

## Achieving the *Revitalising Health and Safety* targets Statistical progress report, October 2008

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 <http://www.hse.gov.uk/statistics/pdf/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 eighth such annual report. It presents our judgements on progress to 2007/08, against *pro rata* target reductions corresponding to eight-tenths of the full ten-year targets: 8% for fatal and major injuries, 16% for ill health incidence and 24% 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 against the PSA targets for ill-health, injury and days lost targets (<http://www.hse.gov.uk/aboutus/plans/sr2004.htm>). These assess progress to 2007/08 against a 2004/05 base year. To meet these targets reductions in incidence rate of: 3% for fatal and major injuries, 6% for ill health incidence and 9% for working days lost, are sought. There is greater uncertainty in these assessments because of the much shorter time series.

The assessments of progress represent HSE statisticians' best judgements based on the information available at October 2008. 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 <http://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:** New cases of work-related illness seen by occupational physicians and disease specialist doctors 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 2007/08

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 2007/08. In 2003/04 evidence indicates changes in recording systems caused a rise in cases creating a discontinuity in the data series (see supporting research). This discontinuity aside the smoothed major injury rate shows a fall between 1999/2000 and 2007/08 of 8.9%. This reduction would be greater after adjustment for the discontinuity. Furthermore, evidence suggests that the overall reporting of non-fatal injuries has improved over this period. All indications point to a fall in major injury rates of at least that suggested by the smoothed series. .
Fatal injuries	↘	Year on year fatal injury figures are subject to fluctuation given the relatively small numbers. Therefore it is more appropriate with these data to view the trend using a smoothed series rather than raw data (see annex). The rate of fatal injury to employees has fallen between 1999/2000 and 2007/08, 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), it is now 25% 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 in RIDDOR. The annual rate of total reportable injury in the LFS shows a statistically significant fall of 32% (with a range of possibilities - 95% confidence interval - from 23% to 41%) between 1999/2000 and 2007/08. The rate of all workplace injury (including absences of 3 days or fewer, which are not reportable), also showed a drop.
Supporting Research		Investigation suggests a discontinuity in the RIDDOR major injury numbers in 2003/04. A report setting out the evidence for this is available at: <a href="http://www.hse.gov.uk/statistics/pdf/discontinuity.pdf">http://www.hse.gov.uk/statistics/pdf/discontinuity.pdf</a> . Work is continuing both to quantify the size of the discontinuity and to adjust the data for this and for any identifiable trends in reporting.
<b>Overall direction</b>	↘	The rate of major injury to employees dominates the rate of fatal and major injuries. This rate shows a falling trend 1997/1998 to 2002/03 and again from 2003/04 to 2006/07. The rise around 2003/04 relates to a change in the reporting system. Other information on self-reported injuries and over 3 day injuries supports the assessment of a falling trend.
<b>Size of change</b>		Assuming uniform year on year change, in 2007/08 the <i>Revitalising</i> target requires an 8% reduction from baseline (1999/2000), and the PSA target a 3% reduction from baseline (2004/05) in the incident rate of major and fatal injuries. The overall change in the trend for major injuries 1999/2000 to 2007/08 shows around a 8.9% reduction (without any adjustment for the discontinuity), and from 2004/05 to 2007/08 a 10% reduction. Given the scale of this falling trend and strength of supporting evidence our judgement is that <b><i>progress is on track to meet the Revitalising target, and the PSA target has been met.</i></b>

Please see Annex A for charts showing recent trends.

### Ill health incidence: Assessment of change from 1999/2000 to 2007/08

Musculo-skeletal disorders	↘	The 2007/08 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. However, the rate in 2007/08 was of a similar order to that in 2004/05 (the PSA baseline), but in recent years the rate has fluctuated. 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 2006/07 is of a similar order to that in 2001/02 and 2004/05. THOR surveillance data shows a mixed picture with a stable trend in psychiatrist reports of work-related mental health between 2000 and 2007, 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 2008.
Asthma/ short-latency respiratory	↘	THOR data shows a statistically significant decrease in occupational asthma cases from 1999 to 2007. 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 2007. The number of dermatitis cases compensated under the IIDB is smaller but has also fallen slightly over the period.
Mesothelioma/long-latency respiratory	↗	The rate of mesothelioma deaths and other cases of asbestos-related disease, which dominate this category, continues to increase. However, for ages under 60 years the rate of mesothelioma deaths in 2006 was lower than in 1999. Death rates from coal workers' pneumoconiosis and silicosis are on a long-term downward trend, and were lower in 2006 than in 1999. In terms of numbers, the impact of these diseases on the overall target is small.
Vibration-related	→	In the period since 1999, IIDB compensated cases of vibration white finger have reduced in number, while those of carpal tunnel syndrome have increased – though these too have fallen for the latest few years. Vibration-related conditions presenting to THOR have remained broadly constant.
Hearing loss	→	The number of new compensated cases of occupational deafness has fluctuated since 1999. The number of cases presenting to the THOR network has generally fallen but quite erratically.
Supporting Research		The self-reported illness incidence rate has fluctuated significantly in recent years. A number of methodological factors have been examined for their possible contribution to these changes, but most of these make no contribution to the observed changes, and none make a major impact. A report setting out evidence for this is available at: <a href="http://www.hse.gov.uk/statistics/pdf/lfsissue1.pdf">http://www.hse.gov.uk/statistics/pdf/lfsissue1.pdf</a> .
<b>Overall direction</b>	↘	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.
<b>Size of change</b>		Given the consistency of evidence of change it is reasonable to assess the size of change using the broadest measure, namely self-reports of work-related ill health. From 2001/02 to 2007/08 the decrease in the incidence rate of work-related ill-health was statistically significant, with a central estimate in the order of 15% (with a range of possibilities from 7% to 23%). There is no comparable estimate for the base year, 1999/2000, although the closest self-reporting data suggests that the incidence rate would be lower. This implies the change from 1999/2000 would be less than that measured from 2001/02. Despite the reduction in rate, set against a <i>pro rata</i> target of a 16% reduction, the statistical judgement is that <b><i>on the balance of probabilities progress is probably <u>not on track to meet the Revitalising target.</u></i></b>  Over the shorter PSA period 2004/05 to 2007/08 self-reports of work-related ill-health show no change. Thus the statistical judgement is that <b><i>the PSA target has not been met.</i></b>

Please see Annex A for charts showing recent trends

## Working days lost: Assessment of change from 2000-02 to 2007/08

Days lost from work-related ill health	↘	The estimated number of working days lost per worker due to work-related ill health in 2007/08 was statistically significantly lower than in 2001/02 (the closest available to the Revitalising base year), according to the Labour Force Survey. However compared to 2004/05, the PSA base year, the rate has remained broadly level.
Days lost from work-related injuries	↘	The estimated number of working days lost per worker due to workplace injury in 2007/08 was statistically significantly lower than in 2000/01 (the closest available to the Revitalising base year), according to the Labour Force Survey. However, compared to 2004/05, the PSA base year, the rate has remained broadly level.
Supporting Research		Sources on general sickness absence show stable levels in the few years up to 2006/07, the latest available data for most sources. However, assessment of these sources provides only weak supporting evidence. Notably, work-related absence is generally only a small proportion of all absence, and such sources usually relate to periods earlier than those of interest.
<b>Overall direction</b>	↘	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 2007/08.
<b>Size of change</b>		<p>The central estimate for the decrease in days lost per worker 2000-02 to 2007/08 is in the order of 20%, (with a range of possibilities - 95% confidence interval - from 10% to 30%), compared to a <i>pro rata</i> target of 24%. Despite the fall from the baseline the statistical judgement is that on the <b><i>balance of probabilities progress is <u>not on track</u> to meet this Revitalising target.</i></b></p> <p>Over the PSA period 2004/05 to 2007/08, although the days lost per worker due to workplace illness and injury in 2007/08 was lower than that in 2004/05, the difference was not statistically significant. Considering the range of possibilities for the difference, whilst there is a chance that a reduction of 9% was actually achieved, <b><i>on the balance of probabilities the statistical judgement is that the PSA target has <u>not been met.</u></i></b></p>

Please see Annex A for charts showing recent trends

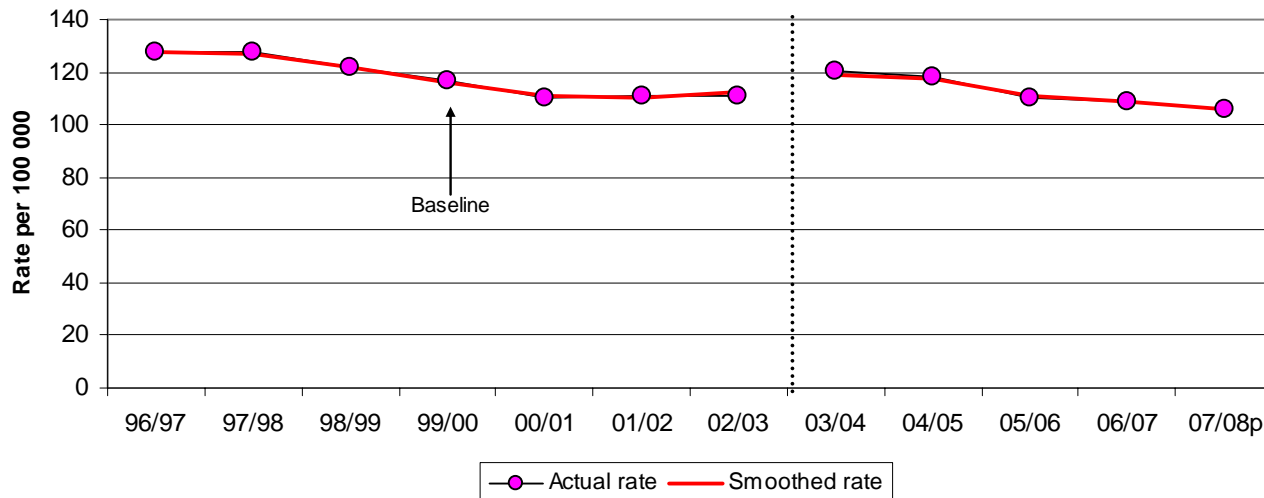
### Key for all three targets:

↗	Rise since base year	↘	Fall since base year	→	No clear change since base year
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Health and Safety Executive  
 Statistics Branch  
 October 2008

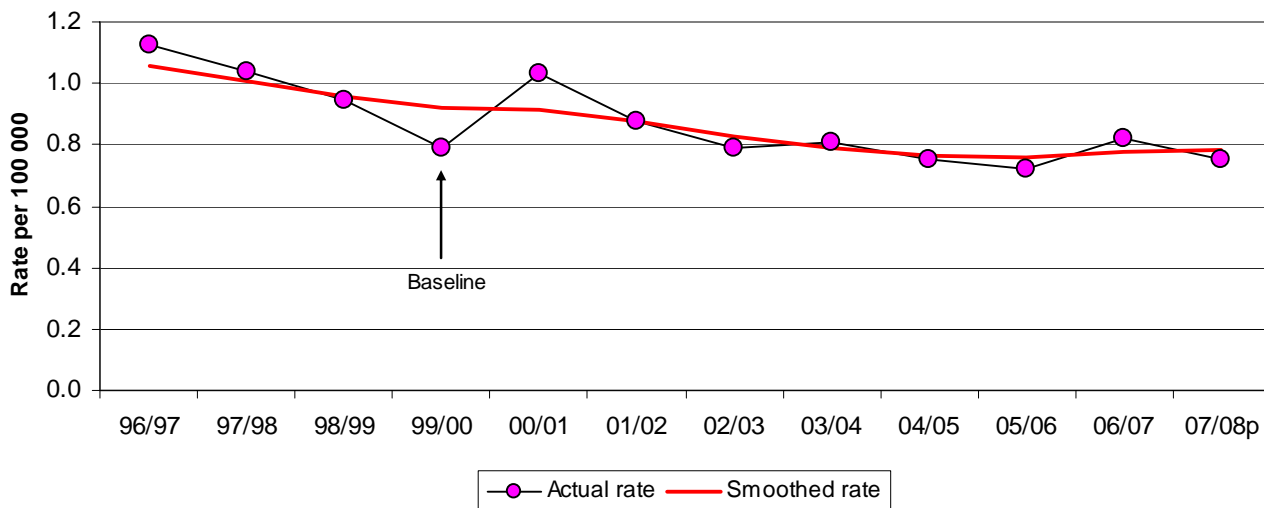
# Annex A : Recent trends in work-related injuries, ill-health and days lost

## Reported major injuries to employees

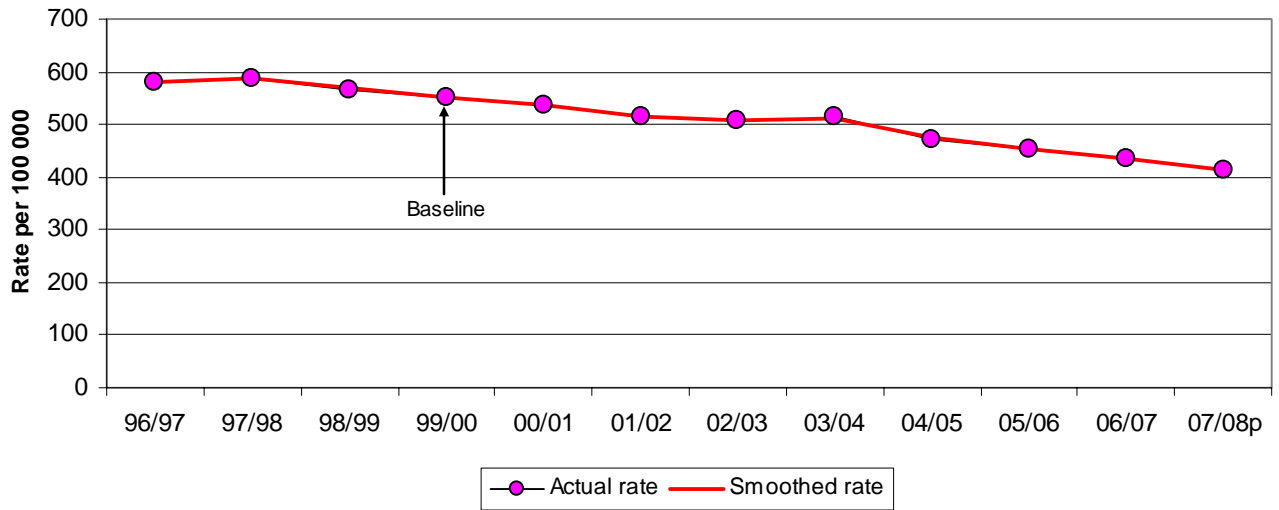


Vertical dotted line represents discontinuity in reported major injury series see <http://www.hse.gov.uk/statistics/pdf/discontinuity.pdf>

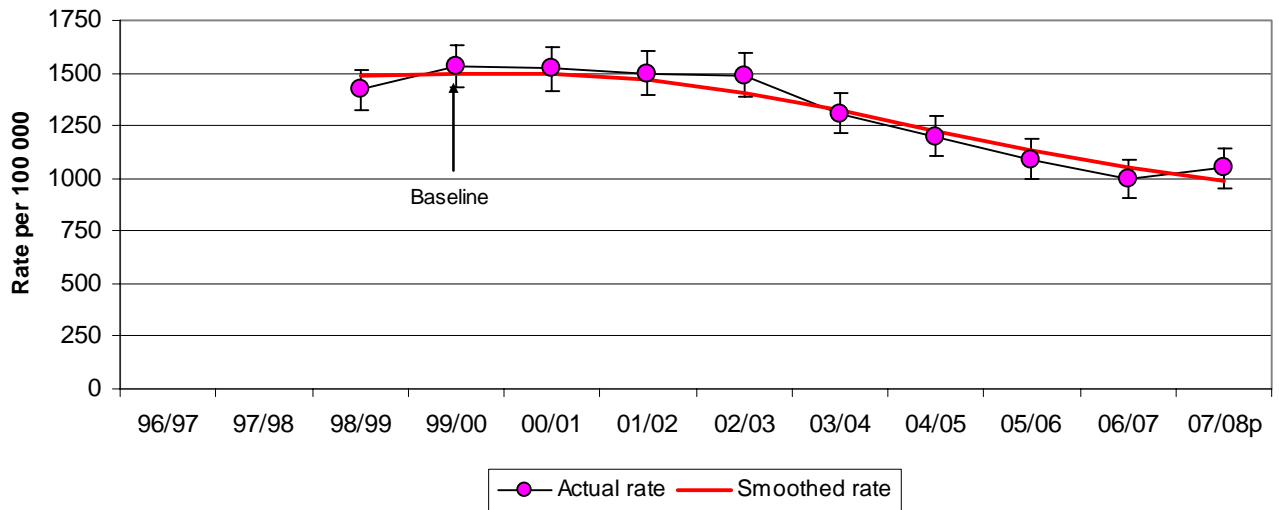
## Fatal injuries to workers



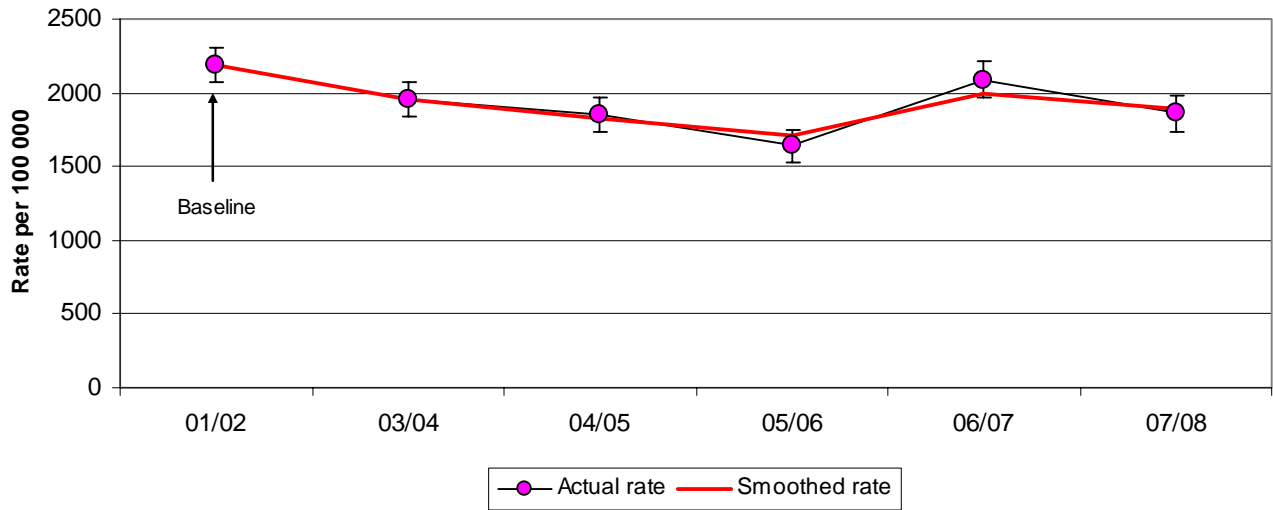
### Reported over-3-day injuries to employees



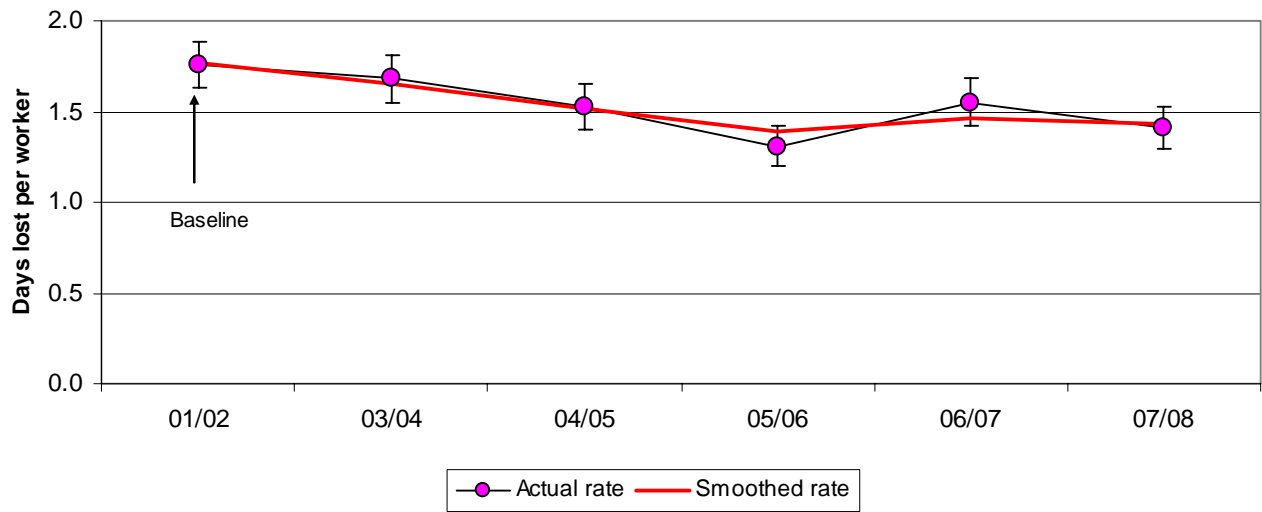
### LFS reportable injuries to workers



### Self-reported work-related ill health



### Self-reported days lost from work-related ill-health and injury



## **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) whether the HS target has been met or not met on injuries; ill-health and days lost.

At the end of the SR2004 PSA5 period (2008) whether HSE has met or not met the required reductions in indicators of injuries; ill-health and days lost set out in PSA5. See Health and Safety Public Service Agreement. Measurement of progress. Technical note. <http://www.hse.gov.uk/aboutus/strategiesandplans/sr2004.htm>.

### **Basis for judgement**

The judgement for each target will be which of the two judgement options is most probable. It will be 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 should be qualified with on the balance of probabilities unless judgement suggests 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.

Attendees' individual judgements at the end of each judgement meeting will be documented. However, the consensus will stand as the final judgement and attendees must respect this group view.

### **Target Judgement meetings**

There will be three target judgement meetings - injury, ill-health and days lost - that will consider both RHS and PSA target judgements in these areas HSE statisticians attending meetings will be those who provide source information or analysis, plus those with experience of analysing and interpreting data in these areas