

Walking in the Yorkshire Dales and northern Pennines

Risk management and scenario planning

Version 2.2

Author and © Mark R. Harvey

Contents

Risk management and scenario planning.....	1
<i>Scope</i>	1
<i>The difference between a 'hazard' and the 'risk'</i>	1
<i>What are risk assessments?</i>	1
<i>Do I need to document the risk assessments?</i>	2
<i>What are the likely hazards?</i>	2
<i>Assessing the level of risk</i>	3
<i>Risk management (mitigating the risk)</i>	4
<i>Dynamic risk management</i>	6
<i>Risk assessments need to be reviewed</i>	7
<i>What is scenario planning?</i>	8
<i>Scenario planning for transport-related problems</i>	8
<i>Scenario planning for access-related problems</i>	9
<i>Further reading</i>	9
Appendix 1: Potential hazards associated with people	10
Appendix 2: Potential hazards associated with flora & fauna	12
Appendix 3: Potential hazards associated with the terrain	14
Appendix 4: Potential hazards associated with the weather (including loss of daylight & poor visibility)	15
Appendix 5: Obtaining Emergency Medical Assistance	16
<i>General medical advice and assistance</i>	16
<i>Emergency (on-site) medical assistance</i>	17
<i>The phonetic alphabet</i>	18

- - - 0 - - -

Risk management and scenario planning

Scope

This document focusses on risk management and scenario planning for urban and rural walks in the Yorkshire Dales and the northern Pennines. It covers group and solo walking during all four seasons and takes account of a wide-range of ‘typical’ weather conditions.

The key principles, scenarios and hazards covered here will almost certainly be relevant for walks in other areas of northern England (and beyond). However, additional hazards and scenarios may need to be considered, especially for walks in coastal areas and for those in the more mountainous terrain found in the Lake District, Wales and Scotland.

Additional hazards and scenarios will also need to be considered for walks that involve scrambling, climbing, caving and / or pot-holing – all of which are beyond the scope of this document.

The difference between a ‘hazard’ and the ‘risk’

According to the UK’s Health & Safety Executive:

- *“a **hazard** is anything that may cause harm”*
source: <http://www.hse.gov.uk/risk/controlling-risks.htm> on 31/7/2015
- while *“the **risk** is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be”*.
source: <http://www.hse.gov.uk/risk/controlling-risks.htm> on 31/7/2015

What are **risk assessments**?

There is an element of risk associated with absolutely everything we do (or do not do) in life. When planning and undertaking any activity (or planning and running any event), it is therefore HIGHLY ADVISABLE to conduct some form of risk assessment and to practice dynamic (i.e. continuous) risk management.

The objectives of this process are:

- 1) to **identify potential hazards**,
- 2) to **eliminate / avoid unnecessary hazards**, then
- 3) to **assess the level of risk** for each remaining hazard, and then
- 4) to take action to **control / manage the residual risk** in order to minimise the likelihood that harm will occur to either
 - **yourself**,
 - **other members of the group / party** (where appropriate), or
 - **other people** (i.e. members of the public and members of the emergency services who may be called-out to assist should an incident occur).

In order to be truly effective, risk assessments and risk management plans must be:

- a) prepared before the activity or event commences (i.e. at the planning and briefing stages) and then
- b) reviewed and updated on an ongoing basis during the activity / event itself and, for regular / repeatable events and activities,
- c) reviewed on a regular basis thereafter.

Do I need to document the risk assessments?

For most urban and rural walks in the Yorkshire Dales / northern Pennines, **experienced walkers (and FoSCL walk-leaders) will probably NOT need to document or otherwise formalise the risk assessment process for each individual walk**. A few minutes spent thinking about the four hazard classes (see next section) will probably be sufficient to allow an experienced walker / walk-leader to identify any significant and ‘out-of-the-ordinary’ hazards and to develop an informal risk-management plan to control the risks. For group walks, the key hazards should be explained to the group in advance, either during the initial pre-walk briefing, or shortly before arriving at the potentially hazardous location (as appropriate). However, **inexperienced walkers (and inexperienced walk-leaders) are STRONGLY ADVISED to conduct the risk assessment in a more formal manner** – i.e. to write it down and to review it several times before doing / leading the walk itself.

For those wishing or needing to document their risk assessments, ten excellent (and reassuringly short) examples covering walks in and around the Yorkshire Dales are included in the “*Bewerley Park Activity Risk Assessments*” document produced by the North Yorkshire Outdoor Learning Service - see the ‘Further Reading’ section for further details.

What are the likely hazards?

When planning any urban or rural walk in the Yorkshire Dales / northern Pennines, there are four main ‘classes’ of hazard that will need to be considered:

- **people** (including their vehicles);
- **flora & fauna** (which includes domestic animals, livestock, wild animals, insects, bacteria, crops and wild plants / fungi);
- **the terrain** (i.e. the natural and human-modified / ‘built’ landscape); and
- **the weather** (including loss of daylight and poor visibility).

Examples of specific hazards within each hazard-class are provided in the appendices (see Appendix 1, 2, 3, and 4). However, it is important to note that the lists are NOT exhaustive: other hazards may exist for the route being assessed and identifying these is a key part of the risk assessment and risk management processes.

The risk assessment for a given walk should NOT result in a list of every conceivable hazard. Rather, **the goal is to identify the hazards that pose the most significant level of risk for the specific walk, person (people) and set of environmental conditions being assessed**.

A well-considered risk assessment for a party that includes children, mobility-impaired individuals and / or people visiting the countryside for the first time will be significantly

different to a risk assessment for a party of fit, healthy and experienced adult fell-walkers. Likewise, a risk assessment for a one-mile city-centre walking tour will be significantly different to the risk assessment required for a fourteen-mile upland walk. In all cases, the objectives are:

- 1) to produce a short, but relevant and useful risk assessment that is **specific to the walk, people and conditions**; then
- 2) to take appropriate steps to eliminate the most significant hazards (where possible); and then
- 3) to devise a risk-management strategy (plan) that minimises **the level of risk** associated with the significant hazards that cannot be eliminated.

Assessing **the level of risk**

For any given hazard, the level of risk is estimated by considering:

- the likelihood of harm occurring and
- the potential severity of that harm.

This allows attention (and risk control actions) to be focussed on the hazards that pose the highest levels of risk by using the **risk matrix** below.

		Potential severity of harm		
		Slightly Harmful 1	Harmful 2	Extremely Harmful 3
Likelihood of harm occurring	Highly unlikely 1	Trivial 1	Tolerable 2	Moderate 3
	Unlikely 2	Tolerable 2	Moderate 4	Substantial 6
	Likely 3	Moderate 3	Substantial 6	Intolerable 9

Acknowledgement: This diagram was copied from the Health and Safety Executive website (<http://www.hse.gov.uk/risk/faq.htm>) on 2nd August 2015 and it is used here under the terms of the [Open Government Licence](#).

It is **VITAL** that preventive action is taken to address any hazard that is considered to pose an ‘**intolerable**’ or ‘**substantial**’ level of risk. For example, it is highly likely that extreme harm (i.e. death or serious injury) would be caused to any person who fell over the edge of a high cliff. By keeping well-away from the cliff edge (the hazard), the level of risk can be significantly reduced. However, in strong winds, icy weather and / or poor visibility, the level of risk may still be too high and an alternative route may be a far safer (and therefore far wiser) choice.

It is **STRONGLY RECOMMENDED** that preventive action is taken to address any hazard that is considered to pose a ‘**moderate**’ level of risk. For example, twisting an ankle when walking across unexpectedly uneven ground is a thoroughly unpleasant (and painful) experience. Furthermore, it can have a significant negative impact on the casualty’s plans – both for the rest of the day and for several months thereafter. In most cases, the likelihood of this event occurring can be significantly reduced simply by being alert to (or being made aware of) the fact that the patch of ground in question is (or may be) uneven.

It is **WISE** to take preventive action to address any hazard that is considered to pose a ‘**tolerable**’ or ‘**trivial**’ level of risk, provided that this does not involve the expenditure of a

disproportionate amount of money, time, or energy. For example, in most cases, blisters can be avoided by wearing a combination of well-fitting boots and socks that help to keep the feet dry. It should be noted that ‘moderate’ or trivial’ risks have a habit of becoming more serious if they are ignored. Adjusting boots / socks or applying a blister plaster at the first sign of a ‘hot-spot’ can prevent the development of a painful and potentially incapacitating and / or infected blister.

Risk management (mitigating the risk)

It is possible to significantly reduce the level of risk associated with most of the hazards that may be encountered during a typical walk in the Yorkshire Dales / northern Pennines and to manage or control the risks that remain. This can be achieved by following the principles and taking the actions listed below:

- For group walks and solo walkers, ensure that the leader / solo walker has the required knowledge, experience, fitness and general ability to safely plan the walk.
- Ensure that all participants have the required knowledge, experience, fitness and general ability to enable them to safely complete the planned walk.
- Ensure that all participants wear, carry and / or use appropriate footwear, clothing and equipment. (See the companion document entitled “*Essential and optional equipment for walkers & walk-leaders*”).
- Identify, evaluate, then remain aware of the likely hazards (see Appendices 1 to 4) and the associated levels of risk.
- Avoid / eliminate hazards wherever it is reasonably practicable to do so.
- During the days / weeks leading-up to the walk, monitor the (relevant) local ‘weather history’. This will help you to anticipate – and therefore plan for - underfoot conditions, river levels, flooding risks, snow-depths, etc.
- During the evening or morning immediately prior to the walk, obtain a detailed weather forecast for the relevant local area.
- Monitor the actual and likely weather for the duration of the walk. (For further information and advice relating to this complex, but vitally important topic, see the companion document entitled “*The potential impact of the weather and how to manage the associated risks*”).
- Shortly before the walk, check online (or via traditional means) for route-closures, diversions, etc. This is especially important for routes that cross CROW or MOD land.
- Learn how to use, then use the appropriate 1:25:000 map(s) and a traditional navigational compass. **NB: Do NOT rely exclusively on GPS (satellite navigation) or other electronic devices as they can fail and they may do so at a crucial time.**
- Attend first aid / emergency aid training (including regular refresher courses) and carry a first-aid kit.

- Carry a mobile phone (but do not rely on it being able to receive a signal). It is also a good idea to register the phone with the emergencySMS service – see <http://www.emergencysms.org.uk/> and <http://ngts.org.uk/>.
- Know (and where necessary, follow) the procedure for contacting the emergency services (see Appendix 5).
- Know and follow the Countryside Code:
see: <https://www.gov.uk/government/publications/the-countryside-code>
- Consider, evaluate, reconnoitre (check-out) and plan the route in advance, including key alternative routes that could prove useful in bad weather and / or in an emergency. Consider creating and using a route-card and route-map (see the companion document entitled “*The design and use of route-cards and route-maps*”).
- Tell someone whom you can trust where you are going and when you expect to return. If possible, give or leave them a copy of the route plan. This will enable the person to alert the emergency services if you do not return as planned. **NB: This is especially important if you will be walking alone.** When you return safely, remember to tell the trustworthy person that you have done so.
- Allow plenty of time for the walk, making adjustments as necessary to suit the forecast and prevailing ground and weather conditions and the fitness, experience and actual progress of the walker(s).
- For the duration of the walk, pay attention to (i.e. remain aware of) the ground conditions, weather conditions and your surroundings and **watch where you are putting your feet.** (The latter might sound ridiculously obvious, but failure to observe this simple precaution has been the cause of many a twisted ankle – and worse.)
- Eat, drink and take rest breaks in sensible locations and at regular (but appropriate) intervals. **NB: It is a wise precaution to clean your hands with an anti-bacterial wipe before touching food (or your face).**
- Do NOT drink (or wash in) water obtained from rivers, streams, or other unprocessed water-sources.
- To reduce the risk of dehydration during hot weather, take extra water, then drink ‘little-and-often’.
- On sunny days, use sun-protection (high SPF clothing and / or sun-block) to reduce the risk of sunburn.
- On roads without pavements or verges, walk close to the right-hand side (facing the oncoming traffic) except where the visibility is significantly better on the opposite side of the road (e.g. at tight bends). **Do NOT assume that drivers have seen you, or that they will take action to avoid hitting you.** Take extra care when ascending / descending crests that significantly restrict visibility ahead of or behind you.

In addition to the above, when leading group walks:

- **Ensure that the leader has the attitude, knowledge, experience, fitness and general ability required to safely plan, lead and complete the walk.** To quote from the *“Mountain Leader Training Handbook - Volume 1”*:

A group of walkers *“looks to its leader to communicate awareness of the potential hazards, to plan an appropriate itinerary and to place the requirements of the group above individual wishes.”*

- Wherever possible, group walks should be led by at least two leaders (usually referred to as the “leader” and the “back-up”). Some walks may need more than two leaders (e.g. due to the nature of the terrain or the anticipated number of participants). In an emergency, it may be possible to co-opt suitable individuals from the group to assist.
- Reconnoitre the route in advance (preferably with the back-up), including the key alternative / emergency routes.
- Immediately prior to commencing the walk, give an introductory briefing. As a minimum, this should include all of the following:
 - Welcome the participants and introduce yourself and the other leader(s).
 - Assess the footwear, clothing, equipment and capabilities of the participants. If in doubt, check it out. (This is especially important for participants that you have not met or walked-with before: ask if they have sufficient food and drink for the day and, if they are not wearing them, ask if they have coats, waterproof trousers, warm clothing, etc.)
 - Briefly describe the route (including the expected duration, distance, height gained / lost, general nature of terrain, etc.) and any significant and ‘out-of-the-ordinary’ hazards that are likely to be encountered.
 - Explain that, within reason, the pace of the walk will be set to suit (i.e. be comfortably manageable by) the slowest member of the group, then monitor the pace – and the group’s ability to cope with it - throughout the walk. If the difference in pace between the fastest and slowest members of a group is so great that it is causing (or is likely to cause) problems, the walk may need to be split into two or more groups.
 - Explain the importance of the group keeping together and state that participants wishing to leave the group must advise one of the leaders BEFORE doing so.
 - Count and identify the participants at the start of the walk, then count and identify them again at regular intervals during the walk and again upon arrival at the walk’s end-point.
- During the walk:
 - Keep the entire group within sight – and within hailing distance – at all times.
 - **Remain vigilant and practice dynamic risk management (see next section).**

Dynamic risk management

In order to remain safe for the duration of a walk, all walkers and walk-leaders need to remain vigilant in order to identify both anticipated and unexpected hazards. Furthermore, the nature of the hazards (and the associated level of risk) can - and often does – change in real time, so the

level of risk assigned to each hazard will need to be assessed / re-assessed ‘dynamically’ (i.e. on a real time / continuous basis). For example:

- The British weather changes constantly: usually on a day-by-day basis, often on an hour-by-hour basis and sometimes on a minute-by-minute basis. Furthermore, in hilly areas like the Yorkshire Dales and northern Pennines, the weather can differ significantly between locations that are just a few kilometres apart horizontally and between locations that are just a few hundred metres apart vertically.
- The human factors can also be highly variable: for example, a person can feel fine at the start of a walk, only to become seriously ill just a few hours later.

As the circumstances change, the action required to effectively manage the situation (and to control the risk) will need to be re-assessed and plans may need to be altered at short notice. This is the process of dynamic risk management. For example:

- Re-assess the group (and individual group members) at regular intervals to ensure that they are all safe, well and reasonably comfortable.
- Throughout the walk, seek-out and anticipate potential / actual hazard(s). Where appropriate, stop the group shortly before arriving at the hazard location (or shortly before the hazardous conditions arise), then describe the nature of the hazard and explain the related risk-management action(s).
- Offer (and, where appropriate provide) direct assistance and / or advice.
- Where conditions dictate, walk in single file.

Please note that the lists above are NOT exhaustive. As part of the risk assessment process, you are **STRONGLY ADVISED** to consider other preventive and / or risk control actions that may be necessary in order to minimise the likelihood that harm will occur to either

- yourself,
- other members of the group / party (where appropriate), or
- other people (i.e. members of the public and members of the emergency services who may be called-out to assist should an incident occur).

Risk assessments need to be reviewed

Both formal (i.e. documented) and informal (undocumented) risk assessments for a specific event / activity should be reviewed shortly after the completion of the related event / activity. This will allow any ‘lessons learned’ to be identified and incorporated into future risk assessments and / or risk management strategies.

The risk assessment process itself, together with all formal risk assessments, should be reviewed on a regular basis (e.g. once every one, two or three years). This will allow changes in hazards, legislation, personal circumstances, etc. to be identified, evaluated and incorporated into the risk assessments and / or the risk management strategies.

A risk assessment that is created, then filed and forgotten is both pointless and potentially dangerous.

What is **scenario planning**?

Scenario planning involves:

- 1) identifying potentially significant events and / or conditions that may occur at some point in the future, then
- 2) considering their likely consequences, then
- 3) making plans to minimise their negative impact and / or maximise their positive impact.

While it is essential to consider and manage hazards, it is also wise to consider (and to make contingency plans for) other potentially problematic scenarios, especially those relating to:

- a) transport and
- b) access.

The next two sections list examples of transport- and access-related scenarios that may arise during an urban or rural walk in the Yorkshire Dales / northern Pennines. Please note that these lists are NOT exhaustive. As before, you are **STRONGLY ADVISED** to consider scenarios that may arise for each specific walk.

Scenario planning for transport-related problems

a) Public transport problems: These could include:

- A late-running outbound train or bus, which may delay the start of the walk sufficiently to prevent completion of the walk in the time available at a pace that will be safe and comfortable for all participants. Where possible, solo-walkers and leaders of group walks are advised to prepare a shorter variant of the walk, just in case.
- Problems with transport connections. A connecting bus may be missed, or it may have insufficient room for the entire group, or it may not turn-up at all. The return service may be similarly affected. Solo-walkers and leaders of group walks are advised to prepare an alternative walk that starts from the planned / advertised start-point and / or to research emergency options to get themselves (and, where appropriate, their group) home safely. When considering the latter, bear in mind that the best emergency transport route may lie in a completely different direction to the planned return route. For example when using the Settle-Carlisle train service from / to Garsdale to walk into Wensleydale, the emergency transport routes may involve a taxi ride up & over to Ribbleshead (to catch the late-evening train), or a bus or taxi ride to Northallerton, followed by a train down the East Coast Main Line, then round via Leeds.

When using public transport, it is advisable to note-down the telephone numbers of any relevant bus operators and of local taxi firms. It is also advisable to carry a reasonable amount of spare cash (e.g. £20 – £50), plus at least one major credit card.

b) Personal transport problems: These could include vehicle breakdown, road closures and parking difficulties. In both urban and rural areas, it can be difficult to find somewhere to park safely and legally, especially during busy periods. Allow plenty of time for the outward journey and be prepared to alter your plans at short notice if necessary.

Scenario planning for access-related problems

Part of the planned route may be blocked, closed or become unusable, necessitating a diversion or a return to the start point. Either option could cause problems including a longer than planned walk or a change to the planned finish point. Either could have transport implications and / or cause a late return. In the Yorkshire Dales / Northern Pennines, the likely cause of access problems include:

- The planned or unplanned, official or unofficial closure of (or restricted access to) Ministry of Defence land, CROW access land, or ‘permissive’ paths. Be aware that all such land - and any permissive path - may be closed at short notice for a variety of reasons including heather burning, grouse shooting, to protect breeding birds, to mitigate against the risk of fire, etc.).
- Official or unofficial agricultural restrictions (e.g. quarantine restrictions).
- Natural events such as landslips, floods, snow, ice.
- A police-controlled incident (e.g. a road traffic accident, crime-scene closure, manhunt, wildfire; etc.)
- Damaged or missing bridges, stepping stones, etc.
- Livestock blocking the route, or preventing safe passage along the route.

It is not possible to foresee every possible eventuality. However, a bit of preparation and a good working knowledge of the area (including alternative routes) should enable most problems to be overcome without too much risk, difficulty or stress.

Further reading

For those seeking high-quality examples of formal risk assessments, the following online resource is highly recommended:

- The “*Bewerley Park Activity Risk Assessments*” produced by the North Yorkshire Outdoor Learning Service contain a wide-range of generic and site- / location- specific risk assessments, including risk assessments for ten highly relevant local walks (pages 20 to 21). The latter demonstrate just how little needs to be recorded for most walks when the focus is placed firmly (and correctly) on walk-specific, ‘out-of-the-ordinary’ hazards. The full (117 page, 2Mb) pdf file can be downloaded from:

<http://www.outdoored.co.uk/resources/bewerley-park-risk-assessments/bewerley-park-activity-risk-assessments-2015/>

- - - 0 - - -

Appendix 1: Potential hazards associated with people

Common hazards include:

- The attitude of the individual walker(s), especially the extent to which they take responsibility for their own safety and the safety of others.
- Pre-existing or new medical conditions (including heart attack, stroke, asthma attack, allergic reactions, epilepsy, etc.) plus general illness / feeling unwell.
- A level of 'fitness' that is (or that may be) inadequate given the nature of the walk and / or the prevailing or expected conditions. See also 'fatigue' below.
- Fatigue – i.e. a level of tiredness / over-exertion that could result in a loss of concentration and / or reduced limb control. Fatigue can significantly increase the likelihood of poor decision making and / or injury due to slips, stumbles, etc. and it can quickly develop into complete exhaustion and an inability to go any further.
- A group with a wider-than-expected range of abilities.
- Participant(s) who are (or might be) unable / unwilling to (safely) tackle all or part of a walk. The following are among the most likely to cause problems:
 - a walk that is more strenuous than one or more of the participants expected;
 - a walk that includes a particularly steep and / or otherwise 'difficult' ascent / descent or a 'scramble' (i.e. a section that requires the use of hands and / or 'bum-shuffling, etc.);
 - a walk that includes a narrow ridge (with a steep drop on both sides) and routes with a steep drop close to the path on one side.
 - a walk that includes a water-crossing which involves the use of stepping stones, boulder-hopping, jumping, or fording;
 - a route that crosses boggy terrain, scree or other loose rock, limestone pavement, fields containing livestock, etc.;
 - a walk that entails walking across ice (including compacted snow and frozen water-crossings) and / or walking through deep soft snow; and
 - a walk that entails walking across (or through) particularly boggy terrain.
- A poor ratio of leaders to participants (which could be caused by the 'no-show' of a leader, a larger than expected number of participants, and / or the need to split the group).
- Poor group control (which could lead to one or more of the participants becoming separated from the main group).
- Rest / refreshment breaks that are inadequate (e.g. too few and / or too short) and / or poorly planned (e.g. lack of shelter at break site, or uneven spacing of breaks).
- Navigational errors (i.e. 'getting lost' or 'going the wrong way' as a result of navigator error, incorrect or misleading signage, incorrect or misleading directions given by other people, etc.).
- Inadequate, damaged, poorly maintained or otherwise inappropriate footwear, clothing, or other equipment.

- Inadequate or inappropriate food and / or drink.
- Strain-related injuries including blisters, pulled muscles, etc.
- Sharp projections at gates or stiles (be especially vigilant for barbed wire, protruding nails, and broken or splintered timbers); damaged or unstable stiles, stiff catches / awkward fastenings or broken hinges on gates; and inconsiderately discarded farmer's junk – any of which may cause cuts, scratches, bruising, or a more serious injury.
- Vehicular traffic including normal road traffic, agricultural vehicles, industrial vehicles (including fork-lift trucks) and off-road vehicles.
- Non-vehicular traffic including mountain-bikers and horse-riders.
- Level crossings (i.e. locations where a road, track, footpath, etc. crosses railway tracks).
- Impaired judgement and / or reduced mental or physical abilities caused by the ingestion of drugs or alcohol (including 'hangovers').
- Aggressive human behaviour (unfortunately, this is becoming increasingly common). To minimise the risk, be polite and considerate at all times and obey the Highway Code / Country Code.
- Allegations of illegal / inappropriate behaviour relating to child-protection, sexual harassment, assault, etc.
- Low morale.

- - - 0 - - -

Appendix 2: Potential hazards associated with flora & fauna

Common hazards include those associated with:

- **Animals**, such as:
 - Livestock including sheep, cattle, goats, equines (horses, ponies, donkeys), swine (pigs & boars) and fowl (geese; hens / chickens; etc.).
 - Wild animals: the most likely to cause problems are snakes and insects and the most likely risks are:
 - Insect bites (including tick bites) and stings - for further information see:
<http://www.nhs.uk/Livewell/bites-and-stings/Pages/insects-bugs-that-bite-sting.aspx>
 - Snake bites - for further information see:
<http://www.nhs.uk/conditions/bites-snake/pages/introduction.aspx>
 - Domestic and working dogs - for further information see:
<http://www.ramblers.org.uk/advice/safety/dog-walkers.aspx>
- **Bacteria** such as:
 - Leptospira: This is often found in soil or water contaminated by urinating animals, especially cattle, pigs, dogs, and rats. In humans, it can cause leptospirosis and Weil's disease.
 - Clostridium tetani: This is often found in untreated water, soil and in animal faeces (especially that from cattle and horses). In humans, it can cause tetanus (a.k.a. 'lockjaw').
 - Campylobacter: This is often found in untreated water. In humans, it can cause diarrhoea, vomiting, stomach pains, fever and general feeling of being unwell.
 - E. Coli (Escherichia coli O157): This is often found in untreated water and animal faeces (especially that from cattle). In humans, it can cause gastroenteritis (the key symptoms of which include diarrhoea and vomiting).
- **Plants**, including crops, wild plants and fungi. Specific risks include:
 - Overhanging or protruding vegetation, including:
 - tree roots (which may cause trips or twisted ankles);
 - overhanging branches / protruding vegetation (which could cause head injuries, eye injuries, cuts, scratches, abrasions, bruises etc.).
 - Plants that have thorns, spikes or needles (e.g. gorse, brambles, blackberries, roses, and holly).
 - Toxic plants, such as those that can cause skin irritations if they are deliberately or accidentally touched (e.g. stinging nettles and giant hogweed). Giant hogweed is particularly nasty and it is becoming increasingly common beside UK rivers, canals, etc. For further information, see:
 - <http://www.nhs.uk/Livewell/bites-and-stings/Pages/Plant-dangers-garden-countryside.aspx>
 - <http://www.bbc.co.uk/news/uk-england-manchester-33509053>

- Poisonous species: many UK plants and fungi are poisonous and many crops are routinely sprayed with potentially hazardous chemicals. **Do NOT eat (and, preferably, do not touch) fungi or plants (including wild or farmed fruits or other crops).**

- - - 0 - - -

Appendix 3: Potential hazards associated with the terrain

Common hazards include:

- Slippery underfoot conditions including those caused by mud, wet grass or other vegetation, ice & snow, and low friction rocks such as smooth / wet limestone.
- Uneven ground surfaces including rocks & boulders, scree, rutted mud, loose, uneven or missing paving slabs / cobbles / drain covers / manhole covers, etc.
- Cliffs, crags, old mine-workings, quarries, potholes, grykes (common on limestone pavement), animal-burrows, high and / or eroded riverbanks, etc.
- Water hazards, including river & stream crossings (especially after heavy rain), stepping stones, marshy ground, flooded ground, etc.
- Overhanging or protruding rocks close to the route that may cause head injuries, cuts, scratches, abrasions, bruises etc. if not noticed.
- Rock-falls, landslides, avalanches etc.
- Moorland, forest or grass fires (including deliberate stubble-burning and heather burning).
- Remoteness, especially the difficulty of obtaining assistance in an emergency and the time required for assistance to reach the scene and for the casualty (and others) to reach hospital / safety.

- - - 0 - - -

Appendix 4: Potential hazards associated with the weather (including loss of daylight & poor visibility)

The weather can (and often does) have a significant impact on the safety and enjoyment of all outdoor activities, but this is especially the case for walking in remote and / or upland areas such as the Yorkshire Dales and northern Pennines. In this context, the main weather-related hazards, include those associated with:

- Ice & snow
- Wind speed & direction
- Poor visibility
- Temperature (actual plus ‘feels-like’)
- Humidity
- Precipitation (type, intensity & duration)
- Lightning (thunderstorms)
- Changeability (especially the speed of change)

All walkers and walk-leaders are **STRONGLY ADVISED** to:

- check the local weather forecast (i.e. local to the area that will be covered by walk) the evening before the walk and / or on the morning of the walk; and to
- keep a ‘weather-eye’ on the sky and ground conditions throughout the walk.

Adverse weather conditions (including poor visibility) can make a route-change and / or other precautionary measures either desirable or absolutely essential. This complex, but vitally important subject is explored in detail in the companion document entitled *“The potential impact of the weather and how to manage the associated risks”*.

The loss of daylight can also be extremely hazardous for walkers who are not equipped for (and experienced at) night navigation. All walkers and walk-leaders are **STRONGLY ADVISED** to ensure that the walk can be and is completed **WELL BEFORE** dark.

- - - 0 - - -

Appendix 5: Obtaining Emergency Medical Assistance

General medical advice and assistance

- You are expected to act responsibly and to assist yourself and other members of your party wherever possible / appropriate.
- General medical advice can be obtained by telephone or via the internet from NHS Direct.
- In order of preference, but depending on the nature of the illness / injury, medical assistance can and should be sought from:
 - a local pharmacist (chemist),
 - a local G.P (Doctor),
 - a minor injury clinic (if one is available locally) or for more serious cases,
 - a local hospital with a 24-hour Accident and Emergency service – for example:
 - Furness General Hospital, Dalton Lane, **BARROW-IN-FURNESS**, Cumbria, LA14 4LF. Tel: 01229 870870.
 - Royal Blackburn Hospital, Haslingden Road, **BLACKBURN**, Lancashire, BB2 3HH. Tel: 01254 263555.
 - Bradford Royal Infirmary, Duckworth Lane, **BRADFORD**, West Yorkshire, BD9 6RJ. Tel: 01274 542200.
 - Cumberland Infirmary, Newtown Road, **CARLISLE**, Cumbria, CA2 7HY. Tel: 01228 523444.
 - Chorley and South Ribble Hospital, Preston Road, **CHORLEY**, Lancashire, PR7 1PP. Tel: 01257 261222.
 - University Hospital Of North Durham, North Road, **DURHAM**, County Durham, DH1 5TW. Tel: 0191 333 2333.
 - Airedale General Hospital, Skipton Road, Steeton, **KEIGHLEY**, West Yorkshire, BD20 6TD. Tel: 01535 652511.
 - Royal Lancaster Infirmary, Ashton Road, **LANCASTER**, Lancashire, LA1 4RP. Tel: 01524 65944.
 - Hexham General Hospital, Corbridge Road, **HEXHAM**, Northumberland, NE46 1QJ. Tel: 0844 811 8111.
 - Royal Preston Hospital, Sharoe Green Lane North, Fulwood, **PRESTON**, Lancashire, PR2 9HT. Tel: 01772 716565.
 - West Cumberland Hospital, Homewood, Hensingham, **WHITEHAVEN**, Cumbria, CA28 8JG. Tel: 01946 693181.

Emergency (on-site) medical assistance

If emergency medical assistance is required on-site:

- stay calm,
- protect EVERYONE - i.e. protect
 - yourself (NB: **DO THIS FIRST** as you are no good to others if you are dead or injured!),
 - the casualty and
 - any other members of the partyfrom further dangers,
- render immediate first aid as appropriate,
- find (or preferably send other people to find) a working telephone and dial 999. (Notes: This could be a landline, or a mobile phone if one is available with a useable signal and sufficient battery-life. 999 is the official number for emergency assistance throughout the United Kingdom. However, the Pan-European emergency number 112 can also be used from any landline or mobile phone and the United States number 911 may also work from some mobile phones.)

When the 999 call is answered, the operator will ask "**Which service do you require?**":

- If your location is **easily accessible by road**, ask for the **ambulance** service. However,
- If you are located in an area that is **not accessible by road** (e.g. on the hills / fells or in fields some distance from a road), ask for the **police** (who will be able to contact - and coordinate with - the appropriate organisations, including the **local cave / fell / mountain rescue unit** where appropriate).

During this telephone call, you may be asked for (and should be prepared to supply):

- Your own name, home address and telephone number.
- The telephone number you are calling from (and the address, where appropriate).
- Details of the casualty's current location. (Note: providing an accurate six or eight figure grid reference will save time and avoid misunderstandings when seeking assistance for incidents outside built-up areas.)
- Details of the incident (e.g. the casualty slipped on mud and hit the back of his head on a sharp rock).
- Details of the casualty's injuries / symptoms / condition (e.g. the casualty is unconscious, his breathing is shallow and there is a depressed wound to back of the head with minor external bleeding).
- Details of any action taken so far to assist the casualty.
- Personal information about the casualty, such as their name and home address (where available), plus any relevant medical history (if known).

Once the incident has been logged, the operator will tell you what to do next and, where appropriate, will keep in contact for the duration of the incident.

The phonetic alphabet

When spelling words, names etc., or giving sheet letters for grid references, it is good practice (but not essential) to use the phonetic alphabet:

A = Alpha	J = Juliet	S = Sierra
B = Bravo	K = Kilo	T = Tango
C = Charlie	L = Lima	U = Uniform
D = Delta	M = Mike	V = Victor
E = Echo	N = November	W = Whiskey
F = Foxtrot	O = Oscar	X = X-ray
G = Golf	P = Papa	Y = Yankee
H = Hotel	Q = Quebec	Z = Zulu
I = India	R = Romeo	

For example, to communicate the word Horton, you would say:

"Horton, that's Hotel. Oscar, Romeo, Tango, Oscar, November."

- - - 0 - - -