# Aiming for Zero Reportable Accidents

Document control information

<table>
<thead>
<tr>
<th>Published document name:</th>
<th>Zero-tolerance.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date issued:</td>
<td>January 2014</td>
</tr>
<tr>
<td>Version:</td>
<td>Draft 1.0</td>
</tr>
<tr>
<td>Previous review dates:</td>
<td></td>
</tr>
<tr>
<td>Next review date:</td>
<td></td>
</tr>
<tr>
<td>Related documents:</td>
<td></td>
</tr>
<tr>
<td>Governing policy:</td>
<td>S&amp;HS mission statement</td>
</tr>
<tr>
<td>Guidance to policy:</td>
<td></td>
</tr>
<tr>
<td>Legislation or related information:</td>
<td>Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013</td>
</tr>
<tr>
<td>Document owner:</td>
<td>Peter Adams, Director of Health and Safety</td>
</tr>
<tr>
<td>Document approved by:</td>
<td></td>
</tr>
<tr>
<td>Lead contact:</td>
<td>Peter Adams</td>
</tr>
</tbody>
</table>
1. Introduction

There have been ongoing discussions at the Personnel and Health and Safety Committee regarding the setting of targets for accident performance. The logical conclusion is that as any accidents are undesirable the target should therefore be for no reportable accidents. However, there will always be no-fault accidents, e.g. where someone trips over their own feet, and therefore a nil-target is actually unachievable. But what can be achieved, in theory, is the avoidance of reportable accidents attributable to a management failing (from here on referred to as a zero target).

This paper considers the implications of what a zero target would mean in practice.

In conclusion a zero target would be incredibly difficult to achieve. An organisation doing so would require highly risk averse managers in combination with a culture of risk avoidance. As the university, and the Higher Education sector as a whole, is a long way from that descriptor the question is whether that target should set for the long term or whether a more realistic target should be set.

2. The zero target

'Reportable accidents' are those accidents that meet certain criteria under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013 requiring the employer to formally make a notification to the Health and Safety Executive.

They include:

- fatalities
- defined major injuries (e.g. fractures, loss of consciousness)
- injuries that prevent an employee from being able to work for seven days following the accident
• non-employees being taken directly to hospital for treatment
• specified illnesses and
• defined dangerous occurrences (specific events that did not cause injury or ill health but had the potential to do so).

The University's accident history shows a variable number of reportable accidents of somewhere between 10 and 25 per year, shown below as an accident rate for the number of reportable accidents per 1000 staff (for comparison of the performance trend).

![Graph showing reportable accident rate](image)

However, there are a number of these incidents for which there is no identifiable fault that can be directed at the university. Staff will continue to trip over whilst running and students will continue to 'socialise' excessively and find means to require hospital treatment. The accident target that is set needs to be one which is in the gift of the organisation to achieve and so the "zero" target must be supplemented with small-print as a target for 'zero reportable accidents in which there was a management failing'.

3. Accidents and risk

Studies by Hienrich and Bird analysed hundreds of industrial accidents to produce ratios of accident severity.
For the purposes of this discussion the specific numbers are unimportant, but the studies showed that there are hundreds of near miss events occurring for every major injury or fatality. This is logical because the outcome of an uncontrolled event is very dependent upon luck.

For example,

These two boulders crashing down an Italian mountainside might have destroyed a farmhouse and potentially killed multiple occupants. But as luck would have it one stopped about a metre from the farm, the other destroyed a barn but caused no injuries.

In the workplace we all know that standing on a chair to reach a high shelf is a dangerous act, but the risk is one that many people take as it is a task that can often be taken without injury and with the benefit of avoiding the inconvenience of collecting and packing away a step ladder. However, sooner or later a fall will result. The result of that fall is then down to a number of factors (age, strength, agility etc) but very dependent upon luck. You would be unlucky to suffer fatal injuries but quite likely to suffer a fracture, and if you only suffered from significant bruising if you fell you would consider yourself lucky.

What this leads us to is that to prevent a reportable accident we need to target the behaviour or actions that might lead to it. If we wish to achieve zero reportable accidents then we must either rely on luck, or we need to eliminate the behaviour giving rise to the risk. In the example of the use of chairs to access high level shelves the likelihood of a fall may be quite low but if we are to meet the zero target then there can be no tolerance of that risk by anyone in the whole organisation. Colleagues will need to be prepared to exert pressure on their peers to prevent that
kind of behaviour, line managers and supervisors will be expected to take decisive action to change behaviour and individuals will need to buy in to the benefits of aiming for a zero target by choosing to act differently to what might be their first instinct.

4. The extent of the challenge

At the University we have a steadily decreasing accident rate. The graph shows that the staff are having less accidents (not just the reportable ones) and the rate has decreased steadily over time.

![Total Accident Rate Graph](image)

But there were 257 accidents reported to S&HS in 2013. By following the ratios in the accident triangles, above, there could be as many as ten or twenty times that number of near miss incidents. So despite the improvement in health and safety management there remain a large number of events that occur that, were it not for luck, might have resulted in a reportable event.

One such minor incident demonstrates how wide ranging the change of behaviour needs to be to eliminate the risk.

Example: Paving slab at Wills Memorial Building

A minor incident occurred recently in which a member of the public tripped and fell outside the Wills Memorial Building due to a defective paving slab. The outcome, luckily, was not a reportable incident but a fall without injury, and with worse luck this incident could have resulted in a reportable injury. Analysing the root causes of this incident highlights a number of actions that might have prevented the fall, these include:

- The period of time that there is exposure to the risk could be reduced by a more frequent formal inspection.
- A quicker response to repair the hazard would have reduced the period of exposure to the risk.
• The selection of a different type of guard or barrier could have prevented users of that space from removing the barrier, or late night revellers from repeatedly stealing it.

• Contractors, Hospitality Services or Estates drivers using the areas for access could have replaced the barrier upon leaving the area:

The point here is not to apportion blame for the incident, but to recognise that there are many factors involved and a change in behaviour of one of the teams above might have prevented the accident, and it was only through luck that we avoided a serious reportable injury, a claim for damages and the potential for enforcement action or prosecution.

As can be seen in this example there are many factors that could lead to the accident. If only one of those identified above have altered their behaviour or response the risk exposure would be reduced, but for the zero target to be achieved it is not good enough to just reduce the risk. Instead if we are to eliminate the accident each and every root cause will need to be addressed to the point at which it could be considered that management have done all that is reasonably practicable. This will require a change the behaviour of the delivery drivers to replace barriers once they leave the building, require the porters to do get different equipment to guard the hazard when every day they find night-time revellers stealing the barrier, or delivery drivers moving it and not replacing it. We will need to adopt efficient and robust systems of work for proactive maintenance regimes for paths and pavings. And follow that up with similar practices for walls, floors, doors, windows, carpets etc. and reduce the risk from each of them to a level that is as low as is reasonably practicable.

And crucially how do we persuade the whole organisation to think differently and to consider what else they might do that will contribute to reduced risk when each one of them can simply point the finger of blame to other services for allowing the accident to happen?

5. What do we need to do?

Before people can be expected to change there is a need to educate them with the reason why they should change and to recognise when they need to do something different. A zero target would bring with it the need for a major change programme to embed in the organisation a set of behaviours commensurate with the achievement of the target. Staff would have to believe in the target and embrace it, and change their behaviour to recognise risk and become risk averse. This will require significant investment, dedication, leadership and a commitment at all levels in the organisation.
6. Conclusion

In my experience of the higher education sector as a whole, not just at Bristol, there is a great difference between the aspiration for a zero target and the culture and behaviours exhibited by staff and management. Without a considerable slice of good fortune the zero target is probably not achievable in the short or medium term.

But a zero target does provide the incentive to change behaviour and reduce risk, and with that change there will be a reduction in times when that risk is realised.

The target would add value in that it sets out a clear intention of what we wish to achieve. In theory the long term the target is attainable, but to achieve it it will need to become embedded as a guiding principle in the aspirations of the university, not just in words but in deed too. Perhaps a more practical compromise should be to set a zero reportable accident target as the long term aim in order to provide impetus and the reason to act to change behaviours. In the short- and medium-term the target could be for a decrease, not in the reportable accident rate (as this is largely based on luck) but on the overall accident rate which are the events that will lead to reportable outcomes.

Of course, we will not achieve target zero overnight, but that does not mean that there should be no attempt to influence behaviour and move closer to achieving the target. I would argue that that process has been ongoing for some while as shown by the improvement in performance year on year. What Bristol University has been successful at doing is sensing the culture and making change at an acceptable pace and intensity. It could be argued that this evolutionary change is too slow and a revolution is required, which leads to the final question: do we adopt a zero target but accept the risk that the revolution will be rejected; or recognise the improvements achieved so far, aim to build on them and accept the risk that the evolutionary process might not be fast enough?