

The **Costs of Accidents** **and Ill-Health** in the Workplace

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All of us wish to avoid accidents at work in order to avoid the suffering which can result from even quite minor accidents. Most of us also realise that accidents can lead to losses in various forms to the organisation for which we work, but sometimes it comes as a surprise to realise just how large these losses can be and it is not always appreciated that they are almost entirely avoidable.

An accident can be defined as an unplanned event which results in injury or ill health to people; damage or loss to plant, materials, property or the environment, or a loss of business opportunity. Studies have shown that for every accident resulting in absence from work for more than three days, there may typically be about ten times as many minor injury accidents (requiring first aid only), and several hundred non-injury accidents, which could also involve property damage. Furthermore, the cause of a minor accident may in other circumstances have led to much more serious results. Thus each minor accident or 'near hit' is a 'free lesson' which, if learnt, may not only reduce loss, but also prevent more serious outcomes. For example, a leak of oil from a machine can cause anything from a minor to a fatal injury, but more frequently will lead to damage to the plant if it is not noticed and rectified in time.

Losses from major accidents or disasters can be enormous and in so-called 'high hazard' industries (typically, chemical, nuclear, air and rail transport and some major civil engineering projects), reducing the risks requires attention to the causes of what have been termed 'organisational accidents' (2,3). Minimising these accidents requires attention to be paid not only to the engineering and immediate human causes, but also to the deeper organisational and cultural precursors that often lie 'hidden' in the organisation but come into play when 'triggered' by some other factor. Achieving good industrial safety does not necessarily mean that vulnerability to major accidents, which are rarer but can be extremely costly, has also been reduced. They require deeper consideration of more complex factors.

It is important to note that the cost of accidental loss must be deducted entirely from potential profit. It is revealing to consider the extent to which turnover would need to be increased to replace that lost profit. Bringing out the impact of potential losses can sometimes influence the attitudes of those who may be reluctant to spend money to make health and safety improvements. Successful businesses view losses from accidents like any other type of loss. The aim is to stop these losses by building health and safety management systems and a strong "culture" into everyday business practices. It is important that underlying causes of accidents are tackled rather than acting after things have gone wrong.

The Health and Safety Executive (HSE) carried out studies with five organisations in an attempt to calculate the true costs of accidents in the UK (4). The results were perhaps surprising. One organisation - a transport company - found that accidents amounted to 37% of its annual profits. In another example - a construction site - costs amounted to 9.5% of the tender price of the project being undertaken, and in a third organisation, accident losses amounted to 5% of running costs. The HSE believed that a similar picture would emerge for other industries. It was also noted that during the period of the study, there were no fatal injuries, prosecutions or significant civil claims to the participating organisations. Any major occurrence of this kind would, of course, have increased substantially the losses calculated - particularly since UK courts are now substantially increasing the penalties for injuries arising from non-compliance with legal requirements. It was also estimated in the study that nearly 10% of the accidents recorded had the potential for serious consequences such as fatalities, multiple injuries or catastrophic loss. This made the point perhaps even more strongly, that learning from relatively 'free lessons' is of great importance.

The HSE (1) have estimated that in 2016 about 30 million working days were lost to UK organisations due to accidents. This arose from an estimated 621,000 workplace injuries (72,000 of which were more serious reportable accidents) and from 144 deaths. When all the costs are properly taken into account, the total cost of work accidents and new cases of work related ill-health to society as a whole has been estimated as likely to be nearly 15 billion pounds sterling a year. The UK currently has one of the best health and safety records in the world. If a global view is taken, the human and financial consequences of poor health and safety is enormous.

References

1. HSE, www.hse.gov.uk
2. REASON, J., Managing the Risks of Organizational Accidents, Aldershot, Ashgate (1997).
3. TAYLOR, R.H., VAN WIJK, L.G.A., MAY, J.H.M., CARHART, N.J., A study of the precursors leading to "organisational" accidents in complex industrial settings, Process Saf. Environ. Prot. Volume 93, 50-67, (2015).
4. HSE, 'Benefits and costs of health and safety issues' see <http://www.hse.gov.uk/leadership/benefits.htm> including case studies.

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