The impact of the introduction of the Incident Contact Centre and associated processing changes in HSE on the trend in the rate of major accidents as reported under the RIDDOR

HSE Statistics Branch
October 2008
Executive Summary

In April 2001, new arrangements for employers to report accidents, diseases and dangerous occurrences under the RIDDOR regulations were brought into effect. In place of a form-based system where employers reported directly to the relevant enforcing authority (HSE area office or local authority) a single central reporting point (the Incident Contact Centre -- ICC) was set up, which could receive reports by telephone, web form or on paper.

Prior to the introduction of the ICC, RIDDOR statistics for HSE-enforced premises were compiled from records in HSE’s operational database (FOCUS), and those for local authority enforced premises from a database maintained by the HSE’s local authority unit and compiled from copies of RIDDOR reports sent to them from local authorities.

For the first two years of the operation of the ICC (i.e. 2001/02 and 2002/03) details of all reports for HSE-enforced premises were entered onto FOCUS the operational database used by Field Operations Division (FOD). This involved HSE staff in area offices entering the data in the same way as they had done when reports were received directly by HSE. In April 2003, it was decided that only reports of injuries selected for investigation would be entered into FOD’s operational database. Since only a minority of reports are investigated, this change removed a layer of scrutiny of individual reports.

The main conclusion from this report is that the discontinuity in the trend for major accidents that occurred in 2003/04 is attributable with reasonable confidence to the advent of the ICC. The new system led to different -- and in some cases erroneous -- interpretations of RIDDOR provisions. These differences affected the way injuries on the borderline of reportability, or on the borderline between major and other reportable injuries were treated. The ICC tended to count more cases as reportable, and more cases as major injuries than the preceding system of reports directly to HSE and local authorities.

The reason for the effect of the introduction of the ICC in 2001/02 only becoming evident in the finalised figures in 2003/04 is that there were quality control procedures in operation that masked the discontinuity for the first two years the ICC’s operation. These quality control procedures primarily involved the work of the FOD IT support team and the admin staff in the FOD offices who, for the first two years of the operation of the ICC, inputted the accident reports onto FOCUS.

From the outset of the ICC the process of LAs copying their reports to the HSE was discontinued. Thus statistics were subsequently compiled directly from ICC records. Increases in the smaller number of reports relating to local authority enforced premises are evident from 2001/02.

Further work is required to establish the extent to which it would be reasonable to adjust the major injury trend. For the time being we conclude that the introduction of the ICC produced a step upward change in the number of recorded major injuries. Over three years this added about 4000 (15%) to the annual total. The increase was produced by a combination of improved reporting and changes to the operational interpretation of definitions. We cannot yet quantify the separate
contributions of these two effects, nor the extent to which operational definitions at the ICC have now been brought back into line with pre-ICC practice. Work is in hand on these questions. However the direction of the net effect is clear. The recorded reduction in major injury rates between the period before 2001/02 and the present will understate the true underlying reduction.
Background on the reporting mechanism for RIDDOR-reportable injuries

1. In April 2001, new arrangements for employers to report accidents, diseases and dangerous occurrences under the RIDDOR regulations were brought into effect. In place of a form-based system where employers reported directly to the relevant enforcing authority (HSE area office or local authority) a single central reporting point (the Incident Contact Centre -- ICC) was set up, which could receive reports by telephone, web form or on paper. The main intention was to make the reporting process easier for employers and thereby to increase the coverage of reporting.

2. Although these changes made no difference to reporting duties or their scope, there was clearly potential for statistical discontinuity in the recorded numbers of injuries (indeed, in a sense, this was the intention).

3. Prior to the introduction of the ICC, RIDDOR statistics for HSE-enforced premises were compiled from records in HSE’s operational database (FOCUS), and those for local authority enforced premises from a database maintained by the HSE’s local authority unit and compiled from copies of RIDDOR reports sent to them from local authorities.

4. On the introduction of the ICC, detailed instructions on the recording and classifying of injuries were prepared jointly by HSE and the ICC. From the outset, the ICC undertook some limited quality control checks. The procedures for checking data quality were extended in 2004.

5. Each report received by the ICC would be referred to the relevant enforcing authority for acceptance and possible investigation. Any differences of opinion about which authority was relevant were resolved between the ICC and the potential enforcer(s).

6. For the first two years of the operation of the ICC (i.e. 2001/02 and 2002/03) details of all reports for HSE-enforced premises were entered onto FOCUS the operational database used by Field Operations Division (FOD). This involved HSE staff in area offices entering the data in the same way as they had done when reports were received directly by HSE. During these two years, the data held on FOCUS was used to generate the annual accident statistics. This involved transferring the data from FOCUS to the corporate database RAID. In April 2003, it was decided that cost savings could be made by ceasing to record all reports for HSE-enforced premises in FOCUS. From this time onwards only reports of injuries selected for investigation were entered into FOD’s operational database. Since only a minority of reports are investigated, this change removed a layer of scrutiny for most injury reports.

7. From the outset of the ICC the process of LAs copying their reports to the HSE was discontinued. Thus statistics were compiled directly from ICC records. In order to ensure that this reorganisation did not cause a loss of data quality a team within HSE’s Safety and Enforcement Statistics Branch was established to undertake sample accuracy checks.

8. Errors of coding identified by HSE on data input or in the checking of LA reports were fed back to the ICC, and where necessary led to amendment of the ICC operator instructions.
Figure 1

9. The following diagrams summarise the way the systems have changed over time, first for HSE-enforced premises:

### Reporting chains in different periods for HSE-enforced premises

<table>
<thead>
<tr>
<th>Before 1 April 2001</th>
<th>From 1 April 2001 to 31 March 2003</th>
<th>From 1 April 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employers</strong></td>
<td><strong>Employers</strong></td>
<td><strong>Employers</strong></td>
</tr>
<tr>
<td>Paper forms</td>
<td>Telephone, web, paper</td>
<td>Telephone, web, paper</td>
</tr>
<tr>
<td></td>
<td>ICC</td>
<td>ICC</td>
</tr>
<tr>
<td></td>
<td>E-mail</td>
<td>E-mail</td>
</tr>
<tr>
<td>HSE area offices</td>
<td>HSE area offices</td>
<td>HSE area offices</td>
</tr>
<tr>
<td></td>
<td>Database</td>
<td>Database</td>
</tr>
<tr>
<td>HSE central database managers</td>
<td>HSE central database managers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Database extract</td>
<td>Database extract</td>
</tr>
<tr>
<td>HSE statistical staff</td>
<td>HSE statistical staff</td>
<td>HSE statistical staff</td>
</tr>
</tbody>
</table>
...secondly for LA-enforced premises:

![Diagram of Reporting chains in different periods for LA-enforced premises](image)

**Figure 2**

<table>
<thead>
<tr>
<th>Before 1 April 2001</th>
<th>From 1 April 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers</td>
<td>Employers</td>
</tr>
<tr>
<td>Paper forms</td>
<td>Telephone, web, paper</td>
</tr>
<tr>
<td>Local Authorities</td>
<td>E-mail</td>
</tr>
<tr>
<td>Copies of forms</td>
<td>Local Authorities</td>
</tr>
<tr>
<td>HSE LA unit</td>
<td>Database</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>HSE statistical staff</td>
<td>HSE statistical staff</td>
</tr>
</tbody>
</table>

**The corrective measures that were introduced to minimise the impact of the introduction of the ICC on the consistency of RIDDOR statistics**

10. The advent of the ICC in April 2001 was a clearly a major departure from the previous systems. There was, therefore, a concern that data quality would be affected. However, the introduction of a number of validation and quality control procedures provided some reassurance on this point. These were the quality control procedures within the ICC, the checks undertaken by the team within HSE’s Safety and Enforcement Statistics Branch on the data from LA-enforced premises and the residual checks undertaken by FOD administrative staff during the first two years, when accident reports were entered into FOCUS.

11. Despite these precautions, when the ICC was up and running it soon became apparent that there were significant anomalies in the way in which accidents were being recorded. These seem to have arisen because the ICC developed rather different interpretations of key issues compared to the HSE staff previously involved in the reporting chain. For example, it would seem that in the early years of the operation of the ICC, at least, a wider range of injuries were being classified as major than had previously been the case.
12. Because of the importance of major injury rates for HSE’s targets, an additional process was set up to ensure that the introduction of the ICC did not affect the accuracy of recording of major injuries. This additional process involved an administrative and IT support team within FOD’s Planning and Resources Unit. They were given the task of manually checking the accuracy of major injury reports from the ICC. These checks focused on reports covering kinds of injury that were known from past experience and from an examination of the early ICC data to be prone to mis-classification i.e. types of injuries that were being classified as major when they really failed to meet the criteria for such classification. For example, there was a tendency to mis-classify injuries that resulted in a broken nose as a major injury on the incorrect assumption that such injuries constituted a fracture of a bone. Similarly, injuries that resulted in the loss of tips of fingers were being wrongly classified as major on the incorrect assumption that such injuries constituted amputation. The FOD support team would identify candidates for such mis-classifications by downloading sub-sets of reports from the ICC database where the nature of the injury was fracture or amputation but where the notifier comments included the keywords finger/thumb/nose/carpel/tip/digit.

13. The FOD IT support team thus had responsibility both for identifying errors in reports of major accidents and for arranging for corrections to be made. The intention was that both FOCUS and the ICC database would be corrected. This additional data quality work involved the scrutiny of large numbers of records. The extent of the checks can be judged from the fact that in the early years it involved the reclassification of between 1000 and 2000 records that had in the view of the FOD support team been wrongly classified as major. This additional process of data correction was undertaken between 2001/02 and 2004/05.

The discontinuity

14. It can be seen from the above that the reporting chain from injury to statistical record was never straightforward and that it evolved over time. This has always been a concern in terms of the use of RIDDOR data for statistical purposes. Over the period of interest, the reliability and stability of the number of recorded injury reports as a measure of the number of reportable injuries (and particularly major injuries) that actually occur was dependent on the reliability of this evolving reporting chain. Along the way, there were opportunities for problems to arise due to differences in interpretation, incompleteness or error.

15. In view of these complexities it is perhaps not surprising that the RIDDOR dataset for this period appears to contain a major discontinuity i.e. a break in a trend that is otherwise reasonably consistent. This discontinuity is in the time series for the rate of major injuries. This is illustrated in figure 3.
16. It can be seen that there was an increase of between two and three thousand in the number of records of major injuries to employees in the FOD and LA-enforced sectors in 2003/2004 as compared to 2002/2003. This was out of line with the trend for both the previous and subsequent years that together show a reasonably steady downward trend in the finalised figures for major injuries. In all other cases the difference between one year and the next was no greater than 1000.

**Further analysis of the discontinuity that has been undertaken with a view to understanding its origins.**

17. Investigations of this discontinuity are ongoing and have involved five approaches. First, the FOCUS database has been checked to identify the numbers of records captured by the ICC that were subsequently reclassified as being non-reportable by the administrative teams in the FOD area offices. Second, the existence of a second alternative source of information on workplace injuries, the Labour Force Survey, has been used to investigate changes in reporting levels over time and model the major injury trend since
2001. Third, a more detailed analysis has been undertaken of the changes in the numbers of reports year by year broken down into the FOD-enforced and LA-enforced sectors. Fourth, the identification numbers assigned to reports at the ICC have been used to track the way in which some reports were classified differently in the three databases holding data for the FOD-enforced sector for the years 2001/02 and 2002/03. Fifth, the RIDDOR dataset as a whole has been investigated to determine whether there have been changes over time in the proportion of major injuries in relation to overall reports. The findings from these five approaches are discussed in turn below.

Investigative approach 1 - Identification of the numbers of records captured by the ICC that were subsequently reclassified as being non-reportable by the administrative teams in the FOD area offices.

18. In the first two years of the operation of the ICC all injury reports relating to HSE-enforced premises were input onto FOCUS by administrative staff in the FOD area offices. The administrative staff identified a proportion of these reports as non-reportable and coded as such in the database. Table 1 shows an analysis of the non-reportable injuries recorded in FOCUS in the relevant period.

<table>
<thead>
<tr>
<th>Type/sector</th>
<th>Average 1997-08 to 2000-01</th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>40</td>
<td>431</td>
<td>473</td>
</tr>
<tr>
<td>Over 3 Day</td>
<td>211</td>
<td>1771</td>
<td>2111</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td>2202</td>
<td>2584</td>
</tr>
</tbody>
</table>

19. There is a marked increase in the non-reportable numbers on the introduction of the ICC. Around 2400 reports per year, which the ICC had initially identified as reportable, were identified by the HSE staff as non-reportable. With the cessation of entry of all reports to FOCUS from the start of 2003/04 any reports of this kind would remain in the ICC record, and be carried forward into the statistical count.

20. It seems reasonable to hypothesise that the above figures may well under-represent the extent to which the advent of the ICC loosened the interpretation of what constituted a reportable injury. The figures shown represent a summation of work in around 20 area offices and there would probably have been considerable variation in the rigour with which the issue of non-reportability would have been pursued from one office to the next. In the two-year period in question the reports were being pre-screened at the ICC. Therefore, it would seem understandable if reportability was not checked out by the FOD staff as thoroughly as it had been done previously because the issue was now primarily the responsibility of the ICC staff.
Investigative approach 2 - Use of data from the Labour Force Survey to estimate reporting levels and model the injury trend independently of the results from the ICC.

21. The Labour Force Survey includes questions about injuries that individuals may have suffered at work. One of the questions relates to the occurrence of injuries that may have caused workers to take more than three days off work. The responses to this can be used to calculate the rate of legally reportable injury. Whilst this data has some weaknesses, in terms of being self-reported and relying on respondents accurately recalling events over a 12 month period, it does have an important strength. This is that the processes for collecting this data have been consistent since the early 1990s and so this source is independent of many of the biases that can affect data based on the employer reporter chains set out in Figures 1 and 2.

22. The following chart shows the LFS trends for total reportable injury in both the HSE-enforced and LA-enforced sectors.

Figure 4

23. Using these smoothed trends from the LFS it is possible to estimate the proportions of reportable injuries that were recorded through the RIDDOR system on a year-by-year basis. These data are shown in Figure 6.
24. It is noteworthy that the reporting levels in the HSE- and LA-enforced sectors show different temporal patterns. The trend in reporting for the LA-enforced sector shows increases in the years 2001/02, 2002/03 and 2003/04 and then stabilises at just over 0.3. On its own, this trend could potentially have been explained in terms of both the publicity around the introduction of the ICC and the subsequent easier mechanisms of reporting having together led to an increase in the level of reporting of accidents. However, the picture is rather different with the HSE-enforced sector. Once again there would seem to be a significant increase in reporting, but in this case the figures only improve from 2003/04 onwards.

25. The availability of the LFS data makes it possible to model the way in which the RIDDOR data might have looked if the reporting system had not been changed with the introduction of the ICC. Such modelling involves calculating the numbers of reports that would have been expected from 2001/02 onwards if the underlying trends recorded in the LFS had been exactly reproduced in the number of reports submitted under RIDDOR. This approach involves the assumption that the reporting level seen in the preceding three years would have continued. This modelled data is shown below for the HSE-enforced and LA-enforced sectors.
Figure 6

Number of RIDDOR reports received for HSE enforced premises compared with the number predicted from LFS estimates and pre-ICC reporting level

Figure 7

Number of RIDDOR reports received for LA enforced premises compared with the number predicted from LFS estimates and pre-ICC reporting level

26. It is noteworthy that the timing of the divergence between the observed and predicted trends is different for the HSE- and LA-enforced sectors. As with the trend in reporting levels, the advent of the ICC would seem to have affected the data from the LA-enforced sector fairly quickly. On the other hand, with the data for the HSE-enforced sector the divergence only starts in 2003/04. This is suggestive that, with this latter sector at least, the divergence is not primarily due to a great improvement in the level of reporting following the introduction of the ICC. Instead, these findings provide further evidence for there having been
a change in interpretation regarding the reportability of accidents. As discussed above, this change may well have been masked in the statistics for the HSE-enforced sector until the practice of checking of all reports from this sector within FOD Area Offices stopped in 2003/04.

Investigative approach 3 - Detailed analysis of changes in the number of reports year by year.

27. Figures 8 and 9 compare the year on year changes in total and major reported injuries for the HSE-enforced and LA-enforced sectors respectively. Figure 8

![Year-on-year change in total and major injuries reported by HSE enforced premises](image1)

Figure 9

![Year-on-year change in total and major injuries reported by LA enforced premises](image2)
28. Once again these charts show that the advent of the ICC affected the data for the LA-enforced sector almost immediately but that the impact on the data for the HSE-enforced sector was delayed until 2003/04. It can be seen that the increase in the figures for the LA-enforced sector was considerably greater particularly bearing in mind that overall the LA-sector accounts for only a quarter of total reports. The size of this increase suggests that there may have been some improvement in the reporting level from this sector with the advent of the ICC alongside the loosening of the interpretation of reportability. In terms of understanding the discontinuity in the trend in the rate of major accidents, it is noteworthy that in both the HSE-enforced and the LA-enforced sectors the changes in the numbers of major accident reports are disproportionately higher in the years where the advent of the ICC is believed to be driving the changes. Overall major injury reports account for about one fifth of the total but in the key years (i.e. 2003/04 for the HSE-enforced sector and 2001/02, 2002/03 and 2003/04 for the LA enforced sector) the changes involve major injury reports to a much larger degree.

**Investigative approach 4 – Tracking reports in the three databases holding data for the FOD-enforced sector for the years 2001/02 and 2002/03 and measuring the extent to which some reports were classified differently in terms of the major / over-3-day distinction.**

29. Table 2 and Figure 10 show that a key feature of the discontinuity was the discrepancy between the RAID and ICC figures for major injuries, particularly in 2002/2003 and in 2001/02. It is reasonably clear that these differences were due the operation of the data quality checks that took place in these two years and the fact that, contrary to the original intention, the errors identified in these checks were not consistently corrected in both databases.

Table 2. Numbers of reports recorded in RAID and the ICC database for major injuries to employees in the FOD and LA-enforced sectors.

<table>
<thead>
<tr>
<th>Date</th>
<th>Numbers of reports recorded in RAID for major injuries to employees in the FOD and LA enforced sectors</th>
<th>Numbers of reports recorded in the ICC database for major injuries to employees in the FOD and LA enforced sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 / 97</td>
<td>27 456</td>
<td></td>
</tr>
<tr>
<td>1997 / 98</td>
<td>27 954</td>
<td></td>
</tr>
<tr>
<td>1998 / 99</td>
<td>27 212</td>
<td></td>
</tr>
<tr>
<td>1999 / 00</td>
<td>27 584</td>
<td></td>
</tr>
<tr>
<td>2000 / 01</td>
<td>26 495</td>
<td></td>
</tr>
<tr>
<td>2001 / 02</td>
<td>27 023</td>
<td>28 034</td>
</tr>
<tr>
<td>2002 / 03</td>
<td>27 186</td>
<td>30 056</td>
</tr>
<tr>
<td>2003 / 04</td>
<td>29 817</td>
<td>29 844</td>
</tr>
</tbody>
</table>
A methodical investigation in which the recording of reports has been tracked in both RAID and the ICC database, using the identifier numbers assigned by the ICC, has shed considerable light on the causes of the discontinuity. During this investigation the year which was examined in most detail is 2002/03. In this year the ICC database contained nearly 3000 more major injury reports than RAID. From the data presented earlier in this report it is clear that part of the difference can be accounted for by the quality control checks undertaken by the FOD administrative staff responsible for entering the reports onto FOCUS. Table 1 shows that they identified 473 major reports as being non-reportable during the process of entering them onto FOCUS. These non-reportable records would not have been transferred over to RAID as this database only contains the reportable records from FOCUS. In addition, the FOD administrative staff may well have also identified reports that required reclassification from major to over-3-day injuries. However, there is no record of the numbers of reports rejected or reclassified by regional office staff, so this effect cannot be quantified.

Having taking account of the non-reportable records identified by FOD, this leaves some 2500 records that need to be accounted for by other means. A comparison was therefore made to see if the overall number of reports of major...
accidents on FOCUS was equivalent to the number of reports relating to FOD-enforced premises on the ICC database. It was found that there was quite a large discrepancy with 1828 more major reports recorded in the ICC database as compared to the total number of majors (reportable and non-reportable) recorded in FOCUS.

32. Given this large discrepancy between the two databases in the number of records corresponding to FOD premises, an attempt was made to cross-match the major reports from the ICC database to determine how they are classified within RAID. This involved using the ICC ID numbers to establish the links. The initial aim of this work was to cross-match all of the reports of major accidents during 2003/04 in FOD-enforced premises. However, this proved to be difficult. The key problems were that in this year RAID contained around 3000 reports with no ICC ID No. and also a number of reports with duplicated ICC ID numbers.

33. An alternative approach to linking records in the FOCUS and RAID databases was tried. This was to investigate the way in which the subset of reports identified by the FOD IT support team as requiring reclassification from major to over-3-day have come to be finally recorded in the two databases. In 2002/03 the FOD IT support team identified some 1722 reports as requiring reclassification. By cross matching using ICC ID numbers it was found that these reports were allocated into the major and over-3-day classifications in quite different ways within RAID and the ICC database. The table below shows how these reports were recorded.

<table>
<thead>
<tr>
<th>Severity</th>
<th>Number of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RAID</strong></td>
<td></td>
</tr>
<tr>
<td>N/K</td>
<td>80</td>
</tr>
<tr>
<td>Major (code 2)</td>
<td>85</td>
</tr>
<tr>
<td>Over 3 day (code 3)</td>
<td>1557</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1722</strong></td>
</tr>
<tr>
<td><strong>ICC</strong></td>
<td></td>
</tr>
<tr>
<td>N/K</td>
<td>284</td>
</tr>
<tr>
<td>Major (code 2)</td>
<td>1399</td>
</tr>
<tr>
<td>Over 3 day (code 3)</td>
<td>37</td>
</tr>
<tr>
<td>Code 5</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1722</strong></td>
</tr>
</tbody>
</table>

34. It is clear from the above that in RAID most of the records identified by the FOD IT support team were changed from major to over-3-day as they had requested. However, despite the same request having been made to the ICC only a very limited number of records were changed. This difference accounts for the ICC containing at least 1300 more majors than RAID. Indeed, depending on the allocation of the records identified as N/K in this analysis, this figure could be as high as nearly 1600 more records. In any case, it is clear that the
failure to update the ICC database based on the instructions from the FOD IT support team could account for a large proportion of the discrepancy between the ICC database and RAID in the numbers of FOD-enforced major accident reports.

35. Finally in terms of the 2002/03 data it must be assumed that the balance of the discrepancy of 3000 (i.e. roughly 700 reports) is due to fewer reports relating to the LA-enforced sector having been finally recorded in RAID. This is likely to be due to the quality control checks undertaken by the team in Safety and Enforcement Statistics Branch.

36. A similar analysis was attempted for the 2001/02 dataset but this was hampered by the fact that for this year no documentation was available to identify the reports that were found by the FOD IT support team to have been mis-classified by the ICC. In 2001/02 just over 1000 more major injury reports relating to FOD-enforced premises were present on the ICC database as compared to RAID. Of these nearly half could be firmly accounted for by the work of the FOD administrative teams in the area offices. Some 431 records were marked as non-reportable during data entry onto FOCUS.

37. Comparison of the overall number of reports of major accidents on FOCUS with the corresponding number of reports relating to FOD-enforced premises on the ICC database revealed a quite different picture to that for 2002/03. This is shown in the following figure.

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**Figure 11.** Comparison of overall numbers of reports of major accidents in the ICC database relating to FOD-enforced premises with the corresponding numbers in FOCUS

![Comparison of ICC and FOCUS FOD Major Reportability](image-url)
38. It can be seen from the figure above that the number of major reports in the ICC database relating to FOD-enforced premises is more-or-less identical to the total number of majors (reportable + non-reportable) stored in FOCUS. To be precise the ICC database contains 13 fewer reports. Therefore it would seem that in 2001/02 the records identified by the FOD IT support team were systematically changed in both the ICC database and FOCUS/RAID.

39. The balance of the difference of 1000 reports between the ICC database and RAID in 2001/02 (i.e. roughly 600 reports) would seem to be down to fewer reports relating to the LA-enforced sector having been finally recorded in RAID.

40. What happened in 2003/04 in terms of the implementation of the recommendations from the FOD IT support team is far from clear. A batch of 1250 records has been identified where the recommended changes have been implemented in a reasonably consistent way across RAID and the ICC database. Roughly, two thirds of these records were amended in both databases. However, another batch of 400 records have been identified which do not appear to have been changed in the ICC database at all.

Investigative approach 5 – Examination of changes over time in the proportion of major injuries in relation to overall reports

41. Figure 12 shows the way in which the proportion of reports which are classified as major has changed over time.

Figure 12

![Figure 12: Proportion of major injuries in total reported, by reporting authority](image)

42. It can be seen that this proportion has increased over time but that the biggest step changes have occurred in years where the advent of the ICC
would be predicted to be having most effect. This would be the first year of
operation of the ICC (i.e. 2001/02) for the LA-enforced sector and both 2003/04
and 2004/05 for the HSE-enforced sector. In terms of the HSE-enforced sector,
2003/04 was the first year of data collection where the checking processes in
the FOD area offices were no longer operating and 2004/05 was the first year in
which data was no longer being rigorously checked by the FOD IT support
team.

**Conclusions**

43. The main conclusion from this report is that the discontinuity in the trend
for major accidents that occurred in 2003/04 is attributable with reasonable
confidence to the advent of the ICC. This key change in the system for handling
reports resulted in the RIDDOR legislation being interpreted erroneously in two
ways. First, injuries falling outside the strict terms of the legal definition were
being classified as major to a greater extent than had previously been the case.
Second, more reports were being accepted as reportable when there were
reasons to suggest that they were not be covered by RIDDOR.

44. The reason for the effect of the introduction of the ICC in 2001/02 only
becoming visible in the finalised figures in 2003/04 is that there were quality
control procedures in operation that masked the discontinuity for the first two
years the ICC’s operation. These quality control procedures primarily involved
the work of the FOD IT support team and the admin staff in the FOD offices
who, for the first two years of the operation of the ICC, inputted the accident
reports onto FOCUS. The key evidence for the impact of the work of the FOD IT
support team is the work that has traced the 1722 reports from the 2002/03
dataset that the team identified as requiring re-classification. It has been shown
that the majority of these reports were reclassified in FOCUS and were,
therefore, not included in the finalised figures. Whilst it has not been possible
undertake a similar tracing procedure with the 2001/02 dataset, it can only be
assumed that a similar number of records were reclassified. Alongside the work
of the FOD IT support team residual data quality checks were being undertaken
by the FOD staff responsible for entering the reports onto FOCUS. In both
2001/02 and 2002/03 they marked over 400 major reports as being non-
reportable.

45. The main purpose of this research has been to establish whether the
increase in reported of major injuries in 2003/04 was genuine, ie a reflection of
a real increase in reportable major injuries across the whole UK economy. We
now believe it was not. This poses a further question, whether we should go
beyond merely disregarding the discontinuity when considering the overall trend
and actually take the positive step of adjusting the figures downwards. The case
for doing this would be that any trend that has occurred in the raw figures since
2002/03 has been achieved despite a significant proportion of reports having
been erroneously classified as major.

46. Further work is required to establish the extent to which it would be
reasonable to adjust the major injury trend. The key issue will be to establish
whether (and to what extent) the errors of interpretation have continued from
2002/03 to the present. Perhaps the strongest evidence on this issue that is
currently available comes from the data on the way in which the proportion of reports classified as major has varied over time. This data described in paragraph 42 and Figure 12 shows that following the advent of the ICC there was a step change which shows no signs of being reversed. However there are other factors that could affect his ratio, for example absence management will tend to reduce the number of injuries which lead to more than three days absence, but will have no impact on the number of major injuries.

47. We conclude that the introduction of the ICC produced a step upward change in the number of recorded major injuries. Over three years (2001/04) this added about 4000 (15%) to the annual total. The increase was produced by a combination of improved reporting and the ICC’s different - and sometimes erroneous - interpretation of reportability and major injury definitions. We cannot yet quantify the separate contributions of these two effects, nor the extent to which the ICC’s interpretations have now been brought back into line with pre-ICC practice. Work is in hand on these questions. However the direction of the net effect is clear. The apparent reduction in major injury rates since 2001/02 has understated the true underlying reduction.