

Presentation: Effective Incident Investigation explained

Ed Friend, Consultant, BHSEA Chairman

Ed described his background as an HSE Inspector and said that it had given him a wide spectrum of experience in the consequences of accidents and the effort needed to carry out investigations. He said he would be speaking from the perspective of an HSE Inspector and how he was trained to do it. Here he paid tribute to an ex-colleague, Ted Rushworth, who had guided him through his early experiences and said that it was the same with all HSE Inspectors to learn practically in this way.

In dealing with the reasons for investigating accidents, Ed mentioned simply that the law required it and, moreover, the Woolf Report on civil action confirmed that injured parties must have full disclosure of the circumstances of an incident. For an Employer, the clear benefit of a thorough investigation and remedial actions is that it indicates a positive attitude to health and safety should any case/claim go to court. More recently, the Sentencing Guidelines Council has added a “failure to respond to Near Misses” to the list of factors aggravating the seriousness of an offence. There is also a social/moral duty of care towards employees and lack of this suggests a negative attitude. This is closely coupled to public expectations that an employer will investigate accidents, particularly serious/fatal ones, those involving several people, or children, or those putting the public or the environment at risk.

From the company perspective, it is vital to defend any criminal or civil action by finding out what really happened and also to put in place effective preventative measures to stop any re-occurrence. Often cases are conducted on behalf of Insurers, Ed commented, when they discover late in the day that they are unaware that guards may have been removed from machines, because of an inept investigation! It might also be useful to include the investigation findings on a company or national database to extend the learning process industry-wide. It is also a useful tool to monitor company performance and should be integrated closely into the training process. Too often you hear the phrase “I haven’t been trained” offered as a ‘defence mechanism’ after an accident.

Considering the key features of a competent investigation, Ed said that timeliness was crucial and that a site visit is essential. It was also important, he said, to confirm the facts from the injured person, although this may be delayed by their condition, immediately afterwards. Witnesses were also a vital source of information and notes and photographic evidence were equally important. Relevant documents should also be thoroughly scrutinised, as these could often lead to additional lines of enquiry, as well as corroborating previously known facts. They could also indicate what the “root cause(s)” of an accident were, as there are nearly always multiple causes of accidents, which are not always under the control of persons most closely involved! For instance, an obvious cause may be a

missing guard, but the root cause of that may have been poor safety management, not the fault of the operator! **(Here, Ed warned us not to include any specific reference to such failings, if the report was likely to be made available to any third party, including the enforcing authorities!)** It is also vital to find out if there have been any similar incidents or near misses and if there have been any re-occurrences. If so, Why?

As early as possible, Ed added, it is necessary to identify what needs to be done to prevent a re-occurrence, who is responsible for the remedial action, what time scales are to be implemented and who must check that everything has been done! Formal notes should be made about what actions have been taken because these might be very important in any later civil trial, which may be some considerable time afterwards, when memories have faded! Another important measure is to review the investigation to assist managers who may not be familiar with the operational process concerned or, in fact, the words used by safety professionals!

As far as Investigating Techniques are concerned, Ed commented that he was not over-enthusiastic about sophisticated systems like Fault-Tree or Event-Tree analysis, although he readily agreed that they had their very proper place in investigations into complex industrial processes. Instead, at the top of his list, was simple note-taking, which needs to be contemporaneous, accurate and detailed, with names, times, dimensions, plans and drawings. He went to say that these were vital to support evidence in court and can be used as a benchmark against other statements. It is also crucial to interview any one who has material information – the injured person, witnesses, safety representatives, managers and even an employer, if a contractor is involved.

Equally important is the need to inspect plant and machinery, the site, and relevant documents. These onsite investigations are ideally done at the same time of day, he added, so that if (say) an area light was unserviceable and shadows were cast that could have contributed to the cause of an accident. Measurements, machinery labels, distances travelled, working positions, heights, noise and lighting levels could all throw an important light on events. It was important to take samples, photograph and preserve evidence such as materials, components or PPE.

At this point, **Time Prestage, of Tim Prestage Ltd.**, asked if samples should be shared with the HSE Inspector and Ed replied “Yes”!

Ed went on to emphasise the value of reconstructions to recreate malfunctions, brake performancetimes, line of sight etc., without the gory injuries, he added! Of course the use of video recordings could greatly enhance the value of this technique. He added that investigators should indicate whether photos and drawings represented the actual situation or a reconstruction, to make them clear, say if they are scaled, in perspective and whether there are any limitations.

Investigators must always keep in mind the credibility of information, the truthfulness of the witnesses, their reliability, motivation and is what you are being

told plausible? They should follow all reasonable lines of enquiry into training, supervision, systems of work, alternative explanations and contradictory information. If this takes you outside your competence zone, he added, - get help!

Ed concluded by addressing the subject of interviewing techniques, which he said were aimed at obtaining or confirming information. He added that people would not talk freely if they perceive that you are seeking to blame them, or their mate or, sometimes even, their boss! He mentioned some well known techniques such as **Free Recall**, where the interviewer allows the witness to recall all they remember about the incident, even facts that they may consider to be trivial or unimportant. This is done with no interruptions and questions are only asked at the end. Sometimes this process is enhanced by getting the witness to mentally reconstruct the scene, even recalling their emotional state, in a technique called **Contextual Reinstatement**. After free recall, it is often beneficial to encourage the use of a different memory retrieval path by **Recall in Different Order**, as opposed to the conventional chronological order. **Recall from Different Perspectives**, say, by asking to think through a different person's eyes might achieve the same results. All of these techniques can be enhanced by asking open questions, instead of closed questions.

Ask "What was 'A' wearing?" AVOID "Was 'A' wearing ***?"
"What did you see?" "I don't suppose you saw anything"

When taking written statements, remember you do not have the legal powers enjoyed by the enforcing authorities and must use gently persuasion. Offer to write it for them if they insufficient skills and suggest the presence of a friend or safety representative if they are reluctant. Write in the first person, as if you were the witness eg. "My name is J.Doe, I am a qualified electrician and have worked for ABC Ltd. at their Browns Lane Walsall factory for the last 4 years". Read the statement back to them and get them to sign and date it, if they are happy with it. Do not take it away to be typed and then sent to the witness for signing and dating, unless the handwritten copy has already been signed and dated

After the presentation, the members showed their appreciation to the Chairman in the usual manner.