HSE

Health & Safety Executive

Achieving the *Revitalising Health and Safety* targets Statistical progress report, October 2009

The *Revitalising Health and Safety* strategy statement, launched in June 2000, set three national targets for improving health and safety performance by 2010:

- to reduce the incidence rate of ***fatalities and major injuries*** by 10%;
- to reduce the incidence rate of cases of ***work-related ill health*** by 20%;
- to reduce the number of ***working days lost*** per worker from work-related injury and ill health by 30%;

and to achieve ***half*** the improvement under each target by 2004.

The Health and Safety Executive (HSE) set out its technical approach to measuring progress against the *Revitalising* targets in a *Statistical Note* published in June 2001, on the website at www.hse.gov.uk/statistics/statnote.pdf. Among other things, this said that a report on progress would be prepared each autumn, comparing the latest data with those for the base year (1999 or financial year 1999/2000).

This document is the ninth such annual report. It presents our judgements on progress to 2008/09, against *pro rata* target reductions corresponding to nine-tenths of the full ten-year targets: 9% for fatal and major injuries, 18% for ill health incidence and 27% for working days lost. In each case we assess whether progress is 'on track' to meet the ten-year targets.

We are also making statements about progress against the DSO indicators for ill-health and injury which are seeking to achieve "sustained improvement" in the incidence rate of fatal and major injury and ill health since 2008 against a 1999/2000 base year.

The assessments of progress represent HSE statisticians' best judgements based on the information available at October 2009. The judgements make use of data from a number of different sources (which was also a commitment from the *Statistical Note*). These are listed here and described in much more detail on the website at www.hse.gov.uk/statistics/sources.htm:

RIDDOR: Injuries reported to HSE or local authorities under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

LFS: Estimates of self-reported injuries, ill health and days lost from the Labour Force Survey; for ill health also known as SWI (self-reported work-related illness) surveys.

THOR and THOR-GP: New cases of work-related illness seen by occupational physicians, disease specialists and GPs in The Health and Occupation Reporting network.

IIDB: New cases of prescribed diseases assessed for compensation under the Industrial Injuries Disablement Benefit scheme.

ONS Omnibus: Office for National Statistics survey of psychosocial working conditions in Great Britain.

Further details of how this statistical judgement is derived are presented in Annex B.

Fatal and major injuries: Assessment of change from 1999/2000 to 2008/09

Reported major injuries	↘	The rate of employee major injury reported under RIDDOR shows a falling trend from 1997/98 to 2002/03, and again from 2003/04 to 2008/09. In 2003/04, changes in recording systems caused a rise in cases creating a discontinuity in the data series. After adjusting for this discontinuity, our best estimate of the change in the major injury rate between the 1999/00 baseline and 2008/09 is a reduction of 19% (see supporting research). Using the unadjusted data, the major injury rate fell by 10% between 1999/2000 and 2008/09..
Fatal injuries	↘	Year on year fatal injury figures are subject to fluctuation given the relatively small numbers. Therefore it is more appropriate to use a smoothed trend to analyse worker fatalities than the raw data (see annex). The smoothed rate of fatal injury to workers has fallen by 31% between 1999/2000 and 2008/09, with most of the reduction occurring in the earlier part of this period. Numerically fatal injuries have little impact on the combined fatal and major injury rates.
Reported over-3-day injuries	↘	Movements in other reported injuries do not contribute directly to the target assessment but provide relevant information in understanding injury and reporting trends. The reported rate of employee over-3-day injury has decreased since 1999/2000 in every year but one (2003/04) and it is now 28% below the 1999/2000 level.
Self-reported injuries in the Labour Force Survey (LFS)	↘	The Labour Force Survey gives a measure of self-reported injuries that is not affected by under-reporting. The annual rate of total reportable injury in the LFS shows a statistically significant fall of 43% between 1999/2000 and 2008/09 (with a range of possibilities - 95% confidence interval - from 34% to 52%). The rate of all workplace injury (including absences of 3 days or fewer, which are not reportable) has also fallen substantially since 1999/00.
Supporting Research		Building on the previous analysis of the discontinuity in the RIDDOR major injury numbers which occurred in 2003/04 (see http://www.hse.gov.uk/statistics/pdf/discontinuity.pdf) further analysis has been undertaken to quantify the impact of the discontinuity and to produce an adjusted back-series (see http://www.hse.gov.uk/statistics/pdf/discontinuity2.pdf) .

Overall direction	↘	The rate of major injury to employees dominates the rate of fatal and major injuries. Using both the adjusted and unadjusted rate series, there has been a downward trend between 1999/00 and 2008/09. Other information on self-reported injuries and over 3 day injuries supports the assessment of a falling trend.
Size of change	Assuming uniform year on year change, in 2008/09 the *Revitalising* target requires a 9% reduction from baseline (1999/2000), and the DSO target requires significant improvement in the rate of fatal and major injury since 2008. Adjusting for the discontinuity, the major injury rate fell by 19% between 1999/00 and 2008/09 and the unadjusted series shows a fall of 10%. Given the scale of this falling trend and strength of supporting evidence our judgement is that ***progress is <u>on track</u> to meet the Revitalising target***. There were statistically significant falls in the rate of major injury and the LFS rate of reportable injury between 2007/08 and 2008/09 and hence our assessment is that there has been ***<u>progress</u>*** towards the DSO indicator.	

Please see Annex A for charts showing recent trends.

Ill health incidence: Assessment of change from 1999/2000 to 2008/09

Musculo-skeletal disorders	➘	The 2008/09 incidence rate of self-reported work-related musculoskeletal disorders was statistically significantly lower than that in 2001/02, the closest available year to the revitalising baseline. THOR surveillance data points to a fall in reported cases from rheumatologists 1999 to 2007, although some or all of this fall may be due to changes to referral rules and procedures.
Stress, depression or anxiety	→	The incidence rate of self-reported work-related stress, depression or anxiety in 2008/09 is significantly lower than in 2001/02. THOR surveillance data shows a mixed picture with a stable trend in psychiatrist reports of work-related mental health between 2000 and 2008, but with a clear upward trend in occupational physician reports. The ONS omnibus survey shows no clear trend in the proportion of people saying their job was very or extremely stressful between 2004 and 2009.
Asthma/ short-latency respiratory	➘	THOR data shows a statistically significant decrease in occupational asthma cases from 1999 to 2008. The number of cases compensated under the IIDB is smaller and has fluctuated since the base year.
Dermatitis / skin	➘	THOR data show a statistically significant decrease in work-related contact dermatitis and all skin disease cases from 1999 to 2008. The number of dermatitis cases compensated under the IIDB is smaller but has also fallen sharply over the period.
Mesothel-ioma/long-latency respiratory	➚	The rate of mesothelioma deaths and other cases of asbestos-related disease, which dominate this category, continues to increase. However, for men aged under 60 years the rate of mesothelioma deaths in 2007 was lower than in 1999. Death rates from coal workers' pneumoconiosis and silicosis are on a long-term downward trend, and were lower in 2007 than in 1999. In terms of numbers, the impact of these diseases on the overall target is small.
Vibration-related	➘	In the period between 1999 and 2007, the annual total of compensated cases for conditions linked to vibration fell substantially. A widening of the prescription rules saw this number increase between 2007 and 2008. Cases seen by rheumatologists contributing to THOR have fallen steadily since 2001.
Hearing loss	→	The number of new compensated cases of occupational deafness has fluctuated since 1999.
Supporting Research		A report analysing trends and fluctuations in the self-reported illness incidence rate was produced last year and is available at: http://www.hse.gov.uk/statistics/pdf/LFSissue1.pdf. The question of progress between 1999/2000 and 2001/02 is important to the judgement decision. Hence we will be commissioning external research to weigh up all the available evidence from the period and provide an expert view on the most likely trend over the first two years of the Revitalising period.

Overall direction	➘	Stress and musculoskeletal disorders are the largest components of work-related illness. Based on self-reports, there has been a statistically significant reduction in the overall illness incidence rate which is largely consistent with information from other sources.
Size of change		From 2001/02 to 2008/09 the decrease in the incidence rate of work-related ill-health was statistically significant, with a central estimate of 17% and a range of possibilities from 9% to 25%. There is no comparable estimate for the base year 1999/2000. An assumption has been made that there was no change in the ill health rate between 1999/2000 and 2001/02 primarily due to indications that work-related stress was increasing over the two years whilst MSDs were falling. On that basis, in order to meet a 20% reduction over ten years, a pro rata reduction of 18% would be required between 2001/02 and 2008/09. The statistical judgement is that ***on the balance of probabilities progress is not on track to meet the Revitalising target,*** although the reduction since 2001/02 is very close to the required target. Between 2007/08 and 2008/09, the incidence rate of work-related ill health fell but not significantly. Hence, the statistical judgment is that there has been ***no progress*** towards the DSO indicator.

Please see Annex A for charts showing recent trends

Working days lost: Assessment of change from 2000-02 to 2008/09

Days lost from work-related ill health	↘	The estimated number of working days lost per worker due to work-related ill health in 2008/09 was statistically significantly lower than in 2001/02 (the closest available to the Revitalising base year), according to the Labour Force Survey.
Days lost from work-related injuries	↘	The estimated number of working days lost per worker due to workplace injury in 2008/09 was statistically significantly lower than in 2000/01 (the closest available to the Revitalising base year), according to the Labour Force Survey.
Supporting Research		Sources on general sickness absence tend to lag the Labour Force Survey results and are sector specific. In addition, work-related absence is only a small proportion of all absence, and hence sources on total sickness absence only provide weak supporting evidence of the trend in work-related absence.

Overall direction	↘	Based on self-reports of working days lost due to work-related illness and injury, there has been a statistically significant reduction in the days lost per worker between 2000-02 and 2008/09.
Size of change	The central estimate for the decrease in days lost per worker 2000-02 to 2008/09 is 29.5%, (with a range of possibilities - 95% confidence interval - from 20% to 39%), compared to a *pro rata* target of 27%. The statistical judgement is that on the ***balance of probabilities progress is on track to meet the Revitalising target***.	

Please see Annex A for charts showing recent trends

Key for all three targets:

↗	Rise since base year	↘	Fall since base year	→	No clear change since base year

Health and Safety Executive
Statistics Branch
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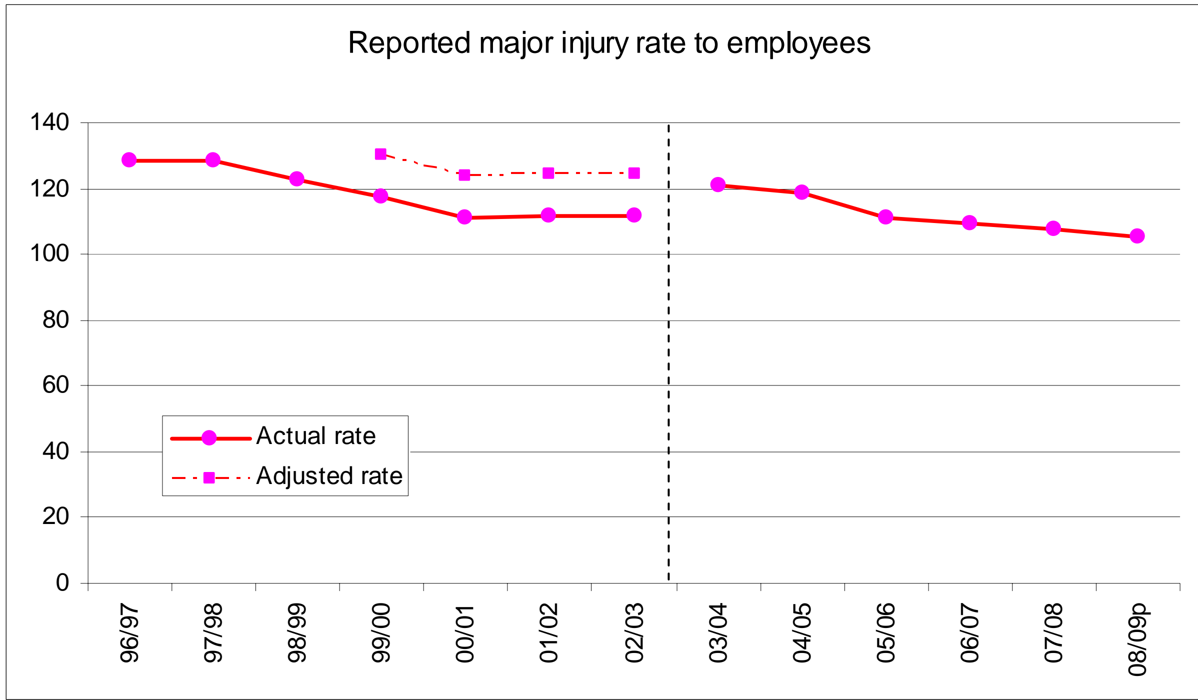
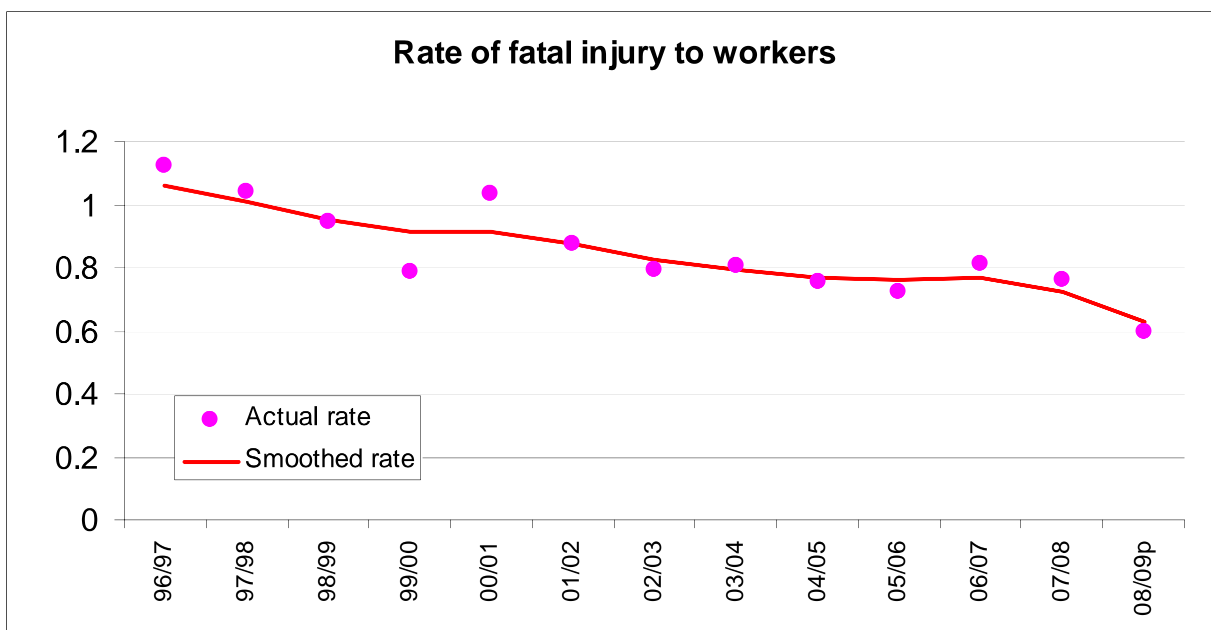
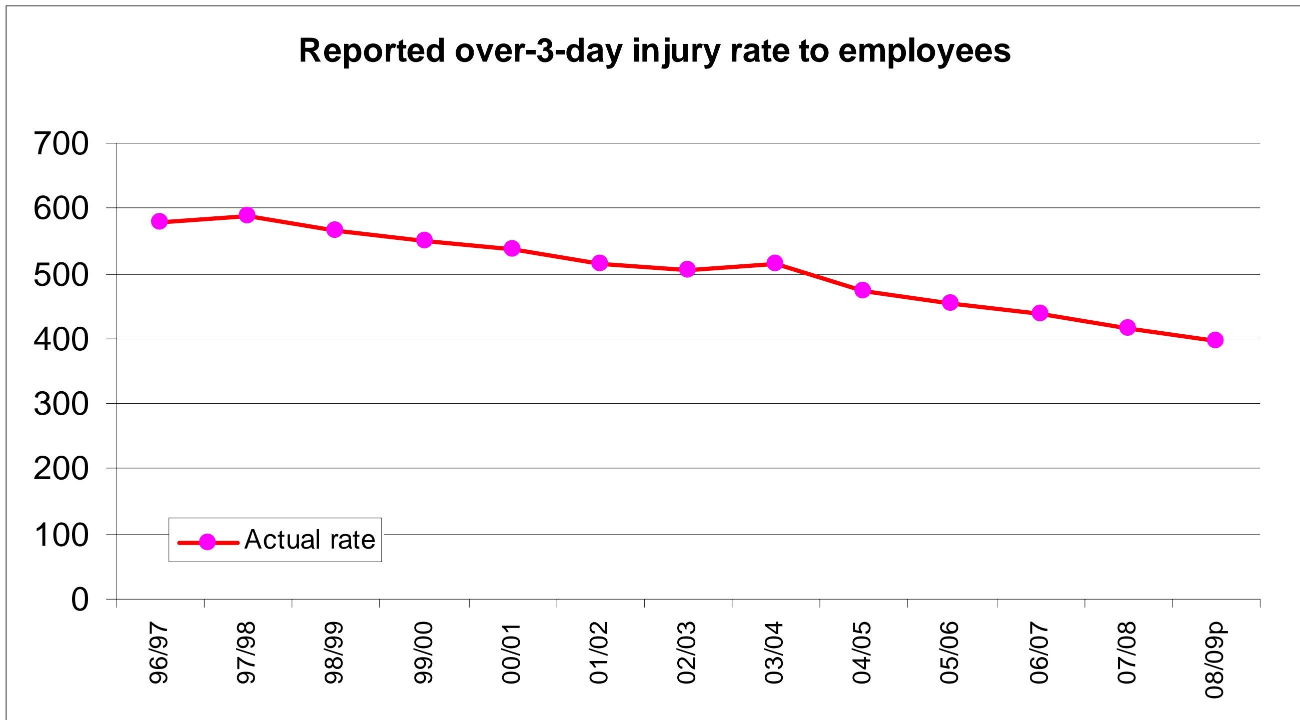
Annex A : Recent trends in work-related injuries, ill-health and days lost

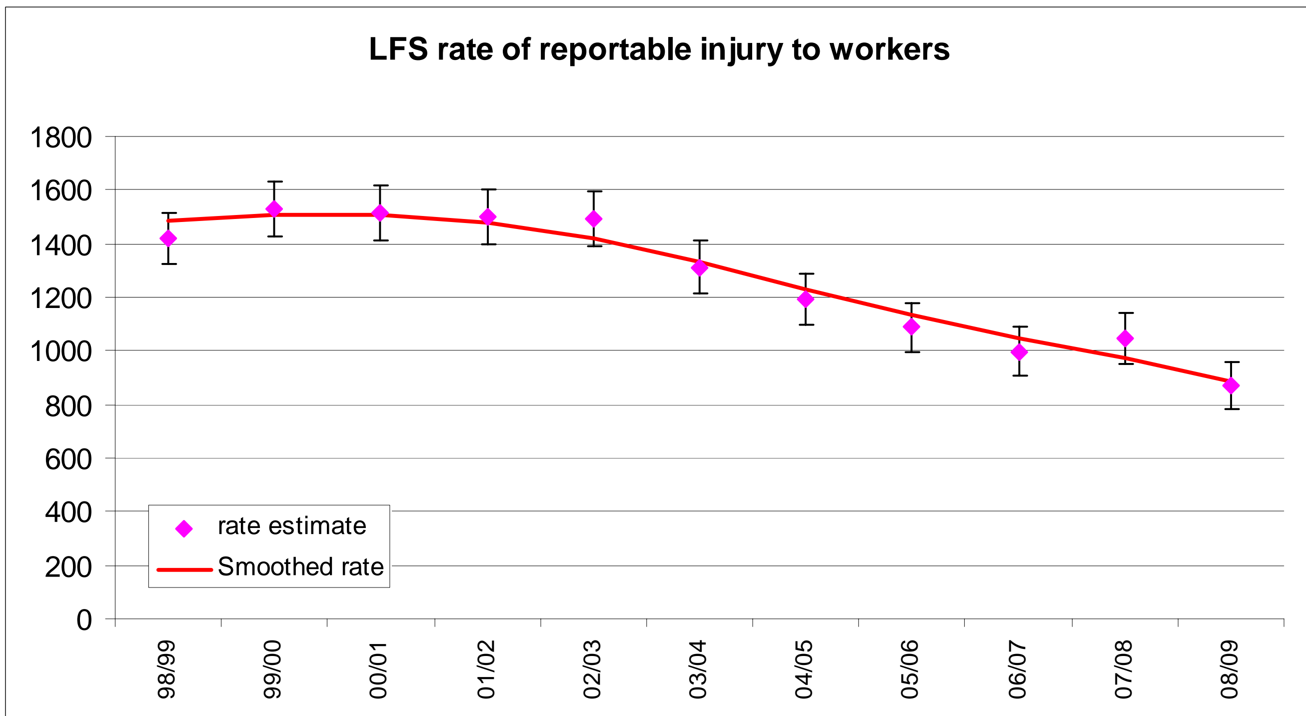


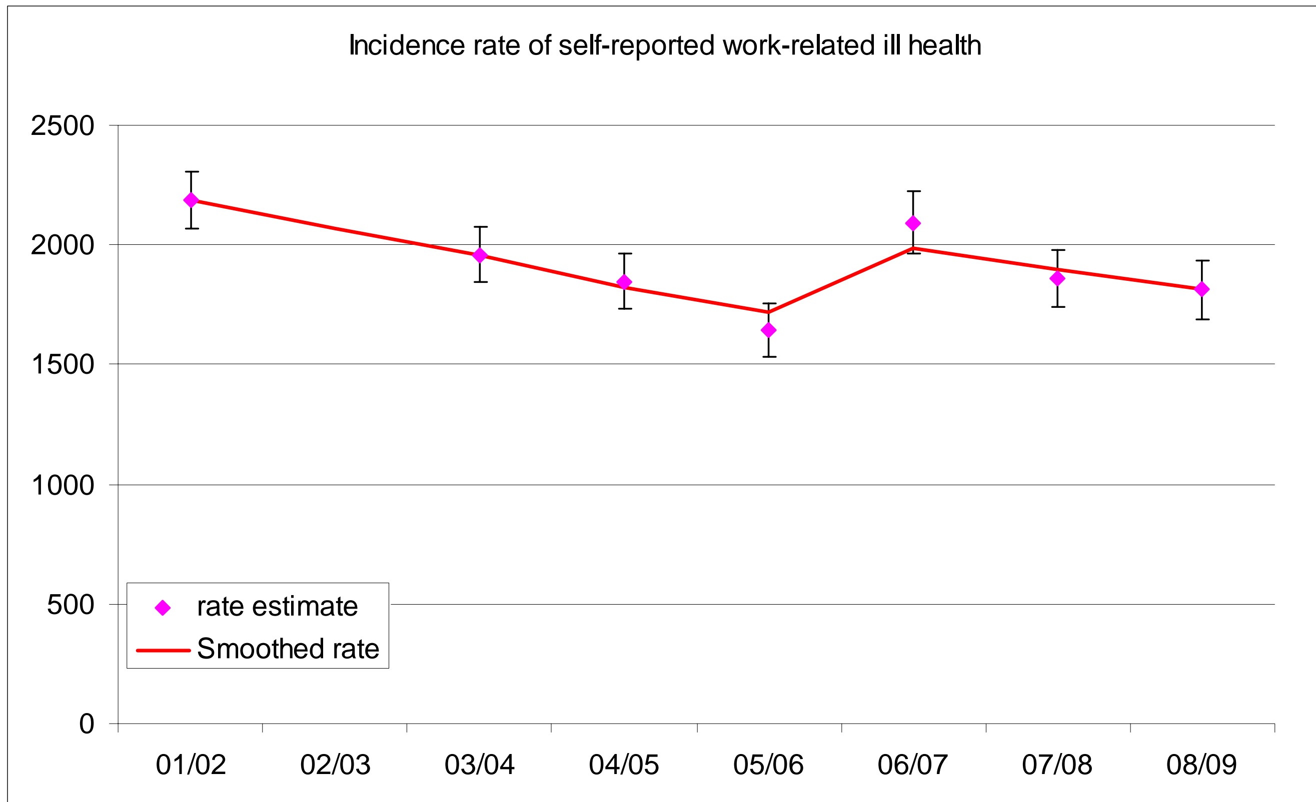
Vertical dotted line represents discontinuity in reported major injury series see http://www.hse.gov.uk/statistics/discontinuity.pdf

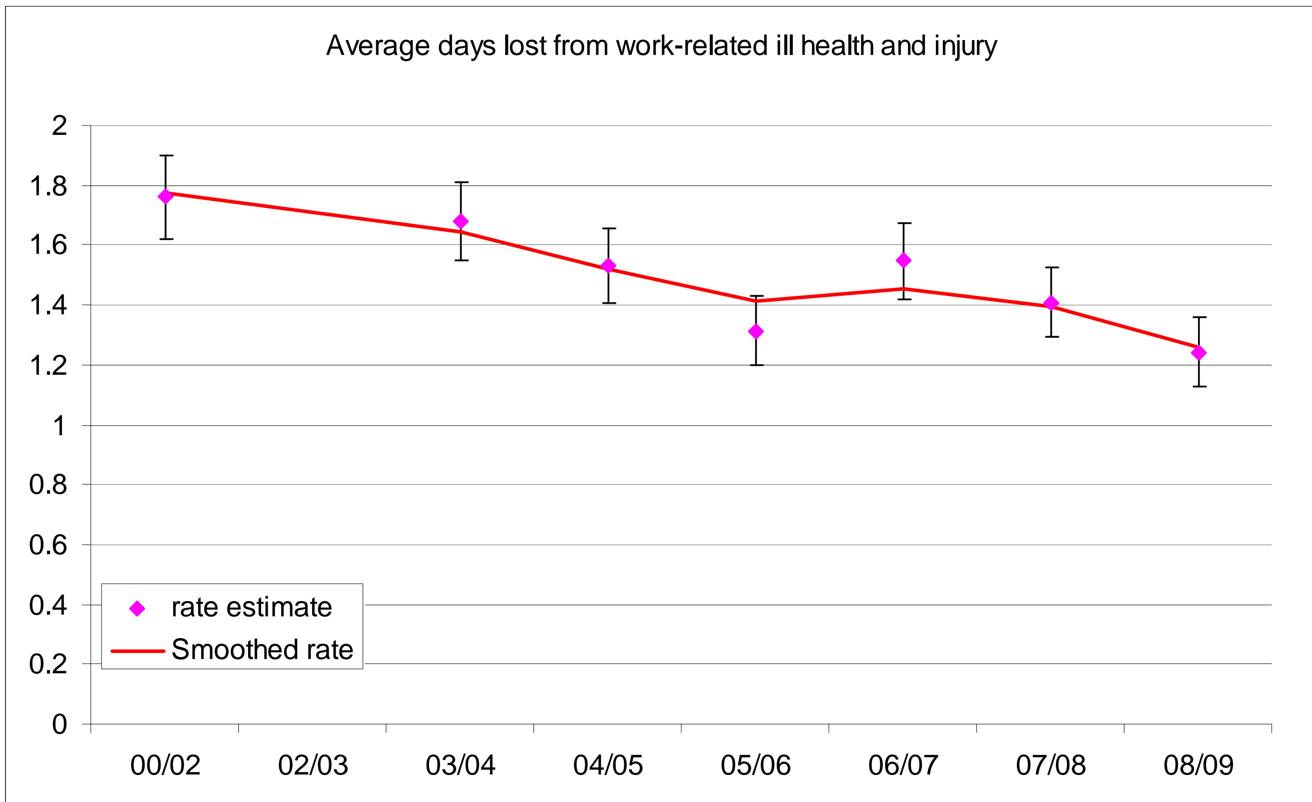
The adjusted rate represents our best estimate of the true trend after allowing for the discontinuity. See http://www.hse.gov.uk/statistics/discontinuity2.pdf




Reported over-3-day injury rate to employees
700
600
500
400
300
200
100
0
Actual rate
96/97
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09p


LFS rate of reportable injury to workers
1800
1600
1400
1200
1000
800
600
400
200
0
rate estimate
Smoothed rate
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09


Incidence rate of self-reported work-related ill health
2500
2000
1500
1000
500
0
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
rate estimate
Smoothed rate


Average days lost from work-related ill health and injury
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
rate estimate
Smoothed rate
00/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09

Annex B: Statistical judgement process

Introduction

The principles that HSE uses when assessing progress against the targets was set out in Achieving the Revitalising Health and Safety Targets: Statistical note on progress measurement (http://www.hse.gov.uk/statistics/statnote.pdf). This note develops these principles into the detail of the target judgement process. Setting out how the statistical judgement is made, on what basis and key responsibilities of those involved.

What is the judgement

Within the Revitalising Health and Safety (RHS) strategy period (up to Autumn 2009) the annual judgement is whether progress is on track or not on track to meet the RHS targets on injuries; ill-health and days lost. At the end of the RHS strategy period (Autumn 2010) the judgement will be whether the HS target has been met or not met on injuries; ill-health and days lost.

Since 2008, HSE has had Departmental Strategic Objective (DSO) to improve health and safety outcomes through progressive improvement in the control of work-related risks. Two elements of this DSO are to achieve sustained improvement in the incidence rates of fatal and major injuries and work-related ill health, against a 1999/2000 baseline. We will also make a judgement as to whether there has been **progress** or **no progress** towards the DSO.

Basis for judgement

The judgement for each RHS target is which of the two judgement options is most probable. It is based on a consensus of attendees within target judgement meetings for injury, ill-health and days lost. Consensus implies general agreement not unanimity.

The judgement statements in the previous section are qualified with “on the balance of probabilities” unless no reasonable doubt in the judgement exists. For example all sources indicate levels well above or below target and all analysts present are in agreement. In such cases the above qualification will not be added to the judgement statement.

For the DSO, HMT requires that the judgement is based on an assessment of whether the incidence rate has improved significantly since 2008.

Target Judgement meetings

There are three target judgement meetings - injury, ill-health and days lost - which consider both RHS and DSO target judgements in these areas. HSE statisticians attending meetings

are those who provide source information or analysis, plus those with experience of analysing and interpreting data in these areas.