Reported road casualties in Great Britain: Severity adjustment data, 2004-2019

The Department is providing record-level severity adjustment data on the road safety data.gov website alongside the 2019 annual report to facilitate severity adjustment analyses. Users are encouraged to use the record-level adjustment probabilities and provide feedback on the adjustment process. At both casualty and accident level, these look-ups contain the model probabilities for them being serious or slight under injury-based reporting systems (IBRS) since 2004, i.e. as if all forces were using injury-based reporting systems. The look ups contain adjustments for all non-fatal casualties and accidents. Fatal casualties and accidents are excluded as they are not given an adjustment probability. Accident\_adjustment and casualty\_adjustment can be linked back to the main accident and casualty datasets respectively and aggregated to produce adjusted totals. The accident values can be derived from the casualty look-up, but this has been provided in a separate look-up for ease and to ensure consistency. For more information on how the accident probabilities are calculated please see the [final severity adjustment methodology paper.](https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-main-results-2018)

**2004 data**

Please note that 2004 adjustments were calculated using variables collected from an older STATS19 specification. There are differences in the way variables were recorded and categorised in 2004. Therefore, 2004 adjustment figures are indicative, and it is recommended to use adjustment figures from 2005 onwards only.

**Using the adjustments**

The accident and casualty adjustment probabilities provided can be linked to the available yearly data extracts using the “Accident\_Index” variable (as well as “Vehicle\_Reference” and “Casualty\_Reference” for the casualty dataset). To get the adjusted slight or serious totals for an aggregate, the values in the appropriate column need to be summed (“Adjusted\_Serious” or “Adjusted\_Slight”). A flag for whether the casualty or accident was originally recorded on an injury based reporting system (“Injury\_Based”) has also been included.

**Uncertainty**

Greater uncertainty applies to totals according to the proportion of casualties assessed using the non-injury based reporting system (NIBRS). The IBRS flag (“Injury\_Based”) can be used to assess the proportion of cases where IBRS was actually used. Estimates where a larger proportion of cases were actually recorded on IBRS are more reliable.

Adjustment trends are more stable than totals and are unlikely to change even if there are changes to the regression model used to produce the adjustments. Total figures are likely to change each year as more data, and more IBRS police forces are incorporated into the model.

**Further information**

As the Department gets more data from IBRS forces, and as more forces move to IBRS, the adjustment model will be updated. The look-ups provided on data.gov will be updated to reflect this.

For more details on the final methodology used to calculate these probabilities, please see the annex accompanying the [2019 Reported road casualties Great Britain, annual report.](https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-annual-report-2019)

For any feedback, please contact [roadacc.stats@dft.gov.uk](mailto:roadacc.stats@dft.gov.uk).