

BULLETIN

**ATTENTION ALL
HEALTH AND SAFETY REPS**

**BEGINNER'S GUIDE TO
EFFECTIVE
ACCIDENT INVESTIGATION**

With the introduction of health and safety committees and representatives, the role of investigating accidents will increasingly be an activity performed not solely by the supervisor but also committee members or representatives. This bulletin provides basic guidelines for accident investigation.

WHY INVESTIGATE ACCIDENTS?

The main aim of investigating accidents is to:

- Prevent similar accidents recurring in the future.
- Identify any new hazards.
- Identify and choose suitable controls.

We want to reduce the cost in pain, suffering and loss of earnings of injured workers. We also wish to reduce productivity losses. Therefore, we need to fully and accurately investigate the circumstances and causes of any accident.

WHEN TO INVESTIGATE ACCIDENTS?

It is important that any investigation occurs as soon as possible. The less time between an accident and the investigation, the more accurate the information that can be obtained. While concern for an injured worker should take precedence over everything else, when accidents involving injury or illness occur, early investigation is essential.

WHAT TO INVESTIGATE?

Obviously, any accident, in which injury or significant property damage occurs, should be investigated. There will also be events usually referred to as 'near misses' or incidents. Most of us will remember incidents in which we have been 'lucky' to escape injury. The accident and incident have the same causes and actions, only the consequences vary. Study of incidents can therefore be used to prevent accidents.

Important Note:

All the publications in the Publications Archive contain the best guidance available at the time of publishing. However, you should consider the effect of any changes to the law since then. You should also check that the Standards referred to are still current.

HOW TO CONDUCT THE INVESTIGATION

It is important to examine the causes and results of any accident objectively. The investigator must begin the investigation with an open mind. No assumptions should be made and any judgements should be based on information that is known to be full and accurate.

It is important to ask open-ended questions and not to put words into witnesses' mouths. It is also important not to blame people but rather to emphasize the importance of seeking the reasons for the accident to prevent a recurrence.

It is far less effective to attempt to change people, to ask them to be better, to be less human, than it is to change their environment so that the consequences of an error on their part are either eliminated or reduced. Rather than an emotive discussion of patterns of behaviour, a more positive approach attempting to modify the environment is needed. That is, it is more effective to alter the situations producing an error than to attempt to change human nature.

For example, if material is poorly stacked on a high shelf and it falls off. The immediate obvious cause could be poor housekeeping. However, possible underlying causes could include the employee not realising the hazard of the action, the shelving being unsuitable for the task or being poorly maintained. Therefore, the true basic causes could identify the need in this case for:

- Further operator training
- Better planning, layout and/or access
- New equipment or methods.

An investigation may require photographs, sketches or another's technical expertise before the final causes of an accident can be determined and adequate controls considered and chosen.

When commencing the investigation:

- (a) Make sure any injured person is given appropriate medical attention without delay.
- (b) Control the accident scene, place barriers, turn power off, etc.

- (c) Start the investigation as quickly as possible.
- (d) Conduct interviews at the scene of the accident if possible. Ensure that the witnesses' discuss the accident in relative privacy. Begin with those who can contribute most.
- (e) After each interview, repeat the witness' story, as you understand it to ensure that you have correctly understood.
- (f) Close each interview on a positive note.
- (g) Take immediate corrective action where warranted.
- (h) Complete report with recommendations.
- (i) Ensure follow-up action occurs.



KEY QUESTIONS TO ASK

Who? Get the names of everyone involved, near, present or aware of possible contributing factors.

What? Describe materials and equipment involved, check for defects, get an exact description of chemicals involved, etc.

Where? Describe exact location; note all relevant facts, i.e. lighting, weather, etc.

When? Note exact time, date and other factors, i.e. shift change, work cycle, break period, etc.

How? Describe usual sequence of events and actual sequence of events before, during and after the accident.

Why? Find all possible direct and indirect causes
AND

How to keep it from happening again.

ACCIDENT/INCIDENT REPORTING FORM

There is no single "best" type of report form. Each is designed to suit the environment in which it is designed for. Properly completed, a report form can be used for long-term analysis of accident trends, as a management tool to ensure that thorough investigation is occurring and as a means of complying with legislative requirements (there is a requirement for any serious accident putting someone off work for 48 hours or more to notify the local office of Occupational Safety and Health, Department of Labour).

Any accident/incident report should provide:

1 Identifying Information

Who was involved and their background. The exact location of the accident should be given as precisely as possible. Dates, times and places will also be of value.

2 What Happened

A step-by-step sequence should be obtained as to what happened and to any contributing causes to the accident which may have been identified. This is a very crucial section to complete.

3 Cause of Accident

This section should give a reader an understanding of immediate cause(s) as well as the basic cause(s) of the problem. Use of this section

is made to determine whether the follow-up action recommended is adequate. As this is the heart of the investigation report, its accuracy is crucial. The writer should have some training in identifying basic causes of accidents rather than, as is common, an approach that tends to blame the injured party.

4 Recommended Actions

This should include a judgement of the effectiveness of the recommended actions and should also detail any intermediate actions which have been taken to reduce the probability of a similar accident.

5 Review by Upper Management

To consider and decide upon applying the recommendations.

It is important that all those involved understand what their responsibilities are. It should be clear:

- Who they should report to
- How and when this should occur.

FUNDAMENTAL CONCEPTS

- Causes of accidents are never simple.
- Behind every accident or incident there are many contributory factors, causes and sub-causes.
- Accident investigation should be related to an emphasis on control of injury and loss/damage rather than just injury-orientated. Systems rather than being people are the basic causes of many accidents.
- After identifying causes and factors, suitable solutions should be proposed and applied.