it all day. Complete a passenger manifest for each vehicle and undertake a passenger check before moving on after each stop. When exiting vehicle listen to and heed the limits set of where to walk and don't exceed. Encourage a "buddy" system. |
| Other vehicles | Collisions and accidents | Be aware of all other group vehicles as well as those of other travellers. Stand to one side to allow safe passage. |

Super Jeep Adventure: Fimmvorðháls

| Hazard | Potential Risk | Control Measures |
|-------------------------------|--|---|
| Rough mountain walking track | | |
| Changing conditions underfoot | Slips, trips and falls – minor/severe injuries | Wear appropriate footwear with laces tied and have hands free to aid balance. Follow the route take by your guide and take no shortcuts. Watch step and be alert to changing underfoot conditions. |
| Ascent | | |
| Breathlessness | Breathing difficulties. Asthma attack | Take frequent stops to maintain steady breathing. Carry inhalers and spares for those who need them. Allocate a member of staff to remain with any participant for whom continuing upwards would be unwise. |
| Vertigo/Agoraphobia | Falls/panic attacks – minor/severe injuries | Identify those participants who might suffer and assess whether participation is appropriate. If not, assign member of staff to remain with non-participants. |
| Snowfields/snow patches | | |
| Slippery | Slips, trips and falls – minor/severe | Only follow the route taken by your guide. Don't walk over untrodden snow or |
| Unknown depth | injuries | snowbanks. Don't play in snow i.e. throw snowballs make snow angels. |
| Hidden dangers underneath | | |
| New lava flows | | |
| May be unsupported | Collapse of lava. Falls and injuries – | Only walk where people have walked previously and where there are signs of a |
| | minor/severe | path. Follow the route taken by your guide. Don't roam freely over the lava. |
| Fissures | | |
| Unguarded edges | Falls and minor/severe injuries. | Keep well away from fissured areas and fissure edges. |
| Fumaroles | | |
| Gas emissions | Breathing difficulties | Stand upwind of any emitting vents or fissures. Seek a higher or open area to gain fresh air. |
| Lava tunnels | | |
| Rock falls and collapse | Minor/severe injuries. | Don't enter the tunnels or stand on top of them. |

Super Jeep Adventure: Fimmvorðháls (cont.)

| Hazard | Potential Risk | Control Measures |
|------------------------------|-------------------------------------|---|
| Volcanic ash | | |
| Dust | Eye irritation | Try to minimise amount kicked up when walking. Be aware may be windblown. Carry fresh water or eyewash in first aid kit to bathe eyes. |
| Magni crater | | |
| Unstable ground | Collapse and injuries -minor/severe | Walk only where others have walked previously and under the direction of the guide. If the ground looks unstable don't approach. Minimise the numbers standing on any one spot. |
| Fissures | Falls – minor/severe injuries | Don't stand over fissures |
| Hot lava/steam | Burns | Don't reach down with hands/fingers to feel the heat. Don't sit down. |
| Moði crater Unsafe | | It is recommended that you do not ascend this crater. |

Super Jeep Adventure: Eyjafjallajökull

| | • | |
|-------------------------------|---|---|
| Hazard | Potential Risk | Control Measures |
| Crater Unguarded edges | Falls and minor/severe injuries/fatalities | Don't approach. Don't exceed the limits set by the guide. |
| Ice | | |
| Slippery Crevasses | Slips, falls and injuries – minor/severe/ fatalities | Always listen to safety commands of guide/driver. Wear appropriate footwear with laces tied. Keep hands free to aid balance. Tread carefully and walk over areas that are essentially horizontal. Don't approach crevassed areas. Consider returning by the same route. Don't climb any ice pinnacles or ice covered rock outcrops. |
| Overhangs | Collapse resulting in injuries | Don't stand beneath any overhangs |
| Ice glare | Temporary snow blindness | Wear sun glasses |
| Reflected solar radiation | Sun burn | Wear sun cream |

Super Jeep Adventure: Gigjökull

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Moraine Unstable and loose | Collapse leading to falls and injuries – minor/severe | Only walk on paths that already exist. Don't walk on sloping ground of moraine deposits. Don't throw stones. Don't shout. |
| Rotting ice and liquefaction Lake bed of previous glacial lagoon | Submergence in "quicksand" – severe injuries | Do not walk in areas where there are no paths. Keep away from low hollows. Be aware of possible presence of buried ice and don't approach. Frequency increases with proximity to the glacier. Keep to paths where evidence of walking is seen. |
| | | Don't stand or walk across the previous lagoon area. Remain in the vicinity of the track. |
| Outflow river | | |
| Cold and fast flowing | Falling in. Cold and wet – hypothermia. Drowning | Only cross river using footbridge. Don't approach the water. Keep back at least 3m from river banks |
| Glacier | | |
| Crevasses | Falls and injury –severe injuries/fatalities | Don't go on to the ice or approach crevasses. |
| Ice caves/cliffs Movement | Collapse – injuries – minor/severe | Don't enter caves or go beneath overhangs. Be aware that sudden movement with no warning can lead to collapse of ice faces. Only view from where the super jeep takes you. |
| Footbridge High irregular steps | Slips, trips and falls – minor injuries | Take care when stepping up and down. Limit numbers on bridge at any one time. Don't bounce or jump up and down. Don't climb or lean over parapet. |

| Super Joon | Advonturo | báramärk |
|-------------------|------------|------------|
| Super Jeep | Auventure: | POISIIIOIK |

| Hazard | Potential Risk | Control Measures | |
|--|--|--|--|
| Hill slopes Steep grassy slopes- slippery when wet. | Slips and falls resulting in injuries – minor/severe | Wear appropriate footwear with laces tied. Keep hands free for balance. Walk slowly in single file. If no path exists, zig-zag up the slope. Return by same path. Don't run. | |
| Craggy rock faces | | Avoid all steep, craggy areas and keep to paths. | |
| Cliff edges | | | |
| Unguarded | Falls and injuries – severe/fatalities | Keep back at least 3m from all edges. | |
| Ascent | | | |
| Breathlessness | Breathing difficulties | Take frequent stops to maintain steady breathing. Carry inhalers and spares for those in need. If suffer Asthma attack decide whether appropriate to continue. | |
| Vertigo | Falls and panic attacks | Identify those who might suffer and assess whether participation is appropriate. Assign a member of staff to stay with non-participants. | |
| Rivers and streams | | | |
| Fast flowing water | Falling in - getting cold and wet, drowning. | Where possible only cross using bridges if available. If no bridge and fording stream only do so where depth, current and stepping stones deem it safe to do so. Follow the advice of the guide. Only cross as an organised group, not as individuals or randomly. | |
| Stakkaholtsgjá Narrow ravine | Claustrophobia and panic attacks | Identify those who might suffer and assess whether participation is appropriate. Assign a member of staff to stay with non-participants. | |

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Vatnajökull National Park: Glacial Landscapes

Synopsis: Options include an opportunity to speak to a Ranger in the Visitors' Centre and view a video on the effects of a jokulhlaup; a walk to a waterfall (approx. 2 hrs); a walk to a viewpoint overlooking a glacier (approx. 3½hrs); a walk to a glacier's snout (40 mins to 1½hrs). All routes are easy to follow. This activity is **moderate**.

| Hazard | Potential Risk | Control Measures |
|---|---|--|
| Weather conditions Sudden changes. Difficult conditions. | Hypothermia. Getting lost | Obtain professional forecast before setting off. Check conditions and seek advice of ranger at Visitor's Centre before commencing walk. Leave details of group, contact number, route to be taken and expected return time with the ranger. Inform Ranger once returned. |
| Footpaths Slippery when wet/muddy Rocky/uneven surfaces | Slips and falls – minor injuries | Wear appropriate footwear with laces tied. Watch step and proceed slowly. Keep hands free to aid balance. |
| Steep ravine Unguarded edges | Falls – severe injuries/fatalities | Keep back at least 2m from edge. Be aware of position when taking photos. |
| Walk to viewpoint overlooking Skaftafellsjökull | | |
| Loose rocks | Rock falls – minor/severe injuries | Don't approach, touch or disturb rocks. Don't walk on and be alert to new movements of rocks. |
| Unguarded edges | Falls – severe injuries/fatalities | Keep back at least 2 metres from edges. |
| Birch tree forest | Getting lost. Spring back of branches Exposed roots | Keep to footpath. Be aware of movement of people through branches in front and behind. Watch footing. |
| Uneven steps | Trips and falls | Watch footing. No pushing or jostling. |

Vatnajökull National Park: Glacial Landscapes (cont.)

| Hazard | Potential Risk | Control Measures |
|---|--|---|
| Walk to Svartifoss Gradient | Breathlessness | Take frequent stops to regain breath. |
| River | Falling in. Getting cold and wet | Only cross using bridges provided. |
| Slippery/loose basalt columns at base of falls. | Risk of collapse leading to falls – minor/severe injuries | Don't approach or attempt to walk, climb or sit on. |
| Walk to snout of Skaftafellsjökull/ Svinafellsjökull Meltwater streams | Falling in. Getting cold and wet | Don't approach or attempt to cross. |
| Ice on ground | Slippery – minor injuries | Don't walk over. |
| Moraine | Unstable may collapse – minor injuries | Only walk on paths or vegetated areas and level ground. Don't walk on moraine slopes or ridge tops. |
| Rotting ice | Liquefaction and strong suction may lead to submergence – severe injuries | Be aware of possible presence and that may be buried under fresh moraine. Frequency increases with proximity to glacier. Don't go near. Remain on paths or areas where evidence of walking is seen. |
| Glacier | Ice caves, ice cliffs or overhangs may be subject to sudden collapse without warning – minor/severe injuries | Don't go onto the glacier. Don't crawl under the ice or go beneath ice cliffs or overhangs or enter ice caves. |
| Kettle hole lakes | Falling in. Getting cold and wet | No paddling/swimming. Keep back at least 2m from edge. |

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Jokulsarlon Glacial Lagoon

Synopsis: A visit to the glacial lagoon in front of Breidamerkurjokull with an optional ride on an amphibious vehicle. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|---|--|--|
| Glacial Lagoon Lagoon and outlet river | Falling in. Getting cold and wet Hypothermia. Drowning | Keep at least 3m back from the edges. Don't attempt to paddle or swim. |
| Toppling beached ice | Minor/severe injuries | Don't approach or touch any beached ice and be aware that it can topple over unexpectedly. |
| Amphibious craft | Collision with pedestrians – minor/severe injuries | Be alert to the movement of vehicles and their arrival and departure. Don't approach the entry/exit points for the vehicles at the edge of the lagoon. Don't linger beside the boarding platform until told to assemble. Don't board the craft until instructed by teacher/guide. |
| Boat Trip Boarding/disembarking | Slips and falls – minor injuries | Only board/disembark once instructed to do so. Use the walkway provided by the boat operator. Proceed in single file. No pushing or jostling. Don't remove lifejacket until the craft has come to a halt. |
| On board | Slips and falls. Falling overboard. Getting cold and wet. Hypothermia and drowning | Listen to and follow all safety information given by the guide. Wear the lifejacket provided and ensure it's fitted securely. Remain seated when the boat transfers from land to water and vice versa. Only stand when informed it's safe to do so by the crew. When standing hold on to hand rails. Be alert to changes in speed and direction. Be aware that floor of boat may be wet/slippery and watch step. |

West Coast Landscapes: Hvalfjorður

Synopsis: A stop on the shoreline of the fjord to study the physical landscape and discuss past and present uses of the fjord. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|----------------------------------|--|---|
| Fjord Deep water | Falling in - getting cold and wet/drowning | Don't approach shoreline too closely. Don't enter the water. Don't throw stones or other objects into the water. Don't go onto the water in any type of vessel. |
| Shoreline Rough ground | Slips and trips – minor injuries | Wear appropriate footwear, laces tied securely. Watch step and keep hands free to aid balance. |
| Traffic Parking area Road | Collisions and accidents – severe injuries /fatalities | Be alert to manoeuvring vehicles and that traffic will be arriving/departing from parking area. Only cross when road is clear and it's safe to do so when instructed by teacher. Be aware that traffic drives on the right hand side. |

West Coast Landscapes: Deildartunga Hot Springs

Synopsis: A visit to the hot springs. This activity is **easy.**

| Hazard | Potential Risk | Control Measures |
|--|--------------------------------------|---|
| Geo-thermal activity Boiling water Scalding steam | Burns. Reduced visibility from steam | Don't touch or approach too closely and always face the water/steam vents. Be aware of hot water spurts and jets of steam. Remain on formal paths and behind barriers. Read and heed all signage and don't throw anything into pools. When taking photos use zoom rather than approaching too closely. Stop and wait for visibility to clear before proceeding. |
| Gas emissions | Breathing difficulties | Be aware of wind direction and stand upwind for fresh air. Don't linger for too long in areas of gas emissions. |
| Pipeline | Burns. Slips and falls | Keep behind the rope/fencing. Don't venture onto grassy marshy area. Don't touch or climb on pipeline. |
| Greenhouses Broken/falling glass Equipment/machinery | Cuts and grazes – minor injuries | Don't approach or enter. |

West Coast Landscapes: Hraunfoss and Barnafoss

Synopsis: A short walk from the parking area along easy, well-marked paths to view two waterfalls. It is possible to walk over an area of lava to observe features of a lava flow. This activity is easy.

| Hazard | Potential Risk | Control Measures |
|-----------------------------------|--|--|
| Steep edges Unguarded | Falls – severe injuries/fatalities | Only walk on marked official pathways. Don't use "random" paths despite what others are doing. Only view features from provided wooden platforms. |
| River and waterfall | | |
| Fast flowing water | Falling in - getting cold and wet/drowning | Only use the footbridge provided to cross the river. Cross swiftly, don't linger. Keep to official footpaths at all times and view from official viewpoints. Don't scramble over rocks and don't throw stones. Be alert to other people moving around the site and let them pass safely. |
| Paths | | |
| Gravel | Can be slippery when dry – minor injuries | Wear appropriate footwear with laces tied. Tread carefully and walk with caution. Don't run or rush. |
| Steps | | |
| Irregular wooden and stone blocks | Trips and falls – minor injuries | Watch every step. Proceed carefully. Have both hands free to aid balance. |
| Lava flow | | |
| Rough, uneven surfaces | Trips and falls – minor injuries | Tread carefully and watch step. Check blocks are stable and can take your weight. Keep back at least 2m from river edges. Don't enter the area on own but as a group. Only walk as far as necessary to complete the learning activity. |

West Coast Landscapes: Into the Glacier – Langjokull

Synopsis: Travelling across the Langjökull ice cap in a specially adapted monster truck; a guided walk into the man-made ice tunnel in the glacier. This activity is **easy**.

| Hazard | Potential Risk | Control Measures |
|--|---|--|
| Monster Truck Steps higher than normal | Trips and falls – minor injuries | Take care when embarking/disembarking. Do so one at a time. Use handrails for balance |
| Stepping onto ice | Slips – minor/severe injuries | Wear appropriate footwear, laces tied and hands free to maintain balance. Use handrails on truck steps for support. |
| Moving over rough terrain | Falls – minor injuries | Wear seatbelts at all times when inside the vehicle. Don't stand whilst vehicle is moving. Look ahead to anticipate motion. Follow instructions of guide. |
| Edge of Glacier | | |
| Jeeps and trucks | Collision with pedestrians – severe injuries and fatalities | Be aware of vehicles moving and reversing. Stay to the sides of the parking area and allow vehicles to pass safely. |
| Uneven/ unstable ground | Trips and falls – minor injuries | Wear appropriate footwear. Watch step and keep hands free for balance. Don't approach the glacier or leave the parking area unless instructed to do so by a guide. |
| Ice | | |
| Slippery under foot | Slips and falls – minor/severe injury | Tread carefully on ice and move slowly. Wear appropriate footwear. Keep hands free for balance. |
| Crevasses and deep snow | Falls – severe injuries/fatalities | Don't walk over untrodden snow or snowbanks. Only walk in areas indicated by guide. Don't approach the edge of crevasses. |
| Ice glare | Temporary snow blindness | Wear sunglasses. |

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West Coast Landscapes: Into the Glacier – Langjokull (cont)

| Hazard | Potential Risk | Control Measures |
|---------------------------------|-------------------------------|--|
| Ice Cave Slippery under foot | Slips and falls –minor injury | Put ice grips (provided by guide) over shoes once inside cave and only remove on exit. Tread carefully, watch step and keep hands free for balance. Listen carefully to all safety briefings and act accordingly. Only enter/exit the cave under the instruction of the guide. |
| Ice fall | Minor/severe injuries | Avoid walking near to crevasses or under overhanging ice. |
| Confined space | Claustrophobia | Identify participants who might suffer. Assess whether participation is appropriate. Assign member of staff to remain with any non-participants. |
| Cold conditions | Hypothermia and frost bite | All participants to have appropriate warm clothing, hat and gloves. Heating provided on monster truck. |