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Fact sheet – Evidence to recommendations

Introduction

All investigations need good recommendations from a robust process. The investigative route that you take from the collection of evidence to the report is important. The documenting of this route and any assumptions made along the way are also important. The route is a logical step by step process that takes you through:

- Facts
- Findings
- Conclusions
- Recommendations

After you have got to the end, developed your recommendations, then you should test your recommendations to see if they will prevent future occurrence.

Facts to findings

Considering the simplified case that we followed in the course, we were presented with the following facts:

Facts	Findings	Conclusions	Recommendations
No evidence of strapping at scene			
Joe left post at ladder foot			
Processes not accessed in five weeks			
Fred has been doing this for months			

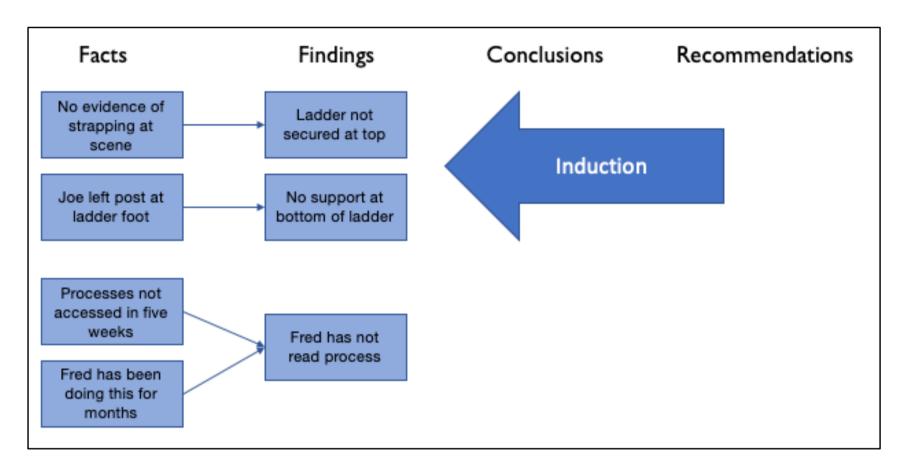
In stepping through the process one must be mindful not to try and accelerate to the recommendations to close the report off. The recommendations MUST prevent future occurrence of this event, if not then they are pointless, and will doubtless be very unsafe if questioned later in any form of court.

We discovered no evidence of strapping at the scene – this on its own is not a very helpful fact. There might have been strapping, that had snapped, and somebody had thrown in the bin. The strapping might have been in Fred's pocket. So we must always cross reference facts that we see and not jump to conclusions. Presented with this fact as investigating officer you might check the tooling rack or stores to see if strapping had been issued, you might ask Joe if he had seen Fred with strapping, you can always ask Fred himself.

Probe, probe, probe



After you have dug around and have a picture of what has happened you have your first finding, considering the above example we might draw the finding that the ladder was not secured at the top. What is not important is that we go and seek evidence to disprove this finding too; if you have good evidence supporting the finding and no evidence contradicting the finding then you have a reliable finding.



This type of finding we call induction, where we have induced the finding from a series of factual pieces of elements that when brought together give direct link to the finding.

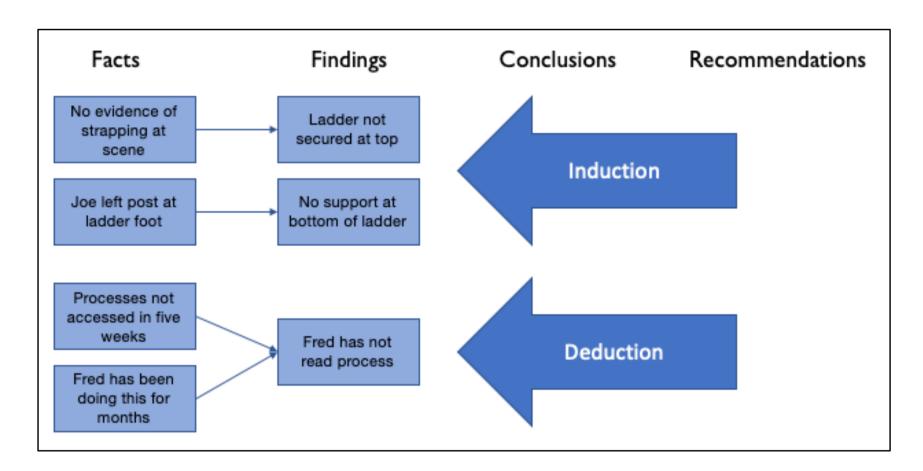
So in our very simplified case we have asked questions and collected evidence and have induced a couple of robust findings. (note not all facts shown for clarity). We now perhaps want to see was there any documents that told Fred what he should have done, and had he followed them.

Now we must look to find evidence of the processes, if they are documented, what was the amendment state at time of accident, how accessible are they – for example if they are stored in the Managing Directors office it becomes a touch unrealistic to expect staff to read the instructions. What was Fred's training record, had he been trained – many many questions to both prove and disprove.

If we consider the lower half of our simplified case study, we have to use some deduction now. We can't prove that Fred hadn't followed the processes, but we can find evidence to suggest he didn't. Clearly if you asked him and he admitted he hadn't this would be direct evidence from which the finding is clear and induced. But we are assuming he hasn't told you about following the processes.

If you find evidence that shows the processes have been in place, intelligible, readable and correct. They have not been accessed for several months and Fred has done this task three times since they were accessed; it is a reasonable deduction that the processes were not read before this task was started. This is called deduction, it is not as robust as induction but in industrial investigations we only have to prove to 'on the balance of probabilities', unlike in criminal law where we have to prove 'beyond reasonable doubt'. There is less burden of proof required in industrial situations.



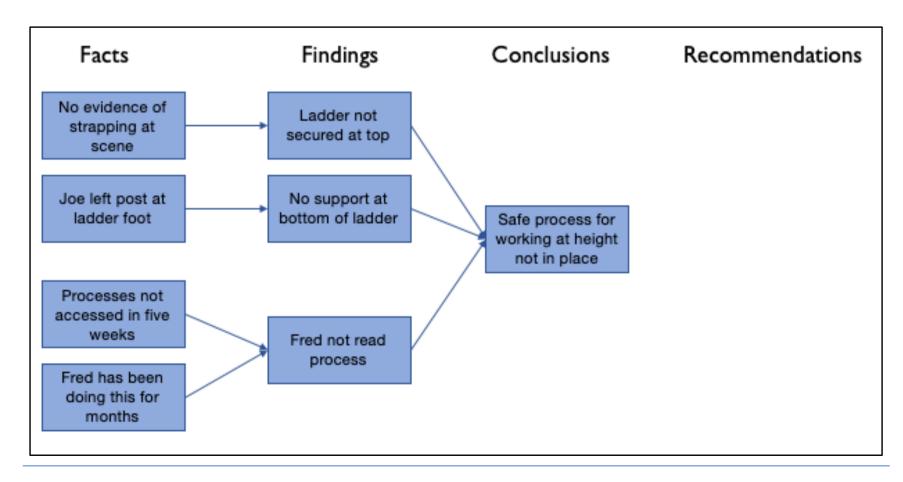


Another important element in getting to robust findings is to use known standards. For example if your take a child's temperature and it is 39C, this fact alone does not show an elevated temperature. Applying a known standard, in this case, that a normal temperature is 36C gives the finding clarity.

One of the biggest mistakes investigators commit is to not document those known standards – it may be widely known and understood, but make sure you reference the standard in the report.

Drawing conclusions

Now drawing conclusions is often perceived as the hardest part of an investigation, but if you have done your evidence collection well, then the conclusion almost writes itself. Make sure in the annex of your report that you document any analysis methodology you have used. Typically this is limited to induction and deduction, but in more complex cases you might have to look at profiling and behaviours for example.



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Given the evidence we have discussed in the case we have been following; with findings of a ladder not secured at the top, no person supporting the ladder at the bottom and Fred having not read the processes – it is safe to say that on the balance of probabilities the safe working at height processes had not been followed.

Best practice investigation always suggests that the disciplinary element and the technical investigation are separated. It is highly likely that in this case Fred might have to face a disciplinary process, but it is important that as the investigating officer you continue to seek recommendations to prevent it happening again. Giving a sanction to Fred will not stop it happening again, so ensure you speak to your supervisor at this point, highlight the possibility, but then complete the investigation correctly.

Building robust recommendations

A helpful mnemonic is ERICPD, if you try and establish recommendations that run from E to D you will most likely present recommendations that give best future protection.

E – Eliminate – can the hazard be eliminated. This is sometimes impossible but if we considered that case we have been following, if we can remove the need for that check that Fred was doing we can eliminate the hazard – elimination gives complete future proofing.

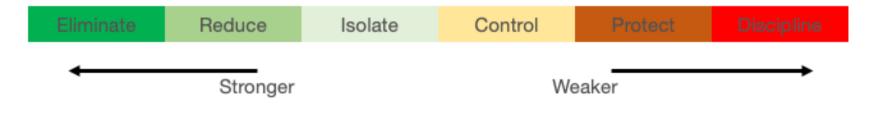
R – Reduce – can we put defences in place that can reduce the likelihood of the event happening, or if it does reduce the impacts of the event. The bowtie method is explained below and is a good method of applied 'Reduce'.

I – Isolate – if we can isolate the hazard we can help prevent future bad events. In the case we have been following isolation is not possible, but you could add guards or interlocks to some things that isolate the user from the risk.

C – Control – we are moving into the weaker side of interventions now, sadly it is an area that is often seen as a first place to go. What we set out to do here is to control behaviour, so for example a recommendation that sends a briefing out to remind people of their responsibilities – is a control measure, and is very weak in reality. It is always worth a strong challenge of self and others to test if there is not a more robust and yet still cost-effective solution. My experience of 'control' recommendations are rarely cost induced, they are more often than not as a result of not thinking harder.

P – PPE – this is a very similar level of recommendation as control. PPE is good and a valuable tool in preventing harm; but the reason it is a weaker measure is that it always requires on people using it. The recent Covid-19 challenge the world has faced has shown how hard it is at times to get people to follow clear evidenced guidelines.

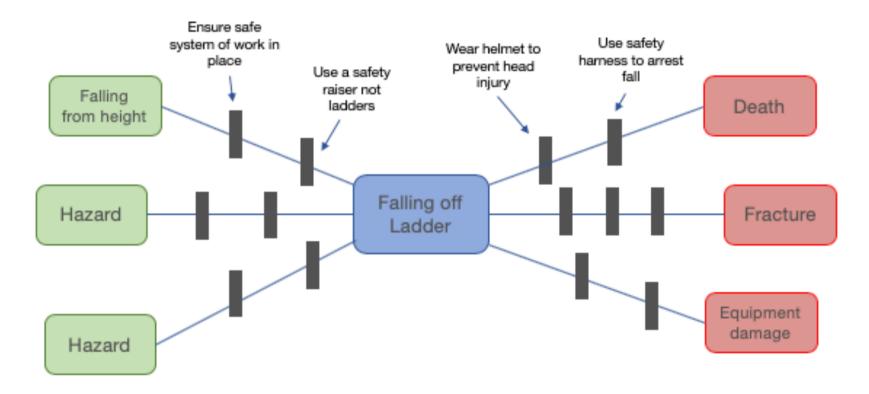
D – discipline is the weakest form of intervention in terms of preventing future occurrence. Disciplining one person might change their behaviour but much research has shown that human behaviour is not affected by such discipline.





The bow tie

One method of looking at and displaying the recommendations is using the bowtie method, see below.



On the left the hazards are grouped, in the example we have been following this might be falling from height and impacting the floor. In the middle is the event we are trying to stop happening and on the right are the consequences of the event happening. The defences on the left aim to prevent the event from happening, whereas the defences on the right aim to reduce the possibility of the bad event having a bad outcome. A protective helmet (PPE) is not going to stop the event but it may well stop a bad event having a bad outcome, the residual outcome might be badly bruised from death.

Report writing

We have a full fact sheet on the report writing aspect, but a few key points to consider are:

- Use simple English
- Write in the third person
- ♦ Write a compelling executive summary many people will only read this summary
- Use pictures helps understanding
- Use of Annexes and appendices to reduce report size

If the recommendations start to point toward disciplinary

Many business investigations end up indicating that disciplinary action might be required. As the investigating officer you will be first to spot the possibility that a disciplinary case might need to be answered. Recall what we said early about recommendations should not be only discipline, so it is important that you can complete your investigation without bias. Report to your investigation supervisor who will split the technical investigation from the disciplinary.

Although you will at this stage continue with the technical investigation, there may well be other times where you are brought in to perform the disciplinary investigation.



The first thing to consider is that all disciplinary investigations can end in a tribunal – court and so conducting them in a good manner is your duty as a company manager.

The principle of natural justice applies, which simply means that people are assumed innocent, they have the right for fairness. Three simple words are always worth keeping in your mind:

- ♦ Fair are you being fair to the person, have you given them the evidence, allowed them representation, treated them with respect etc.
- ❖ Reasonable does the evidence pass the test of reasonability? For example, if the work instructions are in a locked drawer that requires authorisation from the MD, it is not reasonable for the person to read them.
- ♦ Consistent apply the substitution test, take this person out of the equation and insert the 'best' person in the business would they have made the same mistake? And even if they would not have, are you applying punishment that is proportional to the event.

Culpability

A way of measuring the persons culpability, their blameworthiness is to use the Reason tree, named after Professor James Reason. The idea is you work from left to right and culpability diminishes as you move to the right.

