

ACCIDENTS CAN SAVE LIVES AND SAVE MONEY

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SUMMARY

When an accident occurs there is always a cost involved either in property damage or injury to the individual and as we are well aware all accidents should be investigated thus adding further costs.

The whole investigation process is wasted however unless actions are taken to prevent a recurrence and the facts speak for themselves that where an accident or incident has occurred and no investigation or an inadequate investigation has been carried out, or if no or inappropriate corrective action has been implemented, the accident has reoccurred in some cases causing greater losses than in the first instance.

The solution to this needless waste is to have a proactive approach to OH&S management by implementing effective OH&S systems supported by comprehensive emergency procedures, rehabilitation programs and efficient accident investigation practices that identify the root cause of the problem and gives suitable corrective action to be implemented to prevent any recurrence.

INTRODUCTION

Every year accidents and illness in the workplace cost Australia something in the order of 27 billion dollars. This is about the same as the total health expenditure of the Australian Government.

The question of how can accidents save lives and save money can be answered by saying that the initial accident will cost money and cause suffering, probably more than anyone realises, but if it is comprehensively investigated and effective corrective action taken so that the same or similar accidents do not occur, future losses will be avoided.

IS AN INCIDENT AN ACCIDENT?

An incident is described as "An undesired event that could (or does) downgrade the efficiency or the business operation" or " a deviation from a standard".

This means that any occurrence, whether or not injury or damage occurs is an incident.

The accepted definition of an accident is "an undesired event which results in physical harm to a person or damage to property. It usually results from contact with a source of energy above the threshold limit of the body or structure".

The incident must be "undesired". Obviously the deliberate and corporately beneficial demolition of a building or an operation to remove a persons appendix while meeting the remaining criteria cannot be considered an accident. It must result in "physical harm and/or property damage". Near misses or near hits, therefore, are not accidents by terminology. Finally, while the human body and most structures are designed to withstand a certain amount of punishment, an accident occurs only when these limits are exceeded.

WHAT INCIDENTS/ACCIDENTS SHOULD BE INVESTIGATED?

The jury is still out on this as some readings suggest that all incidents and accidents should be investigated while others have other ideas.

In this era of total risk management approach to safety the decision to investigate or not should be made by the responsible manager after considering the damage potential of the incident, the overall cost of the investigation, and the total costs of accidents to the company.

This manager must however be trained in risk management techniques and not just rely on "gut-feel" or external influences when making the decision that an incident is low potential and no investigation is required.

ACCIDENT REPORTING

The key to an efficient accident investigation program is the successful capturing of information relating to all accidents and incidents that occur. There should be a mandatory requirement to report all incidents as part of the overall OH&S system.

The reporting process will only be effective when all parties are convinced that it is in their best interest to report.

There is often unwillingness of people to report occurrences or management to investigate occurrences because of the belief that "incidents just happen". Other sayings such as "price of progress", "your number is up", "acts of God" and "the law of averages" are unquestionably obstacles to safety progress. Of course, nothing could be further from the truth - **incidents are caused and can be prevented** - and everyone from senior management to the new employee must be convinced that this is the case.

There are other factors that have been identified as affecting reporting.

- Since most accidents can be traced back to management system flaws, there may be a reluctance on the part of management to encourage reports which might lead to their being criticised.
- Supervisors, unless properly motivated, may look upon reports as direct attacks upon their supervisory competence.
- If the program is very punitive, (some have zero tolerance levels requiring severe penalties for even first offences involving safety) it is very difficult to expect involved individuals to make reports that will result in their own punishment.
- In companies where labour/management strife is the norm, it may be very difficult to convince workers that they should report accidents, when such reports may be looked upon as "dobbing in" on their fellow workers.

None of these problems are easily resolved. Solutions lie in the establishment of a company health and safety program which is considered the property of all participants - workers, supervisors, management and union. Reporting must be encouraged and processes developed whereby individuals should be protected, as much as possible, from having their reports result in punitive action against themselves or their fellow workers. The process should be based totally on preventing future accidents and not on punishing inadvertently careless activity.

WHY INVESTIGATE?

It's a sarcastic view but it still surfaces : "Why investigate Peter's accident. We all know what happened. He stuck his finger in the saw".

There are two main reasons for investigating

accidents. They are to prevent a recurrence and to protect companies and individuals against claims and liability.

Accident investigation is also a demonstration of the regard in which the employer holds the welfare of their employees, and the employer's commitment to the health and safety program.

It is through such demonstrations that employees become convinced that they should actively support the health and safety program and participate in it.

Accidents are extremely costly in terms of lost production, damaged equipment or facilities, destroyed materials, etc., and it is through investigation that future costs can be avoided or reduced. Most businesses badly underestimate accident costs, limiting their estimates to those costs immediately experienced and, occasionally, any increase in workers' compensation premiums which directly result. "Hidden" costs, including those associated with replacement recruitment and training, long term production line disruption and significant reduction in equipment efficiency are seldom considered.

The costs associated with accident insurance and workers' compensation can be minimised by reducing accident experience, a reduction made possible through accident investigation. Most Workers' Compensation Schemes have, over the last decade or so, instituted programs aimed at making those employers with above average accident experience pay the bulk of the costs associated with the jurisdiction's compensation programs. Conversely, those with below average experience pay substantially lower premiums. The difference can have a devastating effect on a firm's competitiveness.

You will note that not included in the list of potential benefits is the determination of who caused the accident and their subsequent punishment. While such an outcome may result from an accident investigation, it will rarely be the most significant outcome and will hardly ever directly address the root causes of the accident.

THE INVESTIGATOR

The investigator is the key to a successful result. The investigator must be intuitive, must be able to sense when a situation is not quite what it seems; ask that extra question which will clarify some seemingly inexplicable circumstance; and

continue digging when simple explanations don't seem to quite ring true.

The investigator must also be a diplomat, capable of threading the way through the mine fields of corporate turf wars and managerial privilege - to maintain the support of management when managerial toes are in danger of being bruised, and to protect the company interests while meeting corporate legal obligations.

The investigator must also have

- *A logical and inquiring mind*, able to reach a satisfactory conclusion.
- *Good people skills*. Those people directly or indirectly involved often feel threatened and the investigator must be caring and respectful of their feelings.
- *The ability to report competently*.
- *The ability to disregard the Blame Syndrome*. Any investigator with the negative attitude of blame will surely find evidence to fit.
- *Experience and training*. This is just as important to competent accident investigation as to any other business skills.

The size and makeup of the investigation team should be dictated by the incident's seriousness or complexity. The first-line supervisor, with the help of employees involved, usually investigates causes resulting in minor injury or property damage. The manager (and the resources of the safety officer) verify the findings of the supervisor ensuring they are factual.

The team for a major investigation involving a serious bodily injury, a fatality, or extensive property damage might include the employee(s) directly involved, the supervisor, safety officer, technical specialists and employees familiar with the process or operation.

A question that often arises is who should investigate. Many companies have a policy whereby accidents are investigated by the supervisor responsible for the area in which the incident occurred. For most relatively routine incidents, this is probably the best solution. The supervisor is normally the person most familiar with the area, the individuals involved and the work that was being undertaken. Utilising the

supervisor is the most cost efficient and frequently the most effective means of carrying out the investigation. There are, however, potential problems. The area supervisor is management's point person at the scene. As such, the supervisor is responsible for the very management processes, and the flaws in which may have resulted in the accident. Further, the supervisor is normally responsible for ensuring that workers are trained and competent to safely carry out their work.

Supervisors may well have major conflicts of interest when investigating accidents involving their own areas of responsibility. For these reasons, it may be better to utilise an accident investigator employed by the safety department to carry out non-routine investigations.

The investigator, however, in order to avoid any "them versus us" type of reaction should, for the purpose of the investigation, report directly to an appropriate line manager. Where the company does not have a safety department, some investigation-trained individual from a non-involved area should be appointed. In very small companies, a senior manager should assume responsibility for the investigation. The decision as to what is or is not routine should be made by the appropriate manager.

THE INVESTIGATION

To properly carry out an investigation the investigator must come prepared. It is advisable to have a incident investigation kit containing necessary items such as a camera, tape measures, paper, pens, forms, storage containers for evidence, torch etc. as well as necessary personal protective equipment.

As stated earlier, the level of effort involved in the investigation largely depends on the seriousness or complexity of the incident. Investigators should perform only those tasks that are pertinent to identification of the causal factors. A written procedure for collection of evidence may include the following instruction:

- a) Visit the incident scene before the physical evidence is disturbed.
- b) Take samples of unknown chemical spills, vapour residues, and other substances, noting conditions that may have affected the sample.
- c) Make comprehensive visual records. No

one can predict in advance which data will be useful, so photographs should be taken from many different angles and accurate and complete sketches or diagrams should be made before the incident scene is restored.

- d) Determine which incident-related items should be preserved. These may become critical evidence if there is litigation later.
- e) Identify the people who were involved in the incident. Also identify eye witnesses, including those who saw the events leading to the incident, those who saw the incident happen, and those who came upon the scene immediately following the incident.
- f) Interview the witnesses.

Note : Eye witnesses, despite the fact that they are a major source of evidence, are notoriously unreliable. Their unreliability increases astronomically with time and an opportunity to discuss the situation with others.

Witnesses do not set out to give a distorted description of events but they are almost always influenced by what, over a very short time, they become convinced that must have happened. Witness interviews should, therefore, take place as quickly as possible after the event and where possible (unfortunately it rarely is possible) witnesses should be kept isolated until after they have been interviewed.

Interviews are usually most effective if the interviewee can be set at ease in a comfortable, non-threatening environment.

- g) Review all sources of potentially useful information. These may include original design, design specifications, drawings, operating logs, purchasing records, previous reports, maintenance logs, procedures, verbal instructions, inspection and test records, alteration or change of design records, job safety analysis, records indicating previous training and job performance of the employees and supervisors involved.

THE REPORT

Like the investigation itself, the report should follow a sequence so that the reader is led

logically to the conclusions reached by the investigator. Raw data, the detailed chronological analyses, pictures, etc., are usually placed in appendices at the end of the report and referred to as required in the body of the report. The report should begin with a description of the investigating team and the circumstances leading to the investigation being initiated. Next, a section should briefly describe the accident scene as initially observed by the investigator(s), including data concerning the personnel, equipment and facilities. Usually a sketch of the site will be included in the body of the report at this point. The report should go on to list witnesses to the event, evidence collected and to describe the procedures used by the investigators at the site and in interviewing witnesses and other involved personnel. Other investigating authorities should be noted as well as any co-operative activity which may have taken place. Where pertinent, a history of previous related safety activity should be outlined. The report should then describe the accident itself and the resulting injury or damage. Next should come a chronological description of the events leading up to the accident. This will be a resume of the detailed chronological analyses. The chronological description should be followed by the investigators conclusions as to the cause of the accident in terms, wherever applicable, of system failure. The report should conclude with recommendations for prevention of recurrence.

CONCLUSION

Accidents can save lives and save money but only if we learn from our mistakes. If a person is killed in the workplace, as sad as it is, it is even sadder, one could say criminal, if another person was to be killed under similar circumstances.

There's no escaping the slightly sour taste of an accident investigation. Our quest for what went wrong and what we can do about it forces us to face our shortcomings head on.

The saving grace in conducting effective investigations is the outcome : concrete recommendations for preventing more accidents from happening. Investigating losses is an integral part of a Health and Safety program. Efficient investigation and effective implementation of the corrective action is an investment in the future.

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