Health and Safety Services

UNIVERSITY OF LEEDS

Step by Step guide to the High Risk Fieldwork Risk Assessment

Introduction

This step by step guide takes you through the University **high** risk fieldwork risk assessment form. There are similar guidance documents for the low and medium risk assessment forms. You will need to consider the specific nature of the fieldwork trip to gauge which risk assessment form to use, especially areas such as the activity, the location and mode of transport.

It should be noted that this guidance is in no way a comprehensive guide to every aspect of the fieldwork activities undertaken by the University. If there are any concerns or questions that relate to the activity it is important that you seen further guidance and specialist advice and support can also be sought from your Health and Safety Manager or Health and Safety Co-ordinator

Risk Assessment

The form is divided into sections to provide the following information; this guidance follows the form's sections:

Fieldwork Project Details

- Faculty / School / Service.
- Location of fieldwork.
- Brief description of Fieldwork activity and purpose.
- Fieldwork itinerary
- Organiser details, fieldwork activity organiser (course leader), fieldwork co-ordinator, nature of the visit and details of participants.

Hazard Identification

- **Nature of the site**
    - Include all locations to be visited during the trip; these could be logged as part of the itinerary. Any changes during the trip should be recorded on the itinerary and be approved by the activity organiser and recorded on or off the site.
    - Site information must include:
        - Nearest local contact point(s) (such as a hospital, police station or hotel).
        - System for contact appropriate to the location (such as mobile phones or a two-way radio). Include prearranged contact times if appropriate.
        - Grid references and maps for rural and remote areas.
        - Tide-times where appropriate e.g. for coastal trips.

- **Environmental Conditions**
    - **Climate**
      Assess the local climate and weather conditions to identify suitable equipment and clothing and ensure this is available and worn. Consider:
        - Extreme cold or heat.
        - Humidity.
        - Exposure to sunlight.
        - Fog.
        - Rain or snow.
        - Altitude.

- Wind

Determine whether a period of acclimatisation is needed for the participants when visiting and returning from climates with extremes of temperature.

Also consider hazards associated with specific climates such as:

- **Alpine & Sub-Alpine**
  - Purity of water.
  - Exposure to sunlight.
  - Altitude sickness.
  - Access and evacuation in case of emergency.
  - A place for safe refuge.
  - Supply of food and water.
  - Sudden weather changes.
  - Lack of local infrastructure.

- **Desert and Arid**
  - Dehydration.
  - Wild animals such as predators, venomous snakes and insects.
  - Prevalence of disease.
  - Water purity.
  - Extreme sunlight and temperature.
  - Political instability and hostile local people.
  - Lack of local infrastructure.
  - Other consideration should be given to transport, food and water supplies.

- **High mountains and Polar regions**
  - Altitude sickness.
  - Lack of local infrastructure.
  - Lack of rescue services.
  - Extreme weather conditions.
  - Dehydration.
  - Hypothermia.
  - Wild animals.

- **Tropical and Subtropical**
  - Water purity.
  - Flooding due to heavy rainfall.
  - Prevalence of tropical disease associated with the area.
  - Wild animals such as venomous snakes and insects.
  - Political instability and hostile local people.
  - Lack of local infrastructure.
  - Consider site access and evacuation in the event of an emergency, and the supply of food and drinking water.

- **Site Specific Conditions**

  It is vital that knowledge of the site is gained prior to the trip. Where possible an assessment of the site should be undertaken before fieldwork starts, to assess any hazards and the suitability for the activities to be undertaken.

This may take the form of a pre-trip visit or contact with local people who can pass on any relevant information. There may also be hazards inherent in the site itself that will need to be considered. Some specific examples include:

- **Alongside Railways and Major Roads**
  Work alongside railways and major roads require permission. The hazards associated with this type of environment are high, so work must be planned in conjunction with the controlling authority. Their advice must be taken on the procedures required.

- **Inner City / Suburban / Residential**
  - Traffic.
  - Physical violence or abuse as a result of the fieldwork activity or due to becoming a victim of a crime.
  - Domestic animals.

- **Commercial and Industrial**
  - Traffic including commercial vehicles such as forklift trucks or industrial plant.
  - Chemical, biological and radiological hazards as a result of the processes being undertaken.
  - Physical violence or abuse.
  - Domestic and feral animals.
  - Collapsing structures or falling objects particularly in demolition or building sites.
  - Trenches / storage tanks / grain silos / old mine shafts / quarry etc.

- **Farmland**
  Any access to farmland must be agreed with the landowner and farmer, to prevent damage to crops and harm to animals, as well as highlighting any hazards that may be encountered by participants.
  Examples of specific hazards associated with farmland are:
  - Aggression from domestic animals that have been disturbed. If large domestic animals may be encountered, participants should be aware of what to do if a large domestic animal becomes aggressive.
  - Mechanical hazards from farm machinery – It is crucial to be aware of the types of machinery that may be encountered. Remember that noise levels associated with machinery may reduce the operators awareness of approaching groups or people or verbal warnings.
  - Chemicals such as pesticides and crop sprays - The presence of these will vary depending on the time of year.
  - Wild animals.
  - Domestic/wild animals with young.
  - Knowledge of open shooting season (usually October to January).

- **Hills and Mountains**
  Hills and mountains pose a number of specific hazards:
  - Exposure, weather conditions and temperature may be very different at the summit compared to the base.
  - Sudden changes in weather such as fog or snow.
  - Exhaustion.
  - Remoteness of the location – where small injuries can have far more serious consequences.
  - Hypothermia and hyperthermia - body temperature falling dangerously low or climbing dangerously high.

- **Marine including Inshore, Coastal and Shorelines**
  The scope of fieldwork in marine environments will often lend itself to using specialist equipment and / or working with a third party partner organisation. Therefore many of the considerations relate to the third party partner organisation and their ability and competency to carry out the tasks. Hazards to consider include:
  - Drowning.
  - Pollution.
  - Infection from ingesting polluted waters, e.g. Weil's disease.
  - Falling rocks from cliffs.
  - Landslips.
  - Getting cut off by tidal changes or rapidly changing water levels.
  - Quick sands and mudflats.
  - Potentially dangerous wildlife such as stinging jellyfish.
  - Hypothermia and hyperthermia - body temperature falling dangerously low or climbing dangerously high.
  - Working from boats etc.

- **Moorland**
  Moorland poses similar hazards to those associated with hills or mountains, also consider the potential for becoming lost due to the lack of landmarks or as a result of poor visibility during bad weather. Consider the previous and current use of moorland e.g. artillery firing ranges, some areas have been used for military training and so there may be unexploded ammunition present.
  Other risks to consider include:
  - Fire.
  - Wild animals with young.
  - Knowledge of open shooting season (usually October to January).

- **Woodland and Forest**
  Seek permission for access to woodland and forests, and give consideration to the risks associated with woodland. These risks include:
  - Fire.
  - Getting lost due to the lack of landmarks.
  - Forestry operations such as tree felling.
  - Potentially dangerous animals (usually abroad), such as wild bears.
  - Wild animals with young.
  - Knowledge of open shooting season (usually October to January).

- **Process**

  - Consider what the process involves – does it include:
    - Interviewing groups or individuals.
    - Manual Handling.
    - Driving off road or driving specialist vehicles.
    - Handling or working with animals.

- **Transport**

  Travel is one of the areas where most incidents happen during fieldwork, consider;
  - Transport to and from the site – where appropriate an itinerary including a record of flight times and numbers.
  - Any transport on site.
  - Also consider whether you are carrying any dangerous goods.

- **Equipment**

  What equipment is needed for the activities to be undertaken? Consider:
  - Machinery.
  - Specialist equipment e.g. climbing, sailing etc.
  - Electrical equipment.

- **Violence**

  Consider the potential for violence, political or civil unrest. Violence can be encountered anywhere, but the chances are increased in urban environments. Violence can take the form of:
  - Violent crime such as mugging.
  - Being caught up in local unrest such as political demonstrations.

  Violence could result from people misinterpreting why activities such as questionnaires are being carried out. This is more likely when working alone, dealing with particular high risk individuals and groups, or working in areas with high crime rates.

- **Individuals**

  Consider your capabilities and experiences and those of others within the group to ensure that these are catered for as far as possible and that individuals have the opportunity to take part, this should include:
  - Medical considerations
    If you are currently taking medication you **must** ensure you have enough to cover the duration of the trip, with enough to cover in case of delay. You should also know the name of the medication, not just the trade name that is used as it is not always easy to obtain medication abroad and it may have a differing composition to that found in the UK.
  - Experience of travel or activity.
  - Any disabilities.

- **Work Pattern**

  Consider the pattern of work while undertaking the activity, will you be working shifts, working at night, long hours, also consider potential of lack of sleep, exhaustion etc.

- **Permissions Required**

  Do you require permission to carry out the work e.g. from the owner of the land, for entry into the country etc. Include details of any permissions that you have obtained and any restrictions on activities placed within them. Permission should be sought prior to the field trip and activity however if needed when overseas the Foreign Commonwealth Office, Embassy or Consulate of the Country will be able to advise as to the legislative requirements and permissions required.

- **Other specific risk assessments required**

  Are other assessments required e.g. for Control of Substances Hazardous to Health (COSHH), Manual Handling, Lone Working, if they are required either include details or attach as a separate risk assessment.

- **Health Questionnaire**

  Information should be submitted in confidence to your School. In some cases, evidence of fitness to undertake the trip or specific activities may also be required from a doctor (e.g. fitness to fly).

- **Health Surveillance Required**

  The possibility of exposure to certain substances may require a more extensive level of health surveillance and monitoring. Health surveillance may be required under specific regulations e.g. COSHH.

  Also give consideration to whether the site might contain any potentially hazardous substances, as some may occur naturally, as a result of previous activity or as the result of pollution. Pre-existing medical conditions may make an individual more vulnerable to the adverse effects of some substances and in some cases pathogens if they have reduced immunity.

  Substances to be aware of include:
  - Specified biological agents (human or transmissible animal pathogens "zoonotics").
  - Carcinogens.
  - Toxic chemicals (with both short term acute and long term "chronic" effects).
  - Allergenic substances (some wood dusts, paint vapours, lubricants and animal fur).
  - Radioactive chemicals.

  For more information on these substances, consult the specific guidance documents; contact your local Health and Safety Co-ordinator or Faculty Health and Safety Manager.

- **Vaccinations Required**

  In some cases you may potentially be exposed to infectious or contagious diseases such as Tuberculosis, Hepatitis B and Malaria which may require immunisation or prophylactic medication to prevent infection or contraction. You may also be required to have proof of immunisation for the Country / Countries that are to be visited.

  Exposure to these diseases will dependent on the area being visited. Advice is available from Occupational Health (Staff) the Student Medical Practice (Students) or from your own General Practitioner. Further advice can be sought from advisory bodies such as the World Health Organisation (WHO).

- **First Aid Provision**

  Provide appropriate first aid kits and means of correct treatment of casualties. Also ensure that there is an appointed person to monitor all first aid provision, and take charge of any situation that may arise. A basic First Aid Kit should contain equipment (e.g. bandages, dressings, plasters etc) in sufficient quantities appropriate to the number of participants, the duration of fieldwork and the planned activities.

  Consideration should also be given to any specialist equipment not normally required in a basic First Aid Kit (e.g. hypodermic needles, syringes, sterile saline). All participants must be informed of the arrangements for first aid, the location of facilities

when on fieldwork, who the first aider(s) is / are and the reporting mechanism following an accident.

When visiting some areas of the world consideration of emergency provision for injury or ill-health must be made. It may be necessary to include some medications, sterile solutions such as water and sterile hypodermic needles and syringes in the emergency kit. It is recommended that this is only done when absolutely necessary and following advice from the Occupational Health Service.

Additional Supporting Information

- **Pre-departure briefing**

- **Training**

  During the planning and risk assessment process training needs may have been identified, include this and whether training has been carried out.

- **FCO Advice**

  Include FCO advice when travelling overseas. Also consider any potential increased risks associated with visiting particular countries or regions, often in the form of military or political unrest.

- **Supervision**

  Includes levels of supervision required for the activities, this should be appropriate to the experience of the individual participants. When on a group fieldwork activity the ratio of Staff to Students or experienced to novice participants, should be determined by taking into account the type of activity, size of the group and their experience.

  When undertaking specialist activities such as diving which are being run by or in conjunction with a partner organisation their advice must be sought regarding supervision levels. Note that when a third party partner organisation is used they must provide appropriate health and safety documentation any other requirements (e.g. specific personal protective equipment) for the activities.

  Supervisors must be named in the risk assessment and plan, and any specialist responsibility, qualification, training, in-house training and previous experience must also be included; e.g. trained in first aid, or a specialist instructor in rock climbing or sailing etc.

- **Other Controls**

  Consider any further controls such as registration with the embassy or local authorities when entering a country.

- **Persons at Risk**

  Identify anyone else who may be at potential risk from the work being carried out. This may include employees of partner institutions or the general public.

- **Additional information**

- **Accident / Incident Reporting**
  All accidents, incidents and cases of ill-health associated with the fieldwork must be reported to Health and Safety Services through the Sentinel accident reporting system. When these incidents include fatalities, serious injuries such as broken bones, hospitalisation, or absence from work or study for more than three days these must be reported immediately. Accidents should be reported to the Activity Organiser, Fieldwork Co-ordinator or Health and Safety Co-ordinator.

- **Waste**
  All waste that is produced as part of a fieldwork activity must be disposed of in accordance with local regulations (Country specific) or if returned to the University disposed of in accordance with University requirements (link to waste manual / standards and guidance).

- **Personal protective equipment (PPE)**
  The risk assessment must determine the requirements for PPE. The University will supply **specialist** PPE for specific tasks, such as rigger gloves for certain manual handling or hardhats for working under cliffs.

- **Clothing and footwear**
  Identify suitable clothing for the trip and activities. This includes items such as:
  - Walking boots.
  - Rain wear.
  - Cold weather clothing.

For further advice and guidance please contact your local Health and Safety Manager or Health and Safety Co-ordinator.