

How UK construction killed 76 people last year

In the past year the UK construction industry killed 76 people, virtually the same as last year and 20 more than in the much more widely reported London terrorist attacks. **Donald Lamont**, Health and Safety Executive representative on ICE's health and safety board, analyses the latest statistics in the hope civil engineers can help save more lives.

The UK Health and Safety Executive published its annual statistics on construction deaths on 28 July 2005. It is hoped that an analysis of these statistics will make civil engineers more aware of what they can do to reduce the safety risks in construction activity. Deaths from construction-related ill-health, such as from asbestos exposure, are excluded and may be considerably more numerous than those from the safety-related incidents described here.

The preliminary total of worker fatalities for 1 April 2004 to 31 March 2005 was 72. This was a reduction of one on last year. A preliminary total of four members of the public were also killed in construction-related incidents.

However, only one incident, involving two tower cranes during erection, resulted in more than one person dying—in this case two. Also, once the increased number of people currently employed in construction is considered, the death toll equates to a 3% reduction in the fatality rate. The rate is now estimated to be 3.48 per 100 000 workers, the lowest on record and approximately a quarter of the European rate of 13 per 100 000 workers.

Falls from height most deadly

A loose classification of the sectors of the construction industry in which the fatalities occurred shows that work associated with the building or refurbishment of residential property and commercial/industrial premises accounted for the majority of the fatalities. However, the relative sizes of these sectors of

the industry should be considered in any detailed analysis.

The categories used in Fig. 1 reflect the types of incident which occurred in the past year. The incident type does not always fully reflect the circumstances in which it occurs—for example a tele-handler strikes a pallet of bricks causing some to fall on and kill a worker. This is categorised as being 'struck by' material but the means of prevention might be in better control over site transport. Road traffic accidents, in which a person at work on the highway is killed, are not necessarily included in construction-related totals.

As in previous years, the single greatest cause of fatalities was falls from height by the deceased person. Of the 32 fatal falls, six resulted from the use of ladders mainly in work associated with the repair and maintenance of residential premises. Seven fatalities were caused by falls through fragile roofing materials. This confirms that the specification of non-fragile materials for roof coverings and roof lights should, by now, be standard practice for designers as a reasonably practicable way of eliminating a hazard.

Seven falls were from scaffolds, tower scaffolds or other work platforms at height. A further 11 fatalities resulted from falls through unguarded openings or from unprotected edges. The need to guard openings and edges should be self-evident. The building and refurbishment of domestic and commercial/industrial premises and the types of activity that such work involves is where industry professionals most need to act to reduce risk to safety on site.

Strikes by loads and materials

The next greatest cause of fatalities involved the deceased person being struck while loads were being lifted or by falling materials. Of the 21 in this category, six deaths resulted from loads falling during the lifting operation and another four from falls of stacked materials.

Collapsing brickwork killed five workers, three during demolition and two from brick walls being undermined by adjacent excava-

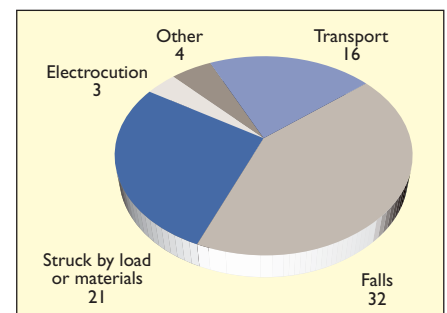


Fig. 1. 2004/05 UK construction fatalities by incident type—falling from height accounts for over 40% of deaths

tion work. Four deaths occurred as a result of trench collapse. This was not just a safety issue in mainstream civil engineering works as two of deaths occurred during landscaping operations.

Transport-related accidents accounted for 16 deaths. Of these, nine, including a member of the public, were killed by being struck by site plant, with a further two being killed by overturning vehicles.

Five deaths occurred from incidents involving road traffic vehicles of which four occurred on motorways and one at a road-works site. Three of those killed were members of the public whereas the other two were struck by vehicles driven by members of the public. The involvement of the public in the highway-related incidents presents additional challenges for engineers in seeking to find ways to prevent them.

Three workers were electrocuted during the year—two from contact between vehicles and high voltage cables. A number of fatalities occurred during the year as the result of non-work-related incidents on a construction site or during building maintenance work. These are not included in the total for construction.

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