Research Risk Assessment Policy

It's the responsibility of the principal investigators (PI) and researchers to identify reasonably foreseeable risks associated with their research and control the risks so far as is reasonably practicable.

All participants and research assistants have the right to expect protection from physical, psychological, social, legal and economic harm at all times during an investigation. Certain research may also present reputational, legal and / or economic risks to the University.

As part of the ethical approval process for research involving human participants you are required to identify potential risks associated with your research and the action you will take to mitigate risk. You may be asked to submit your risk assessment.

The risk assessment process is a careful examination of what could cause harm, who/what could be harmed and how. It will help you to determine what risk control measures are needed and whether you are doing enough.

Risk Assessment Responsibility

The PI and researchers need to take responsibility for all assessments associated with their projects. Occasionally you may need research workers or students to risk assess an aspect of the work and you will need to check the assessments are adequate and sign them off.

Risk Assessment Process

The risk assessment process is a careful examination of what could cause harm, who/what could be harmed and how. It will help you to determine what risk control measures are needed and whether you are doing enough.

To simplify the process you can use the health and safety risk assessment templates, risk estimation tool and guidance for all risks associated with your research project. Please refer to the research risk estimation guidance under how to carry out a risk assessment below to assist you.

Typical risks that need to be considered as part of research ethics are:

Social risks: disclosures that could affect participants standing in the community, in their family, and their job.

Legal risks: activities that could result in the participant, researchers and / or University committing an offence; activities that might lead to a participant disclosing criminal activity to a researcher which would necessitate reporting to enforcement authorities; activities that could result in a civil claim for compensation.

Economic harm: financial harm to participant, researcher and / or University through disclosure or other event.

Reputational risk: damage to public perception of University or the University/researchers' reputation in the eyes of funders, the research community and / or the general public.

Safeguarding risks: Risk to young people, vulnerable adults and / or researcher from improper behaviour, abuse or exploitation. Risk to researcher of being in a comprising situation, in which there might be accusations of improper behaviour.

Health and safety risks: risks of harm to health, physical injury or psychological harm to participants or the researcher. Further information on health and safety risks is given below.

Health and Safety Risks

The potential hazards and risks in research can be many and varied. You will need to be competent and familiar with the work or know where to obtain expert advice to ensure you have identified reasonably foreseeable risks. Here are some common research hazards and risks:

- Location hazards and risks are associated with where the research is carried out. For example: fire; visiting or working in participant's homes; working in remote locations and in high crime areas; overseas travel; hot, cold or extreme weather conditions; working on or by water. Also hazardous work locations, such as construction sites, confined spaces, roofs or laboratories. For overseas travel, you will need to check country / city specific information, travel health requirements and consider emergency arrangements as part of your research planning, by following the University's overseas travel health and safety standard.
- Activity hazards and risks associated with the tasks carried out. For example: potentially mentally harmful activities; distressing and stressful work and content; driving; tripping or slipping; falling from height; physically demanding work; lifting, carrying, pushing and pulling loads; night time and weekend working.
- Machinery and equipment. For example: ergonomic hazards, including computer workstations and equipment; contact with electricity; contact with moving, rotating, ejecting or cutting parts in machinery and instruments; accidental release of energy from machines and instruments.
- Chemicals and other hazardous substances. The use, production, storage, waste, transportation and accidental release of chemicals and hazardous substances; flammable, dangerous and explosive substances; asphyxiating gases; allergens; biological agents, blood and blood products.
- Physical agents. For example: excessive noise exposure, hand-arm vibration and whole-body vibration; ionising radiation; lasers; artificial optical radiation and electromagnetic fields. You'll need to gather information about the amount, frequency and duration of exposure inform whether you may need health surveillance for yourself and / or your research participants.

When to carry out a risk assessment?

Where the project poses significant risks, it is advisable to carry out a risk assessment.

How to carry out a risk assessment?

Risk assessments help you identify what may cause harm, who is it risk, how likely something will happen and how serious the consequences might be. Once you have this information, you can make decisions on how to get rid of the risk or adequately manage it.

It's a legal requirement to carry out health and safety risk assessments where significant risk has been identified. You must also communicate the findings, implement the risk controls and review it regularly.

Please follow the step-by-step guide below to carry out risk assessments using the University's standard risk assessment template and methodology.

If you're a student planning a project that has potential risks to the researchers or participants in the project, you'll be asked to carry out a risk assessment. If you don't know where to start your academic supervisor will help you. Read the guidance below about risk assessment and you'll find tools to help you.

Step by Step Guide

Get Ready

Before you start you, and everyone in your team, need to be 'risk assessment ready'. Use it as an opportunity to carefully examine anything in your workplace that could cause injury or ill health and what could be done to protect people. Risk assessments done like this are relevant and are successfully used to keep people safe and healthy.

Things to Consider

Who is responsible for carrying out risk assessments? Ensure they have the knowledge and appropriate training. This is usually the member of staff responsible for managing the work where there is significant risk. If you're unsure whether you need to carry out risk assessments, speak to your line manager or check your responsibilities.

Who is responsible for making sure risk assessments are completed. The Health and Safety Policy can help you identify who this is.

Managing health and safety, including risk assessments, is an integral part of good management and forms the basis of a positive safety culture. It is crucial to ensure everyone involved has the same values about good health and safety, knows what is going on and what their role is in the process.

Plan

Adequate resources make carrying out risk assessments manageable and achievable. If you are carrying out a major review of your risk assessments, it is recommended you plan the work and produce an action plan to track progress and help identify resourcing. If the assessment project is part of a major project, we recommend you include it in the overall project planning process.

Allowing enough time ensures the assessment process will be carried out carefully and in full. This includes time to research legal and industry standards and best practice. Time should also be available for others to engage and support the assessor and in implementing the risk controls. Managers who recognise that it's part of the day-to-day work, and not an add on, will create an environment in which quality assessments can be produced.

Consider the following questions. They are a systematic way of gathering information you need and can help identify the hazards.

What are the locations where the activities are taking place?

What substances could people be exposed to? You'll need to gather information about the concentration, amount, frequency and duration of exposure.

What equipment is being used? You may also need to gather information about noise and vibration to inform whether you may need health surveillance.

What physical agents are people exposed to? This covers noise and vibration, ionising radiation, non-ionising radiation and electromagnetic fields. You'll need to gather information about the amount, frequency and duration of exposure.

What are the activities being performed?

Who are the people involved in, or affected by, these activities? Make sure you have sufficient detail on them, for example job titles, undergraduates or postgraduates, contractors and the numbers that could be affected.

Do you have people at increased risk? Is there anyone especially at risk due to medical conditions, disabilities, pregnancy and new motherhood?

Identify the hazards, hazardous events and consequences

A risk assessment should identify hazards, hazardous events and consequences:

hazards: things with the potential to cause harm

hazardous event: takes place when someone or something interacts with the hazard, allowing it to cause harm. With physical agents and substances you'll need to make an informed decision about the nature of the hazard, amount, frequency and duration of exposure. This information will need to be recorded on the assessment form.

consequence: the likely nature of the most probable harm that could arise. For example, a wet floor (the hazard) in the washing up area could cause kitchen staff to slip (hazardous event) leading to concussion, serious sprains or minor fractures (consequences).

Understanding the differences between these and how they connect to each other will help you work through the process logically and efficiently. It will also help the end users understand what could hurt them and how. It will help you to correctly assign the risk controls by breaking down the risk into its component parts of likelihood of the hazardous event and the severity of the consequence.

Tips on getting it right

Hazard descriptions should be adequate to inform the end user. Remember, the end user may be new to the job or not aware of abbreviations, local arrangements and terms.

Deal with one hazard at a time. Grouping hazards can muddle the hazardous events and consequences.

Make the hazards obvious within your risk assessment. Clearly identifiable hazards will help the end user quickly understand what can cause them harm.

Some hazards may have more than one hazardous event. You'll need to consider these multiple events separately with their consequences to successfully manage the risks arising from that one hazard.

Different groups of people can be affected by different hazards. Identifying who is at risk from your hazards will make it relevant to them and help you target your risk controls.

Hazards can present either health or safety consequences, or both. Sometimes the harm is immediate and obvious, or may not be apparent and only realised years after exposure. Think short and long term consequences.

You will need up to date information to do this stage well and the sources can be many and varied. Things change over time and get updated. To ensure you're up to date, use common knowledge, industry or sector knowledge and expert knowledge to help identify reasonably foreseeable hazards. You should know where to find this and know when to seek expert knowledge.

Estimate and evaluate the risk

The next step is to estimate and evaluate the risk from a hazard. Risk is the product of two factors:

the likelihood of the hazardous event occurring (likelihood)

the expected consequence of the hazardous event (consequence)

Once you've assigned the risk, you need to take appropriate action to adequately manage it.

Risk control measures

Risk control measures are put in place to control the risk from a hazard by eliminating it or reducing either the likelihood or consequence or both. They should be a combination of protective and preventative controls and you should apply the hierarchy of controls, starting at the top to ensure, so far as is reasonably practicable, the most effective controls are used to reduce the risk.

Reviewing and health surveillance monitoring

The last step is to review your findings and is an important part of the process even if the risk ratings are low. You need to do this in order to ensure the assessment stays relevant and valid. There is no standard review period, only that it should be carried out regularly. This is because things change over time. For example new procedures, legislation, equipment and the people at risk change. Reviews are also triggered when new information comes to light, such as information about a substance or outcomes of an incident investigation or HSE prosecution.

Health surveillance might be necessary to monitor how effective your risk controls are for noise and vibration, ionising radiation, non-ionising radiation, outdoor work (sunlight) and electromagnetic fields hazards and associated risk assessments. It allows for early identification of ill health and helps identify any corrective action needed. Health surveillance results should be taken into account as part of your risk assessment review for these risk assessments.

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