

Hazard

The risk assessment game

The management of risk is a critical part of any safety culture. People are in general not very good at judging risk in the heat of the moment, so it is very important to think about risk in advance of any activity and to plan how it will be controlled.

Risk is made up of two components likelihood and consequence. A high risk activity may have very serious consequences but happen occasionally, or have moderate consequences and happen frequently.

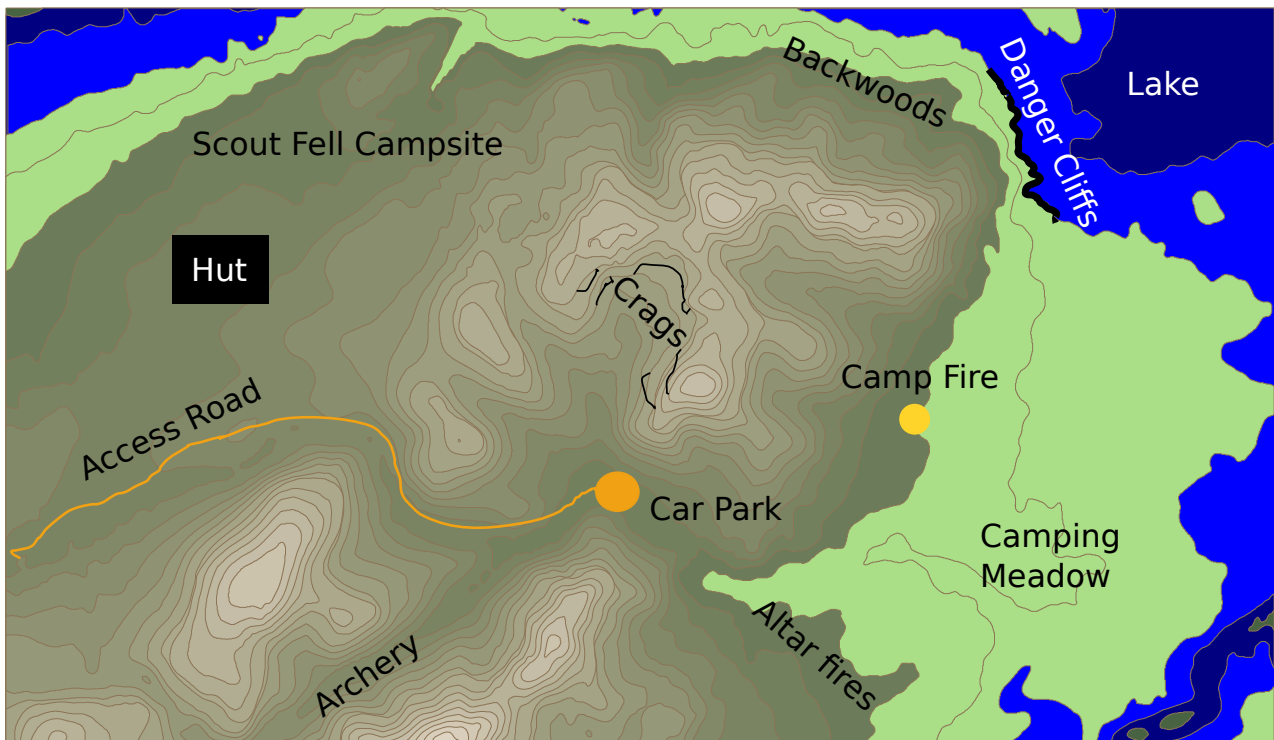
Hazard asks you to think about the consequences and likelihood of hazards associated with some scouting activities which are to take place on at the Scout Fell Campsite in Dangershire (see below). Hazard separates likelihood and consequence and asks you to choose methods of reducing them. In risk assessment we use the ERIC-PD hierarchy of control (Eliminate, Reduce, Isolate, Control, PPE and Discipline) Eliminating the risk is best, giving instructions the worst.

The consequences used in Hazard are A - someone is upset, B- one person injured, C- Several injuries, D - one person hospitalised, E - several people hospitalised, F - one person killed. Consequences are linked to hazards, so free climbing the cliffs with no protection could be fatal, while arriving late is only upsetting.

You should play Hazard in a small group and may decide to have a facilitator to moderate the game and lead the discussion.

You will need one each of the Hazard cards, a copy of the Residual Risk table, and the score sheet. Each team will also need three six sided dice.

Scout Fell Campsite



A wooded, district, campsite with a climbing area, archer, camp fire circle, backwoods area and permanent altar fires. To the north east is a lake which connects to a river on the east side of the









camping meadow. Both the river and lake have some small islands. Near the backwoods area there are some cliffs at the lake edge.

Rules:

- Each team (who are Young Leaders helping run the activities) chooses two activities from these activity cards.

<p>SCOUTS</p> <p>Go Rock Climbing</p>	<p>SCOUTS</p> <p>Use Axes</p>
<p>cubs</p> <p>Go Orienteering</p>	<p>cubs</p> <p>Sausage Sizzle</p>
<p>BEAVERS</p> <p>Soft Archery</p>	<p>BEAVERS</p> <p>Camp Fire</p>







- Teams then choose up-to three hazards for each activity (discuss which ones apply and which they want to do). Each hazard card, with the exception of “missing equipment” shows the consequence (A-F) associated with the hazard. Missing equipment has a special consequence discussed later.

<p>Falling in Water</p>  <p>F </p>	<p>Hit by Blunt Object</p>  <p>E </p>
<p>Burned</p>  <p>D </p>	<p>Tripped</p>  <p>B </p>

3. Teams assign likelihood's to each of their hazards, ranging from unlikely (1) to frequently (5). This is a free choice, but it should be reasonable. Place the likelihood card for each hazard card next to the hazard.

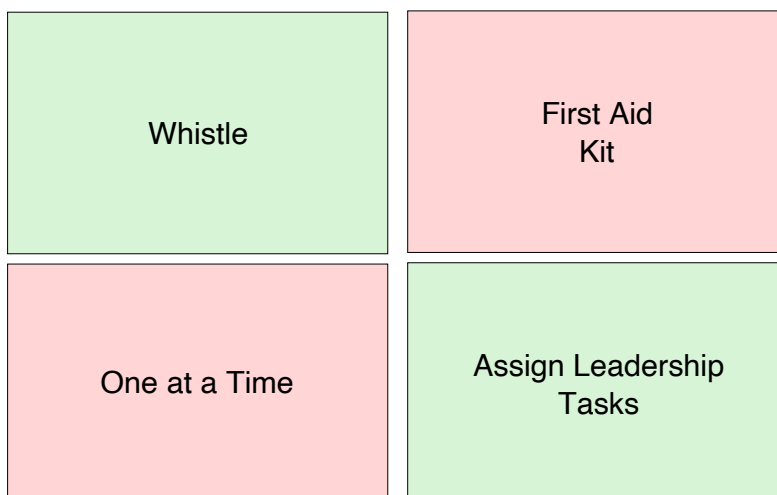


Once we have decided on a consequence and a likelihood we can calculate a risk number for each hazard. This is done using the risk table.

	 A	 B	 C	 D	 E	 F
Likelihood 1	1	2	3	4	5	6
Likelihood 2	2	4	6	8	10	12
Likelihood 3	3	6	9	12	15	18
Likelihood 4	4	8	12	16	20	24
Likelihood 5	5	10	15	20	25	30

The higher the number the worse the risk. We can choose what level of risk is acceptable.

4. Teams now discuss which of the mitigation cards they want to use on the hazards.



Up to three can be used on each hazard. These may either reduce the consequence of the hazard occurring (red cards) or make it more unlikely (green cards).

If the ban is imposed no other mitigation is allowed.

- Using the score sheet you now calculate the reduction in consequence or likelihood by each mitigation. Each will either have no effect or reduce the consequence or likelihood by one step.

Hazard	Consequence	Close Supervision by Leaders	Ban Activity	Safety Rope* plus Activity Permit	Activity Briefing	email Detailed Instructions	No Running	Exclusion Area	Explain Boundaries	Assign Leadership tasks	Anti-bumping	Whistle	Weather Forecast	Map & Compass	Safety Barrier	Appropriate Clothing	Wear a Helmet*	Emergency Contact	Check Equipment	Bucket of water	Spare Food	Hand washing	Wear Uniform	First Aid Kit*	One at a Time	Head Torch	Take Photographs	Inform GSI and OC	Emergency Shelter
6 Falling from height	P1 = 2	P1							P1							P1	P1						P1	P1					
7 Getting Lost	= 2			P1						P1		P1						P1			P1				P1				
8 Falling in Water	P1 = 2			P1					P1				P1											P1					
9 Hit by Blunt Object	= 2							P1						P1										P1	P1				
10 Burned	P1 = 2			P1					P1															P1	P1				
11 Tripped	B			P1																					P1				
12 Messing about	C	P1 = 2		P1						P1															P1				
13 Hit by Sharp object	D	= 2						P1						P1											P1	P1			
14 Fire out of control	E	P1 = 2		P1					P1					P1														P1	
15 Bad Weather	C	= 2																P1										P1	
16 Food Poisoning	B	P1 = 2		P1																									
17 Late Arrivals	A				P1	P1																							
18 Activity Finishes Late	A				P1																							P1	
19 Missing Equipment	Special - items marked * do not count if this card is chosen unless the "Equipment checked" card is used																												

Once this has been done make a note of the residual risk number (using the risk table once again)

- Now we simulate the activities. For each hazard roll all three dice and add up the score, if you score more than the risk number everything went well, if you didn't see what happened on the following table:

Finally talk about what happened and what other actions you could have taken to reduce the risk, or if you think you were too cautious.

Rolled	Consequence
more	Everything ran smoothly
0 - 2 less	A near miss, something went wrong but no-one was hurt
3 - 5 less	One person was injured
6 - 8 less	Several people were injured
9 - 11 less	One person was taken to hospital
12 - 14 less	Several people were taken to hospital
15 or more less	One person was killed



Falling from Height



F



Getting Lost



C



Falling in Water



F



Hit by Blunt Object



E



Burned



D



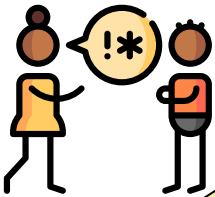
Tripped



B



Messing About



C



Hit by Sharp Object



D



Fire out of control



E



Missing Equipment



Activity
Cancelled

Bad Weather



C



Food Poisoning



B



Late Arrivals



A



Activity Finishes Late



A



SCOUTS

Go Rock
Climbing

SCOUTS

Use
Axes

cubs

Go
Orienteering

cubs

Sausage
Sizzle

BEAVERS

Soft
Archery

BEAVERS

Camp
Fire

Ban Activity!

Close Supervision
by Leaders

Appropriate Clothing

Wear a Helmet

Safety Rope

Activity Breifing

e-mail
Detailed Instructions

No Running

Exclusion Area

Explain
Boundaries

Emergency
Contact

Emergency
Shelter

Check Equipment

Assign Leadership
Tasks

Bucket of
Water

Spare Food

Activity
Permit

Hand Washing

Anti-Bullying
Policy

Wear Uniform

Whistle

First Aid
Kit

One at a Time

Assign Leadership
Tasks

Weather
Forecast

Head Torch

Map &
Compass

Take Photographs

Safety
Barrier

Inform GSL
and DC



1

Unlikely



1

Unlikely



2

Rarely



2

Rarely



3

Sometimes



3

Sometimes



4

Often



4

Often



5







Frequently



5

Frequently

Consequence

	 A	 B	 C	 D	 E	 F
	A	B	C	D	E	F
1	1	2	3	4	5	6
2	2	4	6	8	10	12
3	3	6	9	12	15	18
4	4	8	12	16	20	24
5	5	10	15	20	25	30

Roll 3 Dice.

Compare your total with the risk number

- | | |
|--------------|-----------------------------|
| Rolled more | Activity ran safely |
| 0 - 2 less | Near miss |
| 3 - 5 less | One person injured |
| 6 - 8 less | Several people injured |
| 9 - 11 less | One person hospitalised |
| 12 - 14 less | Several people hospitalised |
| 15+ less | Someone is killed. |

