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## HEALTH AND SAFETY COMMISSION

### Fatal injuries: annual statistics and monthly reports

#### A Paper by John Ewins

Advisor(s): John Hodgson, David Leigh, Heather Bolton and David Ashton

Cleared by Jonathan Rees on 18 August 2006

#### Issue

1. The headline fatal injury statistics for 2005/06, a description of how they are gathered and analysed and how the monthly reports to the Commission relate to them.

#### Timing

2. Not urgent but Commissioners may welcome an early opportunity to comment on the 2005/06 statistics.

#### Recommendation

3. Commissioners are invited to:
  - Note and comment on the headline statistics in para 4-5;
  - Consider whether they wish to continue receiving details of recent fatalities along the lines set out in para 10;
  - Note that the presumptions used for classifying fatal (and other) injury statistics (see para 11) will be considered by the Board and a further report made to the Commission; and
  - Discuss and comment on the approach we take to validating annual fatality statistics and how we plan to improve this – para 15;

#### Background

##### Headline statistics for 2005/06

4. The 2005/06 fatal injury statistics were released on August 17. Worker deaths were the lowest on record at 212 (a 5% drop from 2004/05) as was the rate at 0.71 fatalities

per 100000 workers. In 2003 the rate of fatal injury to workers in Great Britain was the lowest of European member states and this is likely still to be the case. Deaths and rates fell in construction and agriculture but rose slightly in manufacturing and services.

5. Deaths to members of the public rose in 2005/06 to 384, of which 254 resulted from acts of suicide or trespass on railways. Comparable figures for 2004/05 were 370 and 253 respectively.

#### Assembling the statistics

6. Fatal injuries are reported to HSE (or local authorities) either direct or through the Incident Contact Centre (ICC). If the notifier's first report is to an HSE/LA office they are transferred to the ICC to ensure there is a complete record of reported fatalities. More detail of how the data is assembled can be found in annex 1.
7. A summary of recent fatalities is included with the Chief Executive's monthly report to the Commission. This information comes from the Field Operations Directorate based on first reports from notifiers and initial findings of investigations. It is therefore 'raw', unvalidated data. Some of the incidents may not be reportable and so could be excluded from our statistics later. Annex 2 gives a fuller discussion of the issues.
8. To produce annual statistics we need accurate information on:
  - Whether the injury was reportable (under RIDDOR);
  - The sector/industry;
  - The location;
  - Name, age, sex and employment status of the deceased, and
  - Type and cause of the incident.
9. The fatal statistics remain provisional until the following year for two reasons. First, any death within a year and a day of a related incident may change that incident to a fatality. Second, the data may change as investigations progress; for incidents in the last quarter uncertainty continues well beyond the year-end. Timing of the release is a balance between accuracy and immediacy. The later the release, the more accurate the data but conversely the less timely and relevant it becomes. The fatal statistics are usually released in July following the end of year in April. By this time, although still provisional, they should be sufficiently accurate to meet National Statistics standards.

#### **Argument**

10. Contemporary information on recent fatalities (annexed to the Chief Executive's report) is clearly of value to Commissioners. For the reasons set out in para 9, this immediacy provides a challenge to ensuring accuracy of the data. It may be helpful either to leave out, or note, any fatalities that appear, based on the early information, to be non-reportable. We should be able to ensure that the list is extended to include incidents reported to other directorates and LAs. The list should be prefixed with a caveat that it is based on 'raw', unvalidated information. We will examine what more can be done as part of the review mentioned in para 15 below.
11. The production of the annual statistics is complicated, mainly because of difficulties ensuring we have accurate data. Determining reportability, sector/ industry allocation and location involves judgement. These judgements require a series of presumptions about the 'right' way to classify certain incidents. For example, the death of a peripatetic worker is currently counted against where they are employed (their homebase) rather than the location where the incident occurred. (See annex 3 for an

incident illustrating these difficulties and the application of this 'presumption'.) These presumptions have developed through operational practice and have never been formally agreed by the Commission. The HSE Board will, in the first instance look at this, and report further to the Commission.

12. The data used to make these judgements often changes during the course of investigation and so CoSAS liaises with HSE directorates and LAs, case by case both during and after the relevant year, to ensure the annual statistics are as complete and accurate as possible. Validation was more difficult than usual this year because:
  - delays in COIN implementation made the transition from FOCUS more protracted;
  - data in COIN was incomplete for about 1 in 5 fatalities, possibly due to unfamiliarity with the new system;
  - difficulties with data extraction from COIN prevented the usual in-year validation;
13. During April-June intensive work was done to validate the statistics and it appeared that the national and sector pictures were sufficiently accurate for the planned release on 27 July (remembering that this first release is always 'provisional'). However, in the final run-up to the release date, larger than usual discrepancies between the regional/country analysis and FOD operational data cast doubt on the national picture.
14. The further validation work (done after the release was postponed) changed the provisional worker fatalities total from 204 to 212. Some change was predictable simply because investigations had moved on but a 4% increase is outside the expected range. The picture also changed in some regions and sectors. We believe the main reasons for the larger than usual regional discrepancies that underlie this change are:
  - poorer than expected quality of data in COIN (see para 12); and
  - a breakdown in previous arrangements for validating regional/country analysis with operational data at an early stageThe change from the figures due for release on July 27 confirms that postponement was necessary to reduce the risk of reputational damage to the Commission and HSE.
15. OPSD<sup>1</sup> and CoSAS will be conducting a joint review with FOD and Policy Group to develop improved arrangements for validation – this needs to move quickly as we are already well into 2006/07. The review will also consider whether changes at the ICC would be a better, more cost-effective route. It will look particularly at:
  - Managing data quality in COIN<sup>2</sup> and at the ICC;
  - Validation processes in operational directorates and between them, OPSD and CoSAS both in-year and after the end of year;
  - Responsibilities for decision-making on reportability, sector allocation etc for both operational and annual statistics purposes; and
  - Whether there is scope for simplifying the analysis done for the annual statistics to support quicker and easier validation.

## Consultation

16. OPSD, FOD, Policy Group, LAU, PEFD and Communications Directorate.

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<sup>1</sup> OPSD will represent other operational interests, i.e. HID, NSD and LAU/LAs

<sup>2</sup> A data quality group was set up by OPSD and CoSAS in advance of COIN implementation to resolve problems as they arose. The group was unable to make real progress because of the COIN implementation difficulties but could form the basis for the review process.

## **Presentation**

17. The release of the fatal statistics on August 17 went well with coverage on Radio 4 (Six O'clock News) and in the press.
18. The monthly reports to the Commission are in the public domain. The improvements suggested (para 10) should ensure their relationship to our published statistics is clear.

## **Costs and Benefits**

19. N/A

## **Financial/Resource Implications for HSE**

20. There will be some costs for conducting the review of our validation arrangements likely to be ~0.25 staff years (mostly bands 2 and 3) spread across CoSAS, OPSD and FOD. This will be resourced by deferring lower priority work. The review recommendations might require new or enhanced processes that may also impose higher staff costs. It might make recommendations for change at the ICC or with COIN that could involve significant costs – these would need to be considered by the Board.

## **Other Implications**

21. N/A

## **Action**

22. CoSAS will respond to any issues or suggestions from the Commission on the preparation of the annual fatal statistics. More specifically CoSAS will:
  - with OPSD and others, take account of the Commission's views in the review of validation arrangements;
  - work with FOD and others to implement the changes to the monthly report suggested at para 10 if they are supported by the Commission; and
  - prepare a paper on classification presumptions (para 11) for the HSE Board.

## **Assembling annual statistics on fatal injuries**

1. In HSE details of fatal injuries are held in a record on COIN (previously FOCUS etc) and updated with the investigation findings. For incidents where an LA is the enforcing agency we use the ICC database, CoSAS liaising with the relevant authority as the investigation progresses and asking the ICC to update the record. To complete the national picture we combine this data from COIN and the ICC with information about rail-related incidents which now comes from the Office of the Rail Regulation (ORR).
2. In previous years, lists of FOD fatalities (the large majority of worker fatalities) have also been reviewed through the year in a process under which listings were generated from FOCUS and sent for checking to Sectors. This continuing process did not take place this year, as there were difficulties extracting the relevant lists from COIN. Instead, a list compiled from ICC and COIN records for the whole year was compiled by CoSAS and sent to Sectors in May. This list proved to be incomplete, particularly for member of the public incidents.
3. A single database of fatalities (at least for HSE and LA enforced) would give us a more reliable source of information and simplify validation. As the ICC database is nominally a complete record (excluding rail-related fatalities) it could provide a single source of all the necessary data on fatal accidents. The alternative place for a single complete record would be COIN. This was considered during development but rejected because of the need to avoid over-complicating the system. The issue of a single database will be addressed as part of the proposed review of validation processes.

## Monthly reports on workplace fatal injuries

### Background

1. The monthly reports from the Chief Executive to the Commission include an annex of recent fatal injuries. Commissioners questioned whether some of the listed fatalities fell under HSE's remit, and whether these would be counted in the annual statistics. This note explains which types of fatal injury are likely to be included (or excluded) from the statistics.
2. The information on fatalities in the annex to Chief Executive's report was provided by FOD, and is 'raw' and unvalidated. It is also likely to be incomplete because it excludes any fatalities reported to other HSE directorates and other enforcing authorities, such as LAs.

### Basis for inclusion in annual statistics

3. The primary basis for including or excluding any fatal injury is RIDDOR reportability: reportable fatalities are included, non-reportable fatalities are excluded. The main exception to this rule is when the deceased person is self-employed and working on their own premises or in someone's home. As the duty to report was theirs, these injuries are strictly not reportable under RIDDOR. Despite this they do invariably get reported to HSE or the LAs. The test applied to decide whether they should form part of the fatal work injury total is whether the circumstances of the injury are such that it would have been reportable had the deceased person been an employee. There are 10 to 20 such fatal injuries each year.
4. Whether a fatality is reportable (or not) is very often confirmed only after the investigation by an inspector. Some cases can be quite complex, and often result in discussions between the inspector, his/her directorate, CoSAs, and RIDDOR policy colleagues to agree reportability. The key test is whether the accident arose 'out of or in connection with work'.

Incidents *generally* INCLUDED in the figures are:

- Most workers provided they were 'at work'.
- Members of the public, but subject to certain provisos. There must be a work activity involved; and there must be an issue with premises, equipment or work organisation, for example, failings in 'management control'.

Incidents *generally* EXCLUDED from the figures are:

- Workers, where the injury appears to be natural causes (eg, heart attack at work but *not* brought on by work);
- Members of the public, where there appears to be no issue with the duty holder's premises or work organisation. This also includes many sports activities.

5. There are some additional considerations. There are certain categories of fatal injury for which it can be very difficult to determine reportability, which in

turn may influence whether they form part of the official statistics. For similar reasons, notification in these categories is possibly uneven. These include:

- Suicide of workers, on work premises. Especially if there is a suggestion of workplace causation, eg stress;
- Members of the public, where the main criteria is 'supervision'. Particular areas of difficulty here include nursing/care homes and sports activities;
- Natural causes (for example, did a heart attack cause a fatal fall, or vice versa?);
- Violence to workers. Although one or two are reported each year, violence in the workplace is not fully perceived by duty holders and others to be a 'work-related' issue, and is potentially under-reported.

6. Recent fatalities in annexes to the Chief Executive's May and June reports, include several examples of uncertain reportability. The 'judgement' in some of these cases may rest on quite detailed considerations. At the very least they require further enquiries before a decision on reportability is made. Some of the incidents could prove to be 'non-reportable' and so be excluded from official figures. The incidents include:

- Mountain bike rider (MOP);
- Miniature railway rider (assuming MOP);
- Person falling from bed in health care (assuming MOP);
- Fractured ankle leading to complications;
- Person scalded by radiator (assuming MOP);
- Asphyxiation due to choking (assuming MOP);
- Swimmer in reservoir (MOP);
- Person in hostel, possibly intoxicated (assuming MOP).

## **Conclusion**

7. Each fatal injury is reviewed individually, and 'taken on its own merits' to determine reportability, or whether it is to be included in the figures. In the most difficult cases, and particularly if there are novel features, RIDDOR policy section will be consulted. In theory, the courts are the ultimate arbiters on reportability, but there is little case law available, and in practice virtually all decisions on reportability are based on the HSE's/LA's internal judgment.

### **An example of difficulties that can arise in classifying incidents**

1. Three employees of a waste-recycling firm died in a slurry tank on farmland. They were attending a slurry tank owned by their employer (a waste recycling firm) but temporarily sited on the farm for muck spreading. This incident was initially recorded as an agricultural fatality, although the employer was in manufacturing (recycling). This issue is common with peripatetic work, where the enforcing authority or sector is based on where the incident took place, not on the activity of the employer.

2. There are clearly arguments for allocating this either to agriculture (because this incident involved a common risk in that industry) or to waste recycling (because we need to know the extent of the risks to peripatetic operatives in that industry). Our convention is to allocate to the industry of the deceased's employer to ensure accuracy of total fatalities and incidence rate in that industry, i.e. waste recycling in this example.

3. Likewise, the location of the fatality could be either the farm (the site where it occurred) or the waste firm's premises (because the employer responsible for controlling the risk is based there). Our convention is the latter. This ensures the accuracy of regional incidence rates because the deceased people are counted in employment totals for the homebase of their employer. However, it will lead to an apparent anomaly if the the two locations are in different regions. The deaths will be counted (for annual/regional statistical purposes) in the homebase country/region total even though they actually happened in another country/region.