Learning from incidents
1.1 Why learn from incidents?

Effective learning from incidents (LFI) is critical for safe working. The causes of health, safety and environmental (HS&E) incidents are not new. Incidents are often repeat events or similar in nature to previous incidents. People then ask ‘why have we not learned from these past events and why do people continue to make errors or ignore rules?’

Through effective LFI, organisations gather knowledge about what went wrong in the past (incidents, accidents and near-misses) and change working practices to prevent future incidents. However, to avoid repeat incidents, organisations need effective learning processes where people are engaged and understand their role in incident prevention.

The Learning from incidents tool provides an easy to use framework and set of exercises that can be used at different levels in the organisation to analyse and improve LFI processes and learning opportunities. The tool is designed to:

• guide the implementation of LFI initiatives across the organisation or worksite, and

• prompt engaging discussions and deepen the learning from past events to prevent repeat injuries and losses.

It forms a part of the ‘Hearts and Minds’ toolkit available from the Energy Institute (for more information, visit http://www.energyinst.org/heartsandminds).

1.2 Who should use this tool and when?

The tool can be used by anyone with facilitation skills, including health and safety staff as well as team leaders and managers, and should involve the workforce at any level. Some exercises in this tool are designed to be used periodically whilst others can be used in bite size chunks whenever there is the opportunity for a safety discussion, such as:

• During HS&E training programmes aimed at improving onsite safety.

• When actively working to improve the LFI processes in your organisation.

• There has recently been an incident onsite or elsewhere that is of relevance to the organisation or team.

• You have an incident alert relevant to your team’s activities.

• You have found an incident alert relevant to a job that you are about to undertake.

Your organisation may already have LFI processes in place. For example, the organisation should already be investigating incidents and generating learning outcomes. Learning from incidents contains a set of tools to help make these processes more effective though engaging your workforce. You can also refer to Energy Institute Guidance on learning from incidents, accidents and events for more information about how to improve your LFI processes:

http://www.publishing.energyinst.org
It should be noted that, whilst this tool is used to engage the workforce, this does not mean that the workforce are the cause of incidents, nor the sole means of preventing incidents. The underlying causes of incidents are organisational failures to manage risk, and so learning outcomes should focus on ways to improve the safety culture, leadership decisions, and the safety management system. However, learning outcomes should also focus on improving local operational practices, strengthening the ‘barriers’ that prevent incidents – in essence, ‘bringing the management system to life’. If this tool is used with managers and leaders then the focus is more likely to be on addressing the systemic causes of incidents, and if used with frontline workers then the focus is more likely be on improving local operational practices. Both are important to address. The Stichting Tripod Foundation resources on Tripod Beta provide a good explanation of how incidents happen and how to investigate them: see http://www.tripodfoundation.com

1.3 Overview of the tool

Learning from incidents consists of four main parts:

**LFI process model**
The LFI process model helps the organisation map current LFI activities and identify potential gaps. The LFI process model includes six main phases common to all organisations:

1. Reporting
2. Investigating
3. Developing incident alerts
4. Communicating;
5. Reflecting
6. Implementing actions

The model helps the organisation integrate LFI activities in a way that supports learning throughout the LFI process.

**Reflective LFI engagement exercises**
Three workshop-style activities are provided that can help engage people with LFI, providing the means to help people reflect on incident information and apply lessons to their own operations, processes and behaviours.

**LFI hints and tips**
These can be used to guide the improvement of different LFI activities and processes. Hints and tips are provided for each of the six phases of the LFI process, for each question in the LFIQ (see below) and are based on good practice.

**LFI questionnaire (LFIQ)**
This helps the organisation evaluate the quality of its LFI practices and processes by measuring employee perceptions. The results can help those in the organisation identify and prioritise aspects and activities of the LFI process that need improvement.

1.4 Using the tool

Learning from incidents is not intended to be run as a single workshop, but rather as a number of workshops delivered at different times, to different people and even by different people. One possible approach for using the tool is described here:

- Run the LFI process model workshop (section 4) with managers and other people involved in LFI processes to explore current LFI activities in your organisation. Use the model to identify gaps and inconsistencies in LFI activities. (Frequency: once per year)
- Optional: You may want to use the LFIQ to gather information about people’s perceptions of LFI processes and practices as an input into the LFI process model workshop (Frequency: once per year)
- Use the LFI hints and tips as a supporting tool to help you improve areas of LFI identified as problematic. These hints and tips offer a general guide for improving elements of LFI in the organisation. (The LFI hints and tips can also support the LFI process model workshop and the Reflective LFI engagement exercises (section 5)). (Frequency: as needed)
- Run the Reflective LFI engagement exercises (section 5) with various different groups of people, and/or train other people, e.g. supervisors, to run these with their teams, to engage and involve people in LFI across the organisation. Involving people in LFI will give them a sense of ownership, which is invaluable for improving LFI. Section 5 Reflective LFI engagements provides information on when and how to run the three exercises, and who with. You may wish to concentrate on running only those engagement exercises that address areas revealed as needing improvement in the LFI process model workshop. (Frequency: often)

Figure 1: Using the tool
Learning from incidents

3.0 The Learning from incidents process

3.1 The LFI process model

The organisation may already have a process in place to learn from incidents. The LFI process model provides a common way to visualise this process, for planning how LFI activities can be better aligned or integrated to support effective learning. The model is applicable at different levels, for example in a work team where responsibilities for each phase of the model falls on just a few people, or in an organisational context where responsibilities are spread throughout the organisation. From start to finish, the LFI process can take anywhere from a few days to several months, depending on the scale of the incident and how widely learning is distributed throughout the organisation.

LFI starts when an incident or a near miss has happened, when information about an incident is circulated from another site or organisation, or when people raise concerns about onsite safety. These specific moments offer potential opportunities for learning, and are indicated in the LFI process model (figure 3).

Typically, there are seven phases to the LFI process:

Reporting
Every incident or near miss must be reported. Reporting an incident raises awareness of potential problems that could lead to another, similar, incident and provides a starting point for LFI. Reporting should be systematic and all events that could potentially jeopardise safety should be recorded. The organisation should prioritise reporting over other competing goals.

Investigating
During an investigation, incidents are analysed to identify the causes of the incident. Ideally, both immediate and underlying causes should be surfaced through the investigation process. For more detailed information on how to carry out incident investigation, consult Tripod Beta: Guidance on using Tripod Beta in the investigation and analysis of incidents, accidents, and business losses, and the Stichting Tripod Foundation website http://www.tripodfoundation.com.

Developing incident alerts
The incident investigation provides a baseline for recommendations for inclusion in ‘incident alerts’, ‘safety alerts’, ‘lessons learned’, ‘safety flashes’, ‘incident communications’ or ‘lateral learning’ – information bulletins, reports or videos to communicate with the workforce (the term ‘incident alerts’ is used in this framework, but your organisation may use a different term). Incident alerts are typically developed by a safety department or by managers who are familiar with work processes and practices. These incident alerts should include data about the context in which the incident occurred and the causes that led to it. They should be clear and help people understand what to do to prevent similar incidents from happening.

Communicating
Ideally, incident alerts should be communicated to everyone who might benefit from them. Sites should balance between communicating all incident alerts and targeting alerts to relevant groups of people. People with responsibility for developing incident alerts normally decide who should receive this information, although supervisors and line managers take responsibility for communicating incident information to their teams.

Reflecting
People need to be given opportunity to reflect on incident alerts, allowing them to think about the relevance of an incident to their own work. People must also be able to offer input and feedback for improving LFI, such as through identifying their own recommendations and actions for improving safety, or improving the LFI processes for creating incident alerts and communicating them. The inclusion of a reflection phase in the LFI process allows people to be actively engaged with LFI, rather than being passive recipients of information.

Implementing actions
During this phase people select which actions to implement into their work to enable avoidance of similar incidents. Implementing actions should be conducted once the previous phases are completed. Draw on the expertise of the workforce when implementing actions. LFI should result in a positive change in organisational processes or behaviour, leading to an increase in safety and a decrease in the chances of a similar incident happening. Without a change in organisational processes, practices or people’s behaviour, learning cannot have taken place.

Change in behaviour or processes
Learning should result in a change in behaviour and/or process. This could be as simple as updating a procedure, or as complicated as changing the culture of the organisation. Learning can only be said to have taken place if there is evidence of a change. The organisation should have in place a means of gathering this evidence. For example, in many organisations, recommendations from incident investigations are recorded in order to track when recommendations have been completed. Other mechanisms for recording change could include audits, staff surveys, site visits, etc.
5.0 Reflective LFI engagements

5.1 Engagement exercises

Much organisational knowledge rests with people, therefore it is important to allow and encourage people to reflect on, make sense of, and put into practice the information contained in incident alerts. Providing the time and resource to allow people to reflect on incidents is vital to learning. Engaging people in the LFI process itself is also necessary in order to ensure people take ownership of LFI.

This section describes three reflective LFI engagement exercises, providing ways to engage people with the LFI process and help them reflect on incident alerts. Each exercise is focused on a different phase of the LFI process, but all prompt/aid reflection.

A. Creating incident alerts

This exercise should include relevant people in turning investigation reports into incident alerts that can then be shared more widely. In this workshop the target audience of an incident alert (e.g. the frontline workforce) are the ones who actually create it. This exercise can be run by a facilitator with a mixture of relevant people when they wish to create a new incident alert.

Run this exercise if the developing incident alerts phase has been assessed as in need of improvement. It also provides a way to encourage the feedback loop, and allows participants to engage with incidents. This exercise may also uncover issues with the scope of the investigation itself, e.g. if investigations are not providing the necessary information to learn from.

B. Engaging with communication

This exercise is designed to include people in the process of reviewing how incident alerts are communicated. It helps encourage people to engage with the process of sharing incident alerts and to think critically about the incident alerts themselves. It can be run by a facilitator with a mixture of people who represent the target audience of the incident alert (this should be a different group to exercise A).

Run this exercise if the communicating phase has been assessed as in need of improvement. It can be used to help determine appropriate ways of communicating information about specific incidents, and as a way to review the quality of incident alerts.

C. Engaging with lessons learned

This exercise is designed to help people reflect on an incident alert and its recommended actions, in order to relate these to their own work, and to decide more specifically how they can complete the actions. This exercise can be run by a team leader with his or her team (this should be a different group to exercises A and B).

Run this exercise if the reflecting phase has been assessed as in need of improvement – or run when appropriate, such as when you want your team to learn from a specific incident.

Figure 4: Stages of the LFI process covered by exercises A, B and C
Learning from incidents

Effective learning from incidents (LFI) is critical for safe working. The reasons leading to many of our health, safety and environmental (HS&E) incidents are not new. Incidents are often repeat events or events that are very similar in nature to previous incidents. So the immediate question we ask is ‘Why have we not learned from these past events and why do people continue to make errors or ignore rules and good practices?’

Through LFI, organisations gather knowledge about what went wrong in the past (incidents, accidents and near-misses) and change working practices to prevent future incidents. But without effective learning processes, or effectively engaging with the workforce, organisations are at risk of repeating the same incidents, or suffering incidents with similar causes.

Learning from incidents provides an easy to use framework and set of exercises that can be used at different levels in the organisation to analyse and improve LFI processes and learning opportunities. The tool is designed to:

- guide the implementation of LFI initiatives.
- encourage engaging discussions to deepen the learning from past events to prevent repeat injuries and losses.

The Swiss Cheese model of accident causation in the work environment

ATTACHMENTS

There are two attachments:
1. Learning from incidents questionnaire (LFIQ)
2. LFI hints and tips

For more information please visit: www.energyinst.org/heartsandminds