Risk Assessment

Module 3
Decide who might be harmed and how

Once you have identified the hazards that could be encountered, for each of these then you need to be clear about who might be harmed and how. In this way you can more easily identify the best way of managing the risk.

Remember:

**RISK is the likelihood that the hazard will actually cause harm**

Risk Assessment requires assessing two main factors:

1. **Likelihood** – evaluation of the probability that the consequence will occur
2. **Severity** – the scale of the consequence that could occur.

Risk is a normal part of everyday lives, such as driving, crossing the road, or pursuing leisure activities.

However, the consequences of risks can be both over- and under- estimated. This is why it is important to have informed persons who are familiar with the area and who can identify the hazards and likely consequences to assist with the risk assessment process.

Try to identify the different groups of people that may be affected by the work taking place. This means looking at not only the persons conducting the activity, but any workers who share the area, or enter the area for supervision, maintenance, cleaning or any visitors to the area.

In each case and for each hazard it is important to be clear what group of persons could be harmed by that hazard and in what way.

E.g.

**Electricity**
Chemist working in fume hood with rotary evaporator and hotplate gets electric shock from damaged cable

**Chemical**
Chemical burn to skin of chemist, due to spillage of materials

**Slips, Trips and Falls**
Cleaner trips over extension lead whilst walking into laboratory

**Remember:**

**Some people may be particularly vulnerable to a particular hazard such as:**
- Young persons, new or inexperienced workers, people who are working alone, pregnant workers, disabled persons.

Special controls may need to be put in place to protect them from harm from a particular risk, and extra thought will be needed by the assessor(s).

In the case of lone working, the hazards and intrinsic risks may be the same as at other times, but the consequence of control failures may become significant. The importance of lone working is a special case, and extra controls and considerations are needed when persons are working on their own, or out of hours in the laboratory. Most chemistry departments have procedures in place for lone and out of hours working which must be adhered to. These are likely to include notifying someone of where you are and how long you are likely to be.

It is always a good idea to review your assessment with others who use the area to check that you have not forgotten anybody who might be affected by the hazards.

The Royal Society of Chemistry Environment, Health and Safety Committee has already prepared notes on each group of workers listed above.