

## HELP SHEET FOR TEACHERS

### Napo's Hazard Hunter: Lesson One – Identification of risks and hazards

#### **Napo in... Risky business**

Risky business is a short film about hazards and risks at work, and the need to assess risks and act on the findings to make workplaces safer and healthier. The film looks at hazards and some of the most common workplace risks, and the need to: 'Stop, Think and Act'.

The film seeks to explain the difference between hazards and risks, how these can be eliminated or reduced, and to demonstrate these through practical situations so that there is a greater understanding of the meaning of 'Risk'.

#### **Risk assessment**

Our aim is to make risk assessment and its importance in the prevention of accidents and ill health at work more clearly understood. Specifically we aim to:

- Explain the difference between hazard and risk
- Provide an introduction to risk assessment
- Illustrate, by example, what we mean
- Provide a bridge between the theory and the practice

#### **Why carry out a risk assessment?**

Risk assessment is the basis for successful safety and health management, and the key to reducing work-related accidents and occupational diseases. If it is implemented well, it can improve workplace safety and health – and business performance in general.

#### **What is risk assessment?**

Risk assessment is the process of evaluating risks to workers' safety and health from workplace hazards. It is a systematic examination of all aspects of work that considers:

- What could cause injury or harm
- Whether the hazards could be eliminated and, if not,
- What preventive or protective measures are, or should be, in place to control the risks

#### **Typical hazards in workplaces (many of them are present at home too) include:**

- Electricity
- Fire
- Tools, especially cutting tools such as blades or knives
- Machinery
- Slipping on the floor, falling from ladders or stairs, falling from height (e.g. from a scaffolding or from a roof)
- Transport (to vehicles, drivers or pedestrians)
- Musculoskeletal disorders (MSDs) due to handling heavy loads, twisting and turning, posture (e.g. work with VDU's), repetitive movements (e.g. on an assembly line)
- Chemicals – immediate damage due to inhalation, burns or irritated skin, and long-term effects such as cancer, respiratory diseases and allergies)



- Biological – bacteria, fungi or virus, e.g. hospital, laboratory of medical analysis, poor maintenance of the air conditioning plant
- Noise, vibrations, laser radiation, ionizing radiations, electromagnetic fields, UV rays, etc

There are a variety of episodes taken from different Napo films that can be used to present most of these risks. (table A)

### The five-step approach to risk assessment

This lesson focuses on the first two steps to risk assessment; identifying hazards and those at risk and evaluating and prioritising risks. The other three steps are presented in lesson 2 of Napo's Hazard Hunter.

*Step 3 – Deciding on preventive action, Step 4 – Taking action, Step 5 – Monitoring and reviewing are covered by the second Napo Hazard Hunter lesson entitled intervention and prevention.*

#### Step 1 – Identifying hazards and those at risk

Remember: a hazard can be anything – work materials, equipment, work methods or practices – that has the potential to cause harm.

Here are some tips to help identify the hazards that matter:

- Walk around and look at what could cause harm
- Ask those in the area about problems they have encountered
- Consider hazards such as noise or exposure to harmful substances, which have long-term effects, as well as the more obvious hazards like slips and trips

For each hazard it is important to be clear about who could be harmed. Identify groups of people, not individuals, such as 'stores', 'library' or 'passers-by'. Some groups might be at greater risk than others, for example people with a disability, young children or older people. (see episode 2 "Identify the unknown" in Napo in Risky business)

#### Step 2 – Evaluating and prioritising risks

Remember: a risk is the chance, high or low, that somebody may be harmed by the hazard.

The next step is evaluating the risk arising from each hazard. Consider:

- How likely it is that a hazard will cause harm
- How serious that harm is likely to be
- How often (and how many) workers are exposed

A straightforward process based on judgement and requiring no specialist skills or complicated techniques is sufficient for many workplace hazards or activities. These include activities with hazards of low concern, or workplaces where risks are well known or readily identified. Risks should then be prioritised and tackled in that order.

The top priority is risks that cause serious accidents (e.g. falls from height) and those that have a high probability to cause accidents (e.g. slippery or damaged floors). (see episode "Assess the risk" in Napo in Risky business)



**Table A**

Risk	Film	Scene
<b>Road accidents</b>		
Hit by a vehicle	Napo in... Safe on site	6. Keep them apart
Hurrying or a lack of concentration	Napo in... Clean sweep	1. Change of plan
Being tired and in a hurry	Napo in... Safe maintenance	5. In a rush
High speed and hidden risks	Napo in... Risky business	5. Risky combination
<b>Fire</b>		
Fire	Napo in Danger chemicals	3. Flammable
Fire	Best signs story	2. Prohibition sign – No smoking
Fire	Best signs story	4. Rescue sign – emergency exit
Fire	Best signs story	5. Fire protection sign – fire extinguisher
<b>Electricity</b>		
Electricity	Napo in: Safety in... and outside of work	Sequence of Napo preparing the party lights
<b>Machinery</b>		
Machinery	The adventures of Napo	5. The right protection at the right time
Machinery	Napo in... Risky business	1. Caution hazards
<b>Noise</b>		
Exposure to noise	Stop that noise	Full film
<b>Chemicals</b>		
Chemical risks	Napo in... Danger chemicals	Full film
<b>Slips and falls</b>		
Risk of slipping	The adventures of Napo	1. Why signposting is important
Falling down stairs	The adventures of Napo	2. Signposting is not sufficient
Falling down stairs	Napo in: Safety in... and outside of work	Sequence of Napo on the stairs full of objects
Fall from height	Napo in... Safe on site	2. Don't fall for it
Falling objects	Napo in... Safe on site	1. Building in safety
<b>Manual handling</b>		
Heavy loads	Napo in... Safe on site	5. Lightning strike
Heavy loads	Napo in... Lighten the load	3. Divide and rule
Heavy loads	Napo in... Lighten the load	10. Hold me tight
Heavy loads	Napo in... Lighten the load	6. The duel
Bad posture	Napo in... Lighten the load	5. Radical ergonomics
Bad posture	Napo in... Lighten the load	8. Think and move
<b>Vibrations</b>		
Vibrations	Napo in... Lighten the load	4. Bad vibrations

*The second lesson of Napo's Hazard Hunter introduces the other side of Risk Assessment: Intervention and prevention.*

This teaching resource has been produced by EU-OSHA in consultation with the Napo Consortium – HSE (UK); DGVU (Germany); INAIL (Italy); INRS (France); SUVA (Switzerland); and AUVA (Austria).

