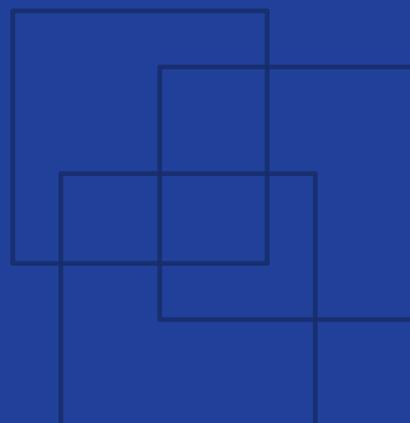




International  
Labour  
Organization

# Introduction to Health & Safety

Working conditions



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# Factory Improvement Toolset

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT has been developed to be a sustainable, time- and cost-efficient option for supporting factories to enhance productivity through improved business practices and working conditions. FIT focuses on areas of production improvement and actions to be taken specific to each participating factory. It can be utilized as stand-alone learning tools or to complement other training programmes.

With each module lasting no more than 2.5 hours, FIT enables factories to train personnel, whilst minimizing interference with production realities. The easy-to-use methodology makes it possible to rapidly scale the implementation to reach a large cohort of trainees across multiple production facilities.

Working in small groups, participants review real-life situations and engage in discussions to determine improvements to be made in factory without an external trainer or specialist. This self-facilitated, activity-based and highly participatory learning approach positions participants as both student and teacher and makes the toolset self-tailored to the needs and interests of each group.

## About this module

This FIT module on Introduction to Health & Safety is a training for garment manufacturers to improve working conditions in the factory. Participants will work on risk assessment and management. This module takes about 2.5 hours to complete.

## Upon completion of the training, participants should have:

- Understood the meaning and importance of Health & Safety in their own factory.
- Learnt how to assess risks in their factory by identifying hazards and evaluating risks.
- Learnt how to manage risks in their factory by planning and implementing selected measures.

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The **Factory Improvement Toolset** of the **International Labour Organization (ILO)** are developed and provided by the ILO's **Enterprises Department**.

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# Guidelines for successfully using the training tool

## Read out-loud

The FIT tool is designed for participants to take turns reading the instructions in the modules out loud to the group. At least one member of the group should be selected in the beginning of the session to take this responsibility.

## Work as a group

Always work in groups of 5-7 during a FIT session. The programme will not be successful if participants work independently or do not collaborate with each other.

## Be active

Encourage everyone in the group to actively contribute to the discussion. Ensure that no group member dominates the discussion or does not participate at all.

## Monitor the time

Select one member of the group to monitor the time for each activity and remind the group when it is time to move to the next exercise.

## Complete the action plan

Complete the action plan at the end of the session. This will help ensure that FIT results in improvements in the factory. Review the plan a while after the session to make sure that actions in the plan has been completed accordingly.

# Icons

A set of icons is used throughout the modules to provide easy to recognize reference points for different tasks within each session and activity.



## Read out loud

One member of the group should read out loud to the rest of group.



## Knowledge link

Knowledge and skills are linked to other FIT learning resources and support.



## Time allotted

Indicates how much time each sessions and activity should take.



## Supplies needed

Indicates that supplies may be necessary to complete the session.



## Begin step-by-step instructions

Indicates that the step-by-step instructions for an activity are beginning.



## Think about it

Indicates additional information for the participants to think about.

# Measuring your performance

Measuring operational efficiency is a key aspect of running a productive factory. The box(es) below guides you in understanding which measurement indicator(s) can be used to measure and evaluate the performance of your factory in relation to the topic of this FIT module.

<b>Indicator 1</b>	<b>Number of accidents and near-misses</b>
<b>Definition</b>	The number of accidents and near-misses (accidents that almost happened) that took place in the factory over a certain period of time.
<b>Purpose</b>	To understand how often accidents happen or almost happen in your factory, what type and where, and which measures to take to avoid future accidents.
<b>Calculation</b>	Record every accident and near-miss happening in the factory (separately in each department), and consult records every month to calculate the total.
<b>Frequency</b>	Calculate monthly
<b>Responsible</b>	HR manager / OSH manager

<b>Indicator 2</b>	<b>Workers' perception of health &amp; safety in the factory</b>
<b>Definition</b>	Your workers' opinion on the level of safety and health (how safe and healthy they feel) in the factory.
<b>Purpose</b>	To understand your workers' opinion and situation, and identify what can be done to improve health and safety in your factory.
<b>Calculation</b>	Have your workers fill out the simple online survey (provided by the ILO – ask your FIT focal point for more information), and consult the results. Don't forget that surveys should be anonymous!
<b>Frequency</b>	Calculate every 6 months, or once a year.
<b>Responsible</b>	HR manager / OSH manager



Session 1

# Business case study

## Goals

**Preparing you for the type of discussions you will have with other group members throughout the learning module and understanding the benefits of being exposed to different perspectives.**

**Understanding better why health and safety are important in the factory.**

# Session 1

## Overview



**One member should read the full session out loud to the rest of group**



**15 minutes**



**Learning manual, pens, markers and poster paper**

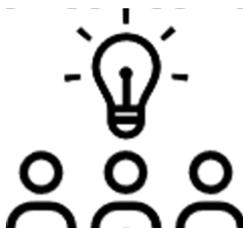
A business case study presents a real-life situation for learners to reflect on and discuss with other group members. By discussing the case, students learn from others' ideas and perspectives, and develop an understanding of the topic at hand within the workplace.



**One group member reads the case study out loud**



**The whole group discusses the case study**



**Everyone develops a deeper understanding of the topic**

# Activities

Activity

1



15 minutes

## Case study review and respond

The case study below presents a situation that could happen in real life.



### Instructions:

- 1) As a group, listen to one member read the case study below while following along in your learning module.

Thy is a new factory manager at the HS garment factory, and she has already spotted several hazards. For example, in the finishing room, workers use toxic chemicals, but do not use any masks or gloves. This is very dangerous as the toxic substances can go through their skin and damage organs such as kidneys and lungs. In the sewing room, all the workers sit on a bench, without back support. This can cause ergonomic problems such as neck pain, or joint muscle disorders. As a result, workers do not feel safe working in the factory and tend to leave within a year. It also increases costs for the factory, which needs to pay for damage, medical and compensation costs, and hire new workers.

Thy feels that the factory needs to improve its health and safety levels. First, together with all the department heads and workers' representatives, she lists the hazards that workers are exposed to in the factory. Then, they evaluate the measures that are currently in place to address each hazard, and what else should be done to better control them. Lastly, they come up with new measures, such as providing protective equipment like masks and gloves.

Since the new measures were introduced, the number of work-related accidents and illnesses has greatly decreased. The workers feel safer and find the working conditions better. As a result, they are more productive, and do work of better quality. This helps the factory be more profitable and cut costs.

- 2) Together, discuss Thy's situation by answering the three questions in table 1 on the next page.

## Table 1. Questions about Thy's situation

1. What problems has Thy identified? What impact do these problems have on the factory and its workers?

2. What does Thy do or change in order to solve these problems?

3. What are the results of Thy's solutions for the factory and its workers?

This page has been intentionally left blank and can be used for note taking.



## Session 2

# Learning about the topic

### Goals

**Understanding the meaning and importance of health & safety in your factory.**

**Identifying and mapping hazards in the factory and understanding who they might harm and when.**

**Evaluating risks in the factory by considering existing measures and assessing what else needs to be done.**

**Learning how to select measures and draft an action plan for implementation.**

# Session 2

## Overview



One member should read the full session out loud to the rest of group



100 minutes



Learning manual, pens, and markers

This training module aims to help you improve the way your factory operates by improving health & safety in your factory. Health means keeping your workers healthy, and safety means protecting them from harm. Improving health & safety is important for everyone. It makes your factory a better place to work, and it also helps improve productivity and quality. Throughout this module, you will work on the three steps below.

Identifying **hazards**

Evaluating **risks**

Selecting **measures**

First, you will learn more about the meaning and importance of health & safety. Then, you will move on to learning more about how to assess and manage risks in your factory by identifying hazards, evaluating risks, and selecting measures.



This module should not be considered a comprehensive manual on health and safety, but rather a basic introduction. Each issue should be further considered. To learn more, ask for the “Better ergonomics” and “Improving welfare” modules!

# Activities

Activity

## 2a



20 minutes

## Why Health & Safety?

**Health & Safety** (H&S) means (1) keeping your workers healthy, and (2) protecting them from harm. H&S is important for many reasons. In this activity, you will discuss why it is important, its benefits, and the cost of not considering it.



### Instructions:

- 1) Together, discuss:
  - What are you already doing in your factory to keep workers safe and healthy?
  - Why would you like to improve H&S in your factory? Why is it important to you?
- 2) Together, look at table 2 listing benefits of improving H&S, then discuss:
  - How can H&S help you improve quality?
  - How can H&S help you improve productivity?
- 3) Together, look at table 3 listing costs of not improving H&S, then discuss: Are you currently facing any of these costs? If so, circle them in the table.
- 4) Together, look at table 4 listing important H&S words, then match each one with its correct description on the right by drawing a line. The solutions are at the bottom of the page.



Safety & Health concerns everyone in your factory. Therefore, workers and their representatives should be consulted and participate actively in your risk assessment and management processes. They may have noticed things that are not immediately obvious to management or an external service!

**Table 2. The benefits of H&S**

Better working conditions	Improved quality of garments
Improved productivity of the factory	Compliance to legal or buyer requirements
Saving costs	Reduced worker turnover

**Table 3. The costs of not improving H&S**

Medical expenses	Compensations	Lost working days
Reduced production	Re-training of workers	Equipment damage / repairs
Low motivation	Bad reputation	Lost contract (non-compliance)

**Table 4. Important words**

<b>Hazard</b>	a. Applying “measures” or “controls” in order to eliminate, control, or minimize hazards / risks
<b>Risk</b>	b. An examination of what could cause harm to workers or anyone at risk, and whether more should be done to prevent harm.
<b>Risk assessment</b>	c. Anything that may cause harm
<b>Risk management</b>	d. The prospect that someone could get harmed by a hazard, and the estimation of how serious the harm could be.

Solutions: Hazard → a.; Risk → d.; Risk assessment → b.; Risk management → d.

## Activity

# 2b



20 minutes

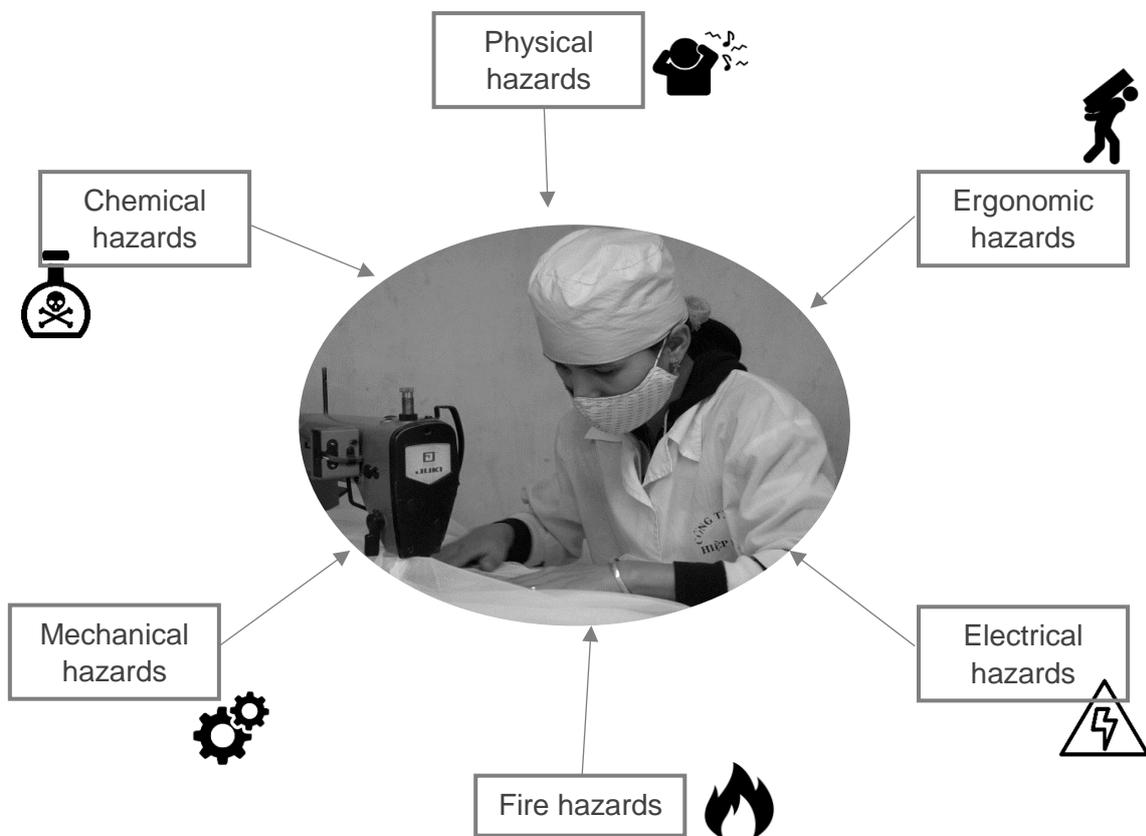
## Understanding hazards

Identifying hazards is the first step of improving **Health and Safety** in your factory by conducting risk assessment and management. In this activity, you will learn more about typical hazards in the factory.



### Instructions:

- 1) Together, look at the different categories of hazards in the factory below, and make sure everyone understands.
- 2) Together, look at table 5 listing common hazards which can cause harm (accidents / health issues). Then replace each listed hazard in the right category. Examples are given to guide you.
- 3) Have three participants read aloud the three scenarios in table 6. Then, for each scenario, discuss the following questions:
  - Which hazard was the worker exposed to?
  - What was the consequence?



**Table 5. Common hazards in the factory**

<p>Toxic fumes or vapours          Bad workstation design          Untidiness and disorder          Poor standing or sitting position          Improper use of machines          Poor use of electrical equipment          Lack of breaks          Machine malfunctions          Dirt and garbage          High / low temperatures          Flammable chemicals          Electrical circuit overloading          Lack of ventilation          Insufficient lighting</p>	<p>Broken or old storage equipment          Blocked pathways          Pest and vermin          Long working hours          Exposed electrical wires          Poorly stored objects which may fall down          Toxic materials          Vibrations          Dust          Poor quality of equipment (tables, chairs, etc.)          Missing or broken machine guards          Liquid spills          Lack of protective wear and equipment          Smoking in the factory</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Categories of hazards**

Physical 	Chemical 	Ergonomic 
Noise	Toxic liquids	Lifting heavy loads
Fire 	Electrical 	Mechanical 
Poor storage of flammables	Poor electrical wiring	Poorly maintained machinery

Table 6. Hazards and their consequences

**Scenario 1:** Rajesh is a storage room worker. In the stores, goods and materials are stored disorderly. Pathways are often blocked by boxes. Yesterday, Rajesh was carrying a large fabric roll, and tripped on a box that was in his way. He broke his arm, and cannot work for at least a month. The fabric got torn and cannot be used.



**Scenario 2:** Quynh is a cutting operator. Cutting knives are old, and the guard missing on most of them. There are not enough metal mesh gloves for everyone. Today, she is not wearing a glove. While using the knife, her arm slips, and her finger gets cut. Other operators worry that it will happen to them, and refuse to work until management makes changes.



**Scenario 3:** Aung works in the finishing room. The room is very hot, not well ventilated. Aung has to stand for long period of times while ironing. She starts to feel dizzy. Her palms are sweaty, and the iron gets slippery in her hand, causing her to burn herself badly. Aung has to pay doctor fees, cannot work for a week, and her supervisor blames her for getting distracted.



## Activity

# 2c



20 minutes

## Identifying hazards

Now that you understand what are the different hazards in the factory, you can **identify hazards** in your own factory as a first step towards improving health & safety. In this activity, you will learn how to identify hazards in your own factory.



### Instructions:

- 1) Together, look at table 7 listing hazards on the next page: Is this what you found in activity 2b?
- 2) Together, discuss:
  - Which of these hazards have caused harm in your factory? Underline them in the table and share with the group.
  - Which of these hazards are most likely to cause harm in your factory? Circle them in the table and share with the group.
- 3) Together, select one room in your factory (for example, the stores), and draw it in table 8. Then, draw or list all the hazards you can think of in that room using the drawing.
- 4) Together, discuss the following questions:
  - **What:** What categories of hazards are present in this room (mechanical, fire, electrical, etc.)?
  - **Who:** Who is exposed to these hazards?
  - **How:** How could these hazards cause harm (both short- and long-term)?



Make a similar drawing for each room of the factory, and ask for all workers' input to better understand hazards and how and to whom they may cause harm. Don't forget about long-term hazards (such as prolonged exposure to noise). Also ask and check records to identify past cases of accidents or ill health.

**Table 7. Common hazards in the factory**

<b>Physical</b>	<b>Mechanical</b>	<b>Ergonomic</b>
<ul style="list-style-type: none"> <li>• Noise,</li> <li>• Insufficient lighting,</li> <li>• Lack of ventilation,</li> <li>• Vibrations,</li> <li>• High / low temperatures,</li> <li>• Untidiness and disorder, Dirt and garbage,</li> <li>• Liquid spills,</li> <li>• Pest and vermin,</li> <li>• Broken / old storage equipment,</li> <li>• Poorly stored objects which may fall down,</li> <li>• Blocked pathways</li> </ul>	<ul style="list-style-type: none"> <li>• Poorly maintained machinery,</li> <li>• Improper use of machines,</li> <li>• Machine malfunctions,</li> <li>• Missing or broken machine guards</li> </ul>	<ul style="list-style-type: none"> <li>• Poor quality of equipment (tables, chairs, etc.),</li> <li>• Bad workstation design,</li> <li>• Long working hours,</li> <li>• Lack of breaks,</li> <li>• Poor standing or sitting posture,</li> <li>• Lifting heavy loads,</li> <li>• Lack of protective wear and equipment</li> </ul>
<b>Fire</b>	<b>Electrical</b>	<b>Chemical</b>
<ul style="list-style-type: none"> <li>• Poor storage of flammables,</li> <li>• Smoking in the factory</li> </ul>	<ul style="list-style-type: none"> <li>• Poor electrical wiring,</li> <li>• Electrical circuit overloading,</li> <li>• Exposed electrical wires,</li> <li>• Poor use of electrical equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Dust,</li> <li>• Toxic fumes or vapours,</li> <li>• Toxic materials,</li> <li>• Toxic liquids,</li> <li>• Flammable chemicals</li> </ul>

## Table 8. Mapping hazards

Draw a room of your factory below. Include as many details as possible (doors, windows, equipment, machines, storage areas, work stations, fans, lights, etc.).

Activity

2d



20 minutes

## Evaluating risks

Once you have identified hazards in your factory, you can **evaluate risks** to help you improve Health & Safety by evaluating which controls (or measures) exist, and what more should be done. In this activity, you will learn about safety measures, then learn how to evaluate risks.



### Instructions:

- 1) Have a participant read aloud the text box below and make sure everyone understands.
- 2) Together, read through table 9 listing common safety measures. Then, for each one, think about two hazards that this measure could be used to address.
- 3) Together, discuss the following questions: Are you using any of these measures in your factory? Does it work? Why, or why not?
- 4) Together, list up to six hazards that you identified in the previous activity (table 8) in table 10. Then, complete the table by writing down for each hazard what is already being done and what more could be done to address it and prevent harm in your factory.



**Evaluating risks** means (1) evaluating what is being done already to control hazards, and (2) evaluate what else needs to be done to protect everyone from harm.

Table 9. Common Health & Safety measures

Measures	Hazards
<p><b>Clear working instructions:</b> Providing clear instructions (signs, in writings, posters, etc.) for the workers who are in contact with the danger</p>	<p>Example: Improper use of machinery; Poor standing position.</p>
<p><b>Personal Protective Equipment (PPE):</b> Equipment or wear provided to workers to protect them from dangers, for example masks, gloves, hats, etc.</p>	
<p><b>Maintenance and housekeeping system:</b> System to ensure that the factory remains tidy, orderly, and clean. This can involve training workers in understanding and maintaining the system.</p>	
<p><b>Removing dangers:</b> Simply eliminating the danger by choosing not to use or purchase dangerous tools, materials, products, etc.</p>	
<p><b>Job rotations:</b> Workers rotate between different jobs in one room so that they do not get bored and lose focus, which easily leads to accidents.</p>	
<p><b>First aid:</b> Having a first aid kit and a person trained in first aid in each room of the factory. It does not prevent accidents from happening, but it can save lives.</p>	
<p><b>Training:</b> Workers are trained on how to keep themselves and their colleagues safe and healthy.</p>	
<p><b>Inspections:</b> Someone is responsible for inspecting and monitoring dangers using checklists, for example by checking and recording the temperature.</p>	
<p><b>Medical checks:</b> Having workers do medical checks regularly so that any injury / illness can be detected early enough, and measures can be taken in the factory to prevent it from happening again.</p>	



**Prevention** is the most important aspect of health & safety measures. Measures should help you create a culture of prevention.



Activity

# 2e



20 minutes

## Selecting measures

Once you have (1) identified hazards and (2) evaluated risks in your factory, you can move on to (3) **selecting measures** and planning the implementation. In this activity, you will select measures to manage risks in your factory using “the hierarchy of controls”.



### Instructions:

- 1) Together, look at table 11 listing the hierarchy of controls. Then, discuss: Why should measures implemented in the factory follow this order?
- 2) Together, fill in table 12 by selecting necessary measures to implement for up to four of the hazards that you have identified in your factory. Don't forget to respect the hierarchy of controls for each hazard! An example is provided to guide you.

Table 11. The hierarchy of controls

#### Measures (controls)

1. Measures to **eliminate** the hazard / risk  
Example: Removing the hazard or replacing it by a safer option.
2. Measures to **control** the hazard / risk at the source  
Example: Preventing access to the hazard, e.g. by guarding or locking doors.
3. Measures to **reduce exposure to** the hazard  
Example: Organizing work and training workers in working safely.
4. Measures that provide **welfare facilities** such as first aid kit in case of accident, or bathrooms to ensure hygiene.
5. Measures to ensure the proper, systematic use of **protective personal equipment**.



Employers and workers should work together as a team to ensure that each new measure will actually work and will not introduce new hazards instead.

Table 12. Selecting measures

Hazards	Measures	Type of control measure
<p>Example: Poor storage that can cause materials to fall down on workers</p>	1. Enforcing new storage systems and guidelines.	1
	2. Setting up a first aid kit in case of accident (trips, falls, etc.)	2
	3. Training workers in understanding and respecting the new system.	4



## Session 3

# Action items

### Goals

**Summarizing and revising the new knowledge gained.**

**Identifying concrete applications of the new knowledge that benefit your factory.**

## Session 3

# Overview



One member should read the full session out loud to the rest of group



20 minutes



Learning manual, pens, and markers

Throughout this module, you gained new knowledge on how to conduct risk assessment and management in order to start to improve health & safety in your factory.

Identifying **hazards**

Evaluating **risks**

Selecting **measures**

In this session, you will think of ways to apply your new knowledge to your own factory by reviewing best practices and drafting your own health & safety action plan.

# Activities

Activity

# 3a



5 minutes

## Best practices checklist

In this activity, you will review best health & safety practices as a next step for evaluating your own and implementing improvements.



### Instructions:

- 1) Together, look at the list of best practices in table 13, and put a ✓ in the column on the right if you use these practices in your factory.

Table 13. Introduction to Health & Safety

Best practices	✓
1. Factory management systematically identifies all hazards in each area of the factory, together with who is at risk, and what the consequences may be.	
2. Factory management evaluates what is being done and what more could be done to address each identified hazard.	
3. Factory management selects and implements measures following the hierarchy of controls.	
4. Workers are consulted to help identify hazards in each area of the factory and give feedback on how effective measures taken are.	
5. The factory records the number of accidents and near-misses in the factory to evaluate how effective measures are and what more could be done.	

Activity

# 3b



15 minutes

## Your action plan

In this activity, you will think of ways to apply your new knowledge to improve health & safety in your factory by drafting your own action plan.



### Instructions:

- 1) Together, fill in the action plan (table 14) on the next page. Identify a key problem that you want to solve and write down the solutions you identified while working on this module.

**Table 14. Introduction to Health & Safety – Action Plan**

<b>Problem identified</b>				
<b>Solutions identified</b>	<b>Action(s) to be taken</b>	<b>Person responsible</b>	<b>By when?</b>	<b>How will improvements be measured?</b>

# Introduction to Health & Safety

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FIT is being piloted in Asia under the regional Decent Work in the Garment Sector Supply Chains in Asia project funded by the Government of Sweden.

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