

Annex 1: Cost-benefits detailed analysis

Introduction

1. The following analysis adopts a **ten-year appraisal** period. Impacts are **discounted over** time at 1.5% per annum for health impacts and 3.5% per annum for all other impacts in line with HM Treasury Green Book guidance.¹ HSE is currently considering a range of legislative proposals to amend RIDDOR, including on additional ill health reporting, reviewing definitions in the regulations and the addition of new dangerous occurrences reflecting new technology. We also examine non-legislative proposals related to tackling over-reporting and enabling more dutyholder auto-reporting.

Additional occupational diseases

Number of reports

2. To estimate how many new ill health reports the additional disease reporting requirements would generate, a range of data sources was used:
 - a. For diseases that were previously reportable under RIDDOR, a five-year average of report numbers to 2010/11
 - b. The Health and Occupation Research (THOR) network, which gathers data from participating physicians
 - c. Industrial Injuries Disablement Benefit (IIDB), which is a state benefit for people injured or made ill through their occupation and include physician assessment of potential beneficiaries
3. THOR and IIDB data include a five-year average from 2015 to 2019 (i.e. before disruption caused by the COVID-19 pandemic); and the latest available data from 2023 (which we understand reflects a return to pre-pandemic norms).
4. In our data, numbers of cases identified each year via THOR and IIDB tend to be higher than those reported under RIDDOR. This could be due to RIDDOR non-compliance or the fact that THOR and IIDB will identify cases arising from historical exposure that is hard to attribute to any one employer or where the employer is no longer operating. We include figures derived from THOR and IIDB in our higher estimates as illustrative of what a maximum could look like on the assumption that all identified cases would generate RIDDOR reports; and to reflect the possibility that the inclusion (or reintroduction) of new ill health conditions into RIDDOR could trigger a flurry of historical reports – it is not clear how likely this is, but we include it as a scenario to illustrate a higher cost. The implementation of RIDDOR changes could be designed to discourage historical reporting, such as a limit on cases diagnosed in the last twelve months.

¹ https://assets.publishing.service.gov.uk/media/6645c709bd01f5ed32793cbc/Green_Book_2022_updated_links_.pdf

5. There are 13 new (or reintroduced) occupational diseases being considered in this analysis. These would be additional to the six that are currently reportable. RIDDOR policy have reviewed available data and made a best estimate as to report numbers for cost modelling. Three-letter codes for disease names provide read-across to the table in Annex 2.
6. **Pneumoconiosis (PNU)** (including silicosis but excluding asbestosis) is proposed for reintroduction to RIDDOR. It is a lung disease caused by inhaling certain types of dust particles, such as silica.
 - a. In the low scenario, we assume there will be six reports each year, based on previous RIDDOR data
 - b. In the high scenario, we assume 197 reports per year based on IIDB data
7. **Decompression illness, pulmonary barotrauma and dysbaric osteonecrosis (DCM)** are also proposed for reintroduction to RIDDOR. These are caused by a rapid decrease in the pressure surrounding workers, e.g. in deep sea or at high altitude. Due to a lack of data from other sources, both the low and high scenarios used old RIDDOR data of five reports per year.
8. **Asbestosis (ASB)** is also proposed for reintroduction to RIDDOR. This is a chronic lung disease caused by inhaling asbestos fibres.
 - a. In the low scenario, we assume there will be three reports per year based on previous RIDDOR data
 - b. In the high scenario, we assume 1,007 reports per year, based on IIDB data
9. **Hypersensitivity pneumonitis (HYP)** (e.g. farmer's lung) is also proposed for reintroduction to RIDDOR. This is a lung disease triggered by an allergic reaction to inhaled substances.
 - a. In the low scenario, we assume four reports per year based on previous RIDDOR data
 - b. In the high scenario, we assume 24 reports per year based on THOR data
10. **Cadmium-related emphysema (CAD)** is also proposed for reintroduction to RIDDOR. This is a progressive lung disease where alveoli (tiny air sacs in the lungs where the exchange of oxygen and carbon dioxide takes place) are damaged, caused by inhalation of cadmium. The available RIDDOR data shows very few reports on poisoning, mostly due to lead. There is no THOR or IIDB data. Both the low and high scenarios use an estimate of one report per year – this is likely to be an overestimate.
11. **Beryllium disease (BER)** (skin and respiratory) is also proposed for reintroduction to RIDDOR. This is a chronic inflammation of the lungs due to inhaling fumes or dust containing beryllium. As with cadmium-related emphysema, there is very limited data and we assume one report per year, expecting this to be an overestimate.
12. **Chromium-related ulceration (CHR)** is also proposed for reintroduction to RIDDOR. This refers to skin, throat and nose ulcers resulting from exposure to chromium.
 - a. In the low scenario, we assume two reports per year, based on previous RIDDOR data
 - b. In the high scenario, we assume 3.3 reports per year based on IIDB data

13. **Knee and elbow bursitis (KEB)** is also proposed for reintroduction to RIDDOR. This is painful swelling around joints. In both the low and high scenarios, we assume 23 reports per year based on previous RIDDOR data. This is the one case where the previous RIDDOR data identified more cases per year than THOR or IIDB.
14. **Oil folliculitis (FOL)** is also proposed for reintroduction to RIDDOR. This is inflammation of hair follicles due to exposure to various oils in the workplace.
- In the low scenario, we assume one report per year, based on previous RIDDOR data
 - In the high scenario, we assume 8.7 reports per year, based on THOR data
15. **Noise-induced hearing loss (NIH)** has not been previously included in RIDDOR. We lack data on new cases. There were an estimated 12,000 prevalent cases (i.e., cases where ill health persists, even if the condition started in previous periods) of hearing problems each year caused or made worse by work according to the Labour Force Survey averaged over 2021/22 to 2023/24. IIDB figures include only annual new assessed claims and these are based on a much stricter definition of 'deafness' in which claimants must have a substantial measured loss of hearing in both ears (greater than 50 dB).² The latest IIDB figure is 100 new cases, which we will adopt in both our low and high scenario. This is likely an underestimate given that the IIDB definition of 'deafness' is stricter than more general 'hearing loss'.
16. **Allergic rhinitis (RHI)** has also not been previously included in RIDDOR. This is nose irritation caused by allergens. Due to the absence of previous RIDDOR reporting, both the low and high scenarios used IIDB's ten cases per year as the estimated number of reports.
17. **Occupational contact urticaria (URT)** has also not been previously included in RIDDOR. This is a localised rash characterised by wheals and redness. Due to the absence of previous RIDDOR reporting, both scenarios used THOR's 29 cases per year as the estimated number of reports.
18. For **bronchiolitis obliterans (BRO)**, we lack data on new cases and this represents a gap in our analysis. We will work further to develop estimates of report numbers for this condition, if possible.
19. After the summation of each scenario's estimated reports, we calculated a total of **185** additional reports per annum in the low scenario and **1,409** additional reports per annum in the high scenario.

Cost per report

20. Our estimate of the cost of reporting an illness or injury under RIDDOR is based on the time it takes to prepare and submit a RIDDOR report; and the wage of the worker conducting this task.

² <https://www.hse.gov.uk/statistics/causdis/deafness/>

The impact assessment for RIDDOR 2013³ made the following estimates, verified by the 2018 PIR⁴:

- a. Ten minutes to gather the relevant material to submit the form
- b. 13.5 minutes to input the data and submit it (including taking a copy for internal purposes)
- c. This gives 23.5 minutes in total

21. In this time estimate, we assume the dutyholder has already spent the time investigating the incident or illness and made a suitable record, which is a duty irrespective of RIDDOR. We have also excluded any time filling in the Accident Book⁵ as something dutyholders would do anyway.

22. We assume that this average time to make a RIDDOR report is suitable for ill health in particular. This may not be the case (given that current ill health reporting account for 1.6% of reports with the majority being for injury) and will require further exploration with dutyholders through consultation.

23. Reporting is assumed to be completed by a manager, at a full economic cost of approximately £31.04 per hour⁶, giving a total cost to business per report of around £12.16.

24. In terms of the costs of a report to HSE, this will differ depending on whether the report is passed up for consideration for further follow-up ('triaged') or not. HSE data suggests that around 33% of RIDDORs are passed to triage. HSE has work study data of the time required to do such processing – note that this process applies to non-fatal safety RIDDORs and so may not be representative of, for example, disease reports, but we apply it in this analysis as the best available evidence.

25. For triaged reports (around 33% of reports), RIDDORs are estimated to take to process and review:

- a. Around 4.4 minutes of a Band 6's time, at £43 per hour
- b. Around 30.7 minutes of a Band 5's time at £57 per hour
- c. Around 2.8 minutes of a Band 3's time at £94 per hour
- d. In total, around £36.69 per report

26. When not triaged (around 67% of reports), RIDDORs are estimated to take to process and review:

- a. Around 4.4 minutes of a Band 6's time, at £43 per hour
- b. Around 9.9 minutes of a Band 5's time at £57 per hour
- c. Around 2.8 minutes of a Band 3's time at £94 per hour⁷
- d. In total, around £16.94 per report

³ https://www.legislation.gov.uk/ukia/2013/33/pdfs/ukia_20130033_en.pdf

⁴ https://www.legislation.gov.uk/uksi/2013/1471/pdfs/uksi0d_20131471_en.pdf

⁵ <https://www.hse.gov.uk/pubns/books/accident-book.htm>

⁶ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digit2010ashetable14>. SOC code 112, median salary of a production manager, uprated by 20% to account for on-wage costs

⁷ This work is currently carried out by a Band 2, but it is planned that it will be carried out by an experienced Band 3 once the system is bedded in

27. This gives an average cost of a RIDDOR report processed by HSE of around £23.46.
28. Around 69% of RIDDORs are processed by HSE and around 31% by local authorities (LAs). Where processed by LAs, we expect an inspector is likely to do so. Due to lack of further evidence we used the estimated processing times from the 2013 IA, at 23.5 minutes per report. The cost of an inspector is approximately £20.74 per hour⁸, causing the cost per report to be £8.12 to a local authority.⁹
29. The average cost of a RIDDOR report, accounting for whether it is processed by HSE or by an LA; and whether the HSE-processed reports are triaged or not, is:
- To business, around £12.16
 - To HSE, around £16.19
 - To LAs, around £2.52
 - TOTAL: around £30.86

Annual cost of additional reports

30. This gives a **total cost to business of additional reports** of:
- In the low scenario, around £2,250 per annum; or around £19,400 in present values over ten years
 - In the high scenario, around £17,100 per annum; or around £147,000 in present values over ten years
31. The **total cost to HSE of additional reports** is:
- In the low scenario, around £3,000 per annum; or around £25,800 in present values over ten years
 - In the high scenario, around £22,800 per annum; or around £196,000 in present values over ten years
32. The **total cost to local authorities of additional reports** is:
- In the low scenario, around £470 per annum; or around £4,000 in present values over ten years
 - In the high scenario, around £3,500 per annum; or around £30,500 in present values over ten years
33. This gives a **total cost to society of additional reports** of:

⁸<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digit2010table14> SOC code 3581, median salary of an inspector of standards and regulations, uprated by 20% to account for on-wage costs

⁹ HSE costs per hour are significantly above those used for LAs. This analysis adopts the PFPD HSE full economic costs per hour, which are used for HSE financial planning and contain estimates related to the costs of HSE's estate, which significantly increases costs. We will look further at the estimation and presentation of HSE and LA costs as this analysis develops.

- a. In the low scenario, around £5,700 per annum; or around £49,100 in present values over ten years
- b. In the high scenario, around £43,500 per annum; or around £374,000 in present values over ten years

Additional Dangerous Occurrences

Number of reports

34. Unlike the occupational disease analysis, evidence around how many additional dangerous occurrence (DO) reports there could be following proposed amendments was limited. For DOs that were already reportable and being amended, previous report numbers were used to estimate any additional reports. For the new DOs being introduced, HSE policy leads have generated estimates based on intelligence from HSE sector experts – these figures will be further refined in consultation where possible.
35. In this analysis, there are ten dangerous occurrences being considered, four of which are completely new to RIDDOR; and six existing DOs that HSE is considering amending.
36. Dangerous occurrences related to **tunnels** are proposed for introduction to RIDDOR. This includes any construction or maintenance of a tunnel 1.2 metres in diameter or greater. HSE colleagues anticipate low numbers and we estimate this addition to generate six reports per year in the low scenario and 12 reports per year in the high scenario.
37. Dangerous occurrences of **dropping objects** are proposed for introduction to RIDDOR, defined as the unintentional fall or dropping of any object from a building or structure under demolition or construction which could cause a specified injury to, or the death of, any person. Using report numbers of similar DOs, we have estimated 400 additional reports in the low scenario and 500 in the high scenario.
38. Dangerous occurrences of **overturning of construction plant** are proposed for introduction to RIDDOR. This includes the overturn of any excavator, mobile plant, drill rig or pilling rig which could cause a specified injury to, or the death of, any person. Using evidence from HSE colleagues and policy assumptions, we estimated 50 additional reports in the low scenario and 100 in the high scenario.
39. Dangerous occurrences of **uncoiling and projection of material** are proposed for introduction to RIDDOR, including any pipework, hosing or material which could cause a specified injury to, or the death of, any person. We anticipated low report numbers due to the low probability of the occurrence and based on the limited available evidence we estimated six additional reports in the low scenario and 12 in the high scenario.

40. Amendments to the **structural collapse** DO are proposed, which would include trench collapses and clarification to existing terms in the DO. We estimated an increase in reports of around 200 estimated reports in the low scenario and 300 in the high scenario.
41. Amendments to the **diving operations** DO are proposed, which would remove references to “which causes a significant risk of personal injury to a diver” as this is highly subjective and is often used by dutyholders to avoid reporting incidents. Based on current reporting, we estimate a small increase of five reports per year in the low scenario and ten in the high scenario.
42. Amendments to the **mines** DO are being considered, which would include incidents involving rubber tyred vehicles. Based on current reporting, we estimate an increase of two reports per year in the low scenario and five in the high scenario.
43. Amendments to the **quarries** DO are proposed, which would add clarification to the regulations around misfires. Using evidence from HSE colleagues and policy assumptions we have estimated an additional five reports per year in the low scenario and ten in the high scenario.
44. Amendments to the **wells** DO are proposed, which would include geothermal wells and wells for carbon capture and storage. We assume there would be minimal change due to the already low current reporting. We estimated an additional one report per year in the low scenario and five in the high scenario.
45. Amendments to the **offshore** DO are proposed, which would include offshore wind and wind farms under the definition of ‘offshore installation’. Based on current reporting, we estimate an additional 50 reports per year in the low scenario and 100 in the high scenario.
46. After the summation of each scenario’s estimated reports, we calculated a total of **725** new reports per annum in the low scenario and **1,054** new reports per annum in the high scenario.

Cost per report

47. We have no evidence on the time to complete dangerous occurrence RIDDOR reports in particular, so we will assume that they are broadly similar with the average cost per report figures estimated in paragraph 29. This gives us an average cost to business of £12.16 per report, an average cost to HSE of £16.19 per report and an average cost to Local Authorities of £2.52 per report.

Annual cost of additional reports

48. This gives a **total cost to business of additional reports** of:
- In the low scenario, around £8,800 per annum; or around £76,000 in present values over ten years
 - In the high scenario, around £13,000 per annum; or around £110,000 in present values over ten years

49. The **total cost to HSE of additional reports** is:
- In the low scenario, around £12,000 per annum; or around £100,000 in present values over ten years
 - In the high scenario, around £17,000 per annum; or around £150,000 in present values over ten years
50. The **total cost to local authorities of additional reports** is:
- In the low scenario, around £1,800 per annum; or around £16,000 in present values over ten years
 - In the high scenario, around £2,700 per annum; or around £23,000 in present values over ten years
51. This gives a **total cost to society of additional reports** of:
- In the low scenario, around £22,000 per annum; or around £190,000 in present values over ten years
 - In the high scenario, around £33,000 per annum; or around £280,000 in present values over ten years

Definition of diagnosis

52. Currently a diagnosis of an occupational disease can only be reported to HSE if it is signed by a 'medical practitioner', defined as a doctor registered with the General Medical Council (GMC). HSE propose to broaden this out to allow diagnoses by registered nurses and physiotherapists to make a specified illness reportable. This will bring RIDDOR in line with 2022 changes to fit notes, which also allowed these professions to certify them.¹⁰ Given that a fit note will often be the means by which a dutyholder is made aware of an illness, this alignment with RIDDOR is expected to make it easier for RIDDOR reportable diseases to be identified and reported.
53. The extent of impact this could have on report numbers is unclear. Data from the Department of Work and Pensions on fit note certification¹¹ indicates that in 2024/25, around 8.3% were certified by the new professions.¹² It is not clear whether these are additional fit notes that would not have been certified, but for these new professions; or if they are merely displacing fit notes that would have been certified by a GP anyway. Other changes made to the fit note system around this time (as well as the COVID-19 pandemic) make comparison of fit notes numbers difficult.
54. For current purposes, this analysis will assume that the experience of the fit note system provides a reasonable proxy for what could happen in RIDDOR; and that all 8.3% are additional as this tends to over-estimate additional costs rather than risk under-estimating them.
55. In the most recent year for which we have full data, 2024/25, there were 1,484 ill health reports – we will take this as our average annual projection of ill health reports over the appraisal period. We would prefer a three-year average, but data from 2022/23 and 2023/24 include large

¹⁰ <https://www.gov.uk/government/news/more-healthcare-professionals-can-certify-fit-notes-from-today>

¹¹ <https://digital.nhs.uk/data-and-information/publications/statistical/fit-notes-issued-by-gp-practices/december-2024>

¹² Nurses 7.4% and physiotherapists 0.9%.

numbers of COVID reports; rules on COVID reporting changed in April 2023, so these reports are not representative of what we will get in future reports. Advice from HSE statisticians is that the 2024/25 figures are the best available. The proposals on additional ill health reporting discussed above are estimated to add between around 185 and 1,409 (see paragraph 19). This would give a total of between around 1,700 and 2,900 reports per annum. An additional 8.3% would give between around 140 and 240 additional reports each year.

56. We assume costs per report will be as summarised in paragraph 29:

- a. To business, around £12.16
- b. To HSE, around £16.19
- c. To LAs, around £2.52
- d. TOTAL: around £30.86

57. This gives a **total cost to business of additional reports** of:

- a. In the low scenario, around £1,700 per annum; or around £15,000 in present values over ten years
- b. In the high scenario, around £2,900 per annum; or around £25,000 in present values over ten years

58. The **total cost to HSE of additional reports** is:

- a. In the low scenario, around £2,200 per annum; or around £19,000 in present values over ten years
- b. In the high scenario, around £3,900 per annum; or around £34,000 in present values over ten years

59. The **total cost to local authorities of additional reports** is:

- a. In the low scenario, around £350 per annum; or around £3,000 in present values over ten years
- b. In the high scenario, around £610 per annum; or around £5,200 in present values over ten years

60. This gives a **total cost to society of additional reports** of:

- a. In the low scenario, around £4,300 per annum; or around £37,000 in present values over ten years
- b. In the high scenario, around £7,400 per annum; or around £64,000 in present values over ten years

Further proposals and analysis

Reducing number of non-reportable reports

61. Each year, HSE receives a number of reports that are not actually reportable, estimated at about 8.2% of the total received, or about 7,700 annually. The reasons for this over-reporting can vary

and have not been researched systematically, but based on policy intelligence could include: reporters misinterpreting what constitutes a 'work activity' under RIDDOR (such as reporting children injuring themselves in school playgrounds); mis-identifying injuries as being on the specified list; a 'belt-and-braces' attempt to minimise legal risk; or where reports are made by someone other than the dutyholder, such as the affected person or their family.

62. As well as the resource implications for businesses and regulators, these over-reports pose a legal risk to HSE under the General Data Protection Regulation (GDPR) as they contain personal information that HSE has no legal reason to hold.

63. HSE proposes to explore what can be done with guidance to reduce the number of non-reportable reports. It is not clear how many could be averted in future, but we expect that improving guidance might have less effect in reducing the numbers made to reduce legal risk or where reports are made by people without a legal duty, such as the affected person or their family, who are less likely to have familiarised with the guidance.

64. The cost per non-reportable report is estimated as follows:

- a. Cost to the reporter: this may not always be a business in practice, but we assume the cost will be the same as the business at around £12.16 per report (see paragraph 24)
- b. Cost to HSE: we assume that non-reportable reports are not triaged as they do not warrant further action and so would incur the average non-triaged report cost of around £16.94 (see paragraph 27) for the 69% that HSE processes
- c. Cost to local authorities: as discussed in paragraph 29, £8.12 per report for the 31% that local authorities process

65. Actual savings are unclear. For the purposes of estimating impact at this stage, we will model a low scenario wherein the guidance makes a slight decrease in non-reportable reports of around 5% (saving about 390 reports annually); and a high scenario where it makes a bigger decrease of 25% (saving around 1,900 reports annually).

66. This gives a **total saving to business** of:

- a. In the low scenario, around £4,700 per annum; or around £41,000 in present values over ten years
- b. In the high scenario, around £24,000 per annum; or around £200,000 in present values over ten years

67. The **total saving to HSE** is:

- a. In the low scenario, around £4,500 per annum; or around £39,000 in present values over ten years
- b. In the high scenario, around £23,000 per annum; or around £190,000 in present values over ten years

68. The **total cost to local authorities of additional reports** is:

- a. In the low scenario, around £980 per annum; or around £8,400 in present values over ten years
- b. In the high scenario, around £4,900 per annum; or around £42,000 in present values over ten years

69. This gives a **total cost to society of additional reports** of:

- a. In the low scenario, around £10,000 per annum; or around £88,000 in present values over ten years
- b. In the high scenario, around £51,000 per annum; or around £440,000 in present values over ten years

Replacing HSE IT systems to enable automated RIDDOR reporting

70. Some larger companies have their own internal health and safety reporting systems. Some of these systems have a function that can automatically generate and submit a report to RIDDOR if the incident is RIDDOR-reportable. This means that businesses can generate reports at negligible marginal cost. Until 2022, HSE had an XML feature that enabled businesses to make such automated reports in respect of injuries. In 2022 it was decommissioned as the system had become obsolete. Since then HSE has no longer been receiving automated reports.

71. One proposal is that HSE could implement an updated form of this automation enabling.

72. At that time, around 10% of injury reports were made automatically each year. If we applied this to the latest 2024/25 report numbers of 94,632, this would come to around 9,500 reports. Costed at £12.16 to business per report (see paragraph 24), this would give a total saving to business of around £120,000 per annum; or around £990,000 in present values over ten years.

73. Evidence from the 2013 RIDDOR impact assessment¹³ indicates that businesses operating such systems had to spend on average around £2,550 (in 2024 prices)¹⁴ to update their systems to accommodate the changes made at that time. We might expect that any businesses using a new automated solution would have to incur similar costs to update their systems to integrate with HSE's new automation software. However, they would only choose to do so if they assessed that they would be made better off overall by doing so – the IT cost updates would be offset by saving the costs of 210 RIDDOR reports.

74. The 2013 IA estimated that such IT costs might be incurred by between 30 businesses (based on the number that produce the auto-reporting software) and 280 businesses (based on the numbers of businesses actually making the reports). It is not clear how reasonable these numbers are today – probably they are now quite out of date. However, if we take them as a rough guide, they would give a cost of between around £76,500 and £714,000. We will refine these figures during consultation.

¹³ https://www.legislation.gov.uk/ukia/2013/33/pdfs/ukia_20130033_en.pdf, paragraph 56

¹⁴ £1,840 in 2012 prices uprated to 2024 prices using GDP deflators at 1.386 (<https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-march-2025-spring-statement-quarterly-national-accounts>)

75. It is not known what it might cost HSE to re-implement the automation support system.

76. However, technology has advanced a great deal since the 2013 impact assessment – and even since the XML system was removed in 2022. With current artificial intelligence, it is possible that businesses could be auto-generating reports from their internal systems without the need for HSE to enable it and without HSE’s knowledge. Further work with industry would be required to understand the role that HSE might play in enabling or facilitating more auto-generated reports.

Familiarisation

77. We expect that businesses would have to take some time to familiarise with the changes to RIDDOR in order to understand the changes and how they will be affected. We do not anticipate that all affected businesses will familiarise. For example, we know that RIDDOR is under-reported for non-fatal reports versus survey data that HSE gathers from the Labour Force Survey – the extent of this varies by sector, but overall around half of non-fatal injury reports appear to go un-reported. Some of this will be due to ignorance on the part of dutyholders. Even where dutyholders do comply, we would expect that in some cases they will familiarise with what they need to report only where an incident arises, where the act of changing RIDDOR itself would not drive additional effort.

78. The first post-implementation review¹⁵ (PIR) of RIDDOR 2013 explored how many dutyholders went out of their way to familiarise with the changes those regulations brought in via an Omnibus Survey of all businesses, which garnered 2,109 responses. That analysis found that:

- a. For businesses with fewer than 100 employees, around 13% went out of their way to familiarise
- b. For businesses with 100 to 249 employees, the survey was not able to estimate this, but if we took an average of those with fewer than 100 employees and those with 250+, this would come to around 20% going out of their way to familiarise
- c. For businesses with 250+ employees, around 26% went out of their way to familiarise

79. This might be an overestimate of the proportion of businesses that would familiarise with the current ill health reporting proposals as the changes to RIDDOR 2013 were more extensive and so probably would have had a greater proportion of businesses familiarise with them. We would particularly expect businesses in the sectors affected by new disease and DO reporting requirements to take some effort to familiarise (see Annex 2).

80. Self-employed workers who pose no risk to others are exempted from much health and safety regulation, but they are still captured by RIDDOR. As such, we will include them in our familiarisation calculations.

81. The PIR for RIDDOR 2013 also estimated that familiarisation time was around one hour per business – again, this could be an overestimate for the current analysis given the narrow scope

¹⁵ https://www.legislation.gov.uk/ukxi/2013/1471/pdfs/ukxi0d_20131471_en.pdf

of the present proposals. Using the cost per hour from paragraph 23, this gives a cost per business of around £31.

82. According to the Inter-Departmental Business Register¹⁶, there are around 2.6 million businesses in GB. If they were to all familiarise, then this would generate a one-off cost of around £82 million. This will be our high estimate.

83. For the low estimate, we will apply the percentages of familiarisation observed in the PIR. This would give:

- a. Around 2.6 million businesses employing fewer than 100 people, of which around 13% or 341,000 will familiarise, costing around £10.6 million
- b. Around 14,000 businesses employing 100 to 249 people, of which around 20% or 2,800 will familiarise, costing around £88,000
- c. Around 11,000 businesses employing 250+ people, of which around 26% or 2,900 will familiarise, costing around £89,000
- d. In total: around 346,000 businesses, costing around £10.8 million

84. This gives total estimated one-off familiarisation costs of between around £11 million and £82 million.

Summary estimated costs and benefits

85. Total estimated costs and savings are summarised below in Table 2. In terms of quantified figures, we assess a **total estimated ten-year present value** of between around **-£10 million** and **-£82 million**, with a **mid-estimate of around -£46 million**. Note the discussion of break-even conditions for averted ill health and injury cases above.

86. Businesses incur the greatest net costs at between around **-£9.9 million** and **-£82 million**. This is chiefly driven by familiarisation costs.

87. HSE and local authorities are also anticipated to incur net costs in ten-year present value terms of between around **-£110,000** and **-£180,000** for HSE; and between around **-£14,000** and **-£17,000** for LAs.

¹⁶

<https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation>

Table 1: Summary of costs and savings, ten-year present values (£k)

	£thousands											
	Business			HSE			Local authorities			Total		
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Additional occupational diseases												
Report costs	-£19	-£83	-£150	-£26	-£110	-£200	-£4.0	-£17	-£31	-£49	-£210	-£370
Additional dangerous occurrences												
Report costs	-£76	-£93	-£110	-£100	-£120	-£150	-£16	-£19	-£23	-£190	-£240	-£280
Diagnosis definition												
Report costs	-£15	-£20	-£25	-£19	-£26	-£34	-£3.0	-£4.1	-£5.2	-£37	-£50	-£64
Reducing non-reportable reports												
Saved report costs	£41	£120	£200	£39	£120	£190	£8.4	£25	£42	£88	£260	£440
Increased automated reports												
Saved report costs	£990			Nil			Nil			£990		
IT investment	-£77	-£400	-£710	NQ	NQ	NQ	Nil	Nil	Nil	-£77	-£400	-£710
Total	£910	£600	£280	NQ	NQ	NQ	Nil	Nil	Nil	£910	£600	£280
Familiarisation	-£11,000	-£46,000	-£82,000	NQ	NQ	NQ	NQ	NQ	NQ	-£11,000	-£46,000	-£82,000
Total	-£9,900	-£46,000	-£82,000	-£110	-£140	-£180	-£14	-£15	-£17	-£10,000	-£46,000	-£82,000

Totals may appear not to sum due to rounding to three significant figures. NQ = not quantified. N/A = cost not anticipated. Negative figures are costs and positive figures are savings.

Break even analysis

88. We anticipate that HSE will use the additional data gathered from RIDDOR reports to target specific interventions and to guide the development of more general policy, particularly in the areas on ill health and the potentially major incidents to which DOs could be a precursor. The ultimate aim of this will be to reduce cases of ill health and injury or of their impact. It has not been possible to predict the extent to which this will be possible, so this analysis has adopted an illustrative break-even approach: how many cases of ill health or injury would have to be averted in order for the savings to balance the costs?
89. The HSE Costs to Britain¹⁷ estimates provide a range of costs per case of **ill health**. The costs reflect average short-latency ill health cases as captured by the Labour Force Survey and are not specific to the ill health cases currently considered for inclusion in RIDDOR. It was decided that the average cost of a case of ill health, at £21,500, was too low to accurately represent the type of ill health being targeted by HSE's RIDDOR proposals, which are at the more impactful end of the spectrum. As such, we have used two of the more severe cost estimates in Costs to Britain:
- a. Ill health resulting in seven or more days off work ('O7D') at around £44,800 per case
 - b. Ill health resulting in withdrawal from the labour market ('never-returns') at around £470,000 per case
90. In practice, any saved cases will be averted in future years as HSE's targeting and policy adapts to and makes use of the new data. It is unclear at what point cases would be averted or how they would be distributed over the ten-year appraisal period. As such, we have discounted the per case costs to the fifth year (i.e., the middle of the appraisal period), giving the following estimates:
- a. Ill health O7D at a present value of around £40,800 per case
 - b. Ill health never-returns at a present value of around £424,000 per case
91. Costs to Britain also estimates a range of costs per case of **injury**. We decided that using the average cost of non-fatal injuries, at £4,600 would be too low to accurately represent the injuries related to the dangerous occurrences being targeted by HSE's proposals. As such, we have used two of the more severe cost estimates in Costs to Britain:
- a. Injury O7D at around £46,000 per case
 - b. Injury never-returns at around £484,000 per case
92. As with ill health, injury costs are discounted to the fifth year, giving the following estimates:
- a. Injury O7D at a present value of around £41,300 per case
 - b. Injury never-returns at a present value of around £429,000 per case
93. This analysis sets out a number of additional reports attached to expected cases of ill health (additional reportable diseases and changes to the definition of diagnosis) and to

¹⁷ <https://www.hse.gov.uk/statistics/cost.htm>

additional dangerous occurrences that could lead to serious injury. These are the cases where additional RIDDOR reporting is expected to provide intelligence to target specific intervention and policy. The numbers are summarised below over ten years:

- a. Ill health cases: between around 3,200 and 16,500
- b. Dangerous occurrence: between around 7,250 and 10,500

94. It is not possible to say how many injuries or potential injuries each DO represents. However for ill health, in order to balance the total societal ten-year present value net costs of between around £10 million and £82 million, HSE policy intervention would have to be able to prevent over the appraisal **either**:

- a. In terms of ill health O7D, between around 250 and 2,000 cases (between around 7.6% and 12% of expected ill health cases if we assumed they were all O7D)
- b. **Or**, in terms of ill health never-returns, between around 24 and 190 cases (between around 0.7% and 1.2% of expected ill health cases if we assumed they were all never-returns)

95. It is very difficult to say whether this seems achievable. Without knowing the types and numbers of interventions that might be enabled by the additional RIDDOR data, we cannot predict how impactful these might be.

96. For occupational ill health, the majority of those proposed to be added to RIDDOR relate to long-latency diseases meaning that exposure (harm) has in many cases already occurred. Any intervention that takes place over the next ten years may have little impact on those cases where exposure has already begun; and might take longer than ten years to start preventing future cases.

97. In some instances, an injury or incident can still occur even when all reasonably practical precautions were in place, including additional interventions by HSE. There are factors (outside of HSE's control) that can also have an impact on injury and ill health rates, for example advancements in technology and new ways of working, industry developments and new and emerging risks, an aging workforce (rising retirement age), the cost of living forcing people to work when sick, societal demands etc.

98. The health and safety system is complex, with injury and ill health rates determined by a wide range of factors, both in and out of HSE's control. In addition, future changes to LFS and the methods used to collect data could skew any injury or ill-health rates, making any changes due to new RIDDOR data impossible to detect or to attribute to HSE intervention.