



# Rail Safety Statistics

## 2016-17 Annual Statistical Release

Publication Date: 26 September 2017

Next release: September 2018

### Background

This release contains statistics on rail safety in Great Britain from 2008-09 to 2016-17.

Rail safety statistics for Great Britain include information on train accidents and the number of fatalities and injuries affecting passengers, the workforce and members of the public.

Data are sourced from the Rail Safety and Standards Board (RSSB), London Underground Limited (LUL), the British Transport Police (BTP) and the Office of Rail and Road (ORR).

There have been some changes to the data from RSSB. Please see the notes section for more details.

More detailed commentary about the statistics contained in this release can be found in RSSB's [Annual Safety Performance Report](#) and ORR's [Annual Health and Safety Report](#)

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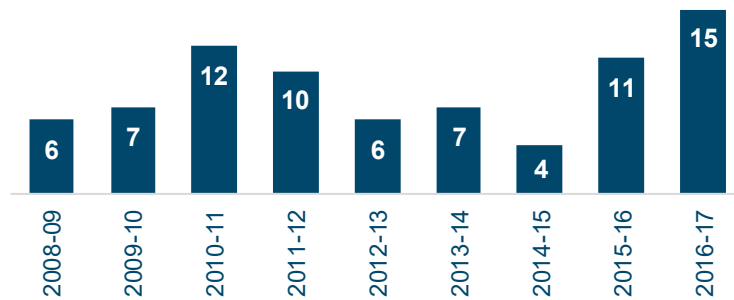
### Summary

#### Fatalities on the Railway

The number of **passenger fatalities** increased for the second year in a row.

Seven of these were a result of the Croydon tram derailment in November 2016. This was the **first time there have been fatalities from an accident** in ten years.

Passenger fatalities on the railway, Great Britain, 2008-09 to 2016-17



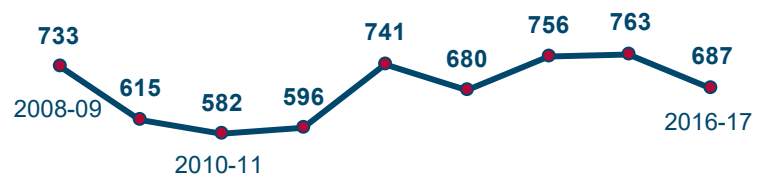
There was **one workforce fatality** in 2016-17 and **public fatalities decreased** for the second year in a row.

#### Injuries on the Railway

There was a **small increase** in the number of injuries to passengers in 2016-17 (up 1%) and a **small decrease** in the number of workforce injuries (down 1%).

#### Other Safety Incidents on the Railway

Train accidents, Great Britain, 2008-09 to 2016-17



There were **76 fewer train accidents in 2016-17**, a decrease of 10% compared to 2015-16.

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A **passenger** is a person on railway infrastructure who intends to travel, is in the process of travelling or has travelled. This is regardless of whether they have a valid ticket.

This **does not include** travellers who trespass or who commit, or attempt to commit suicide. People who are injured in this way are classified as members of the public

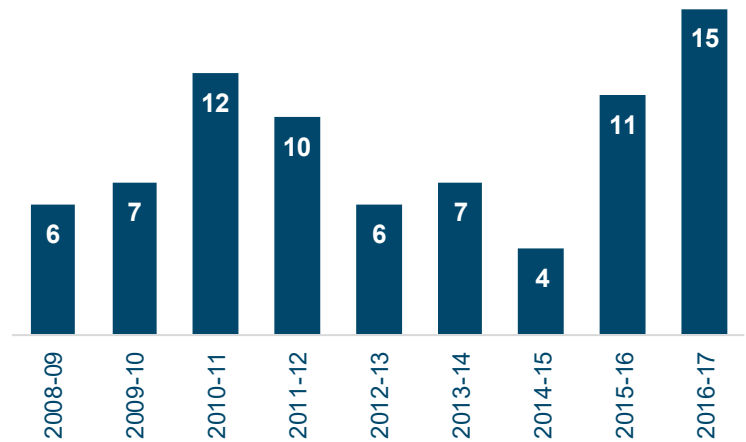
## Passenger Fatalities

There were **fifteen passenger fatalities** in 2016-17.

This was the **highest number** since 2010-11.

Five occurred on the mainline, two on London Underground and eight on other networks.

**There were passenger fatalities** as a result of an accident for the **first time in ten years**, all as a result of the Croydon tram derailment



## Passenger Injuries on the Mainline

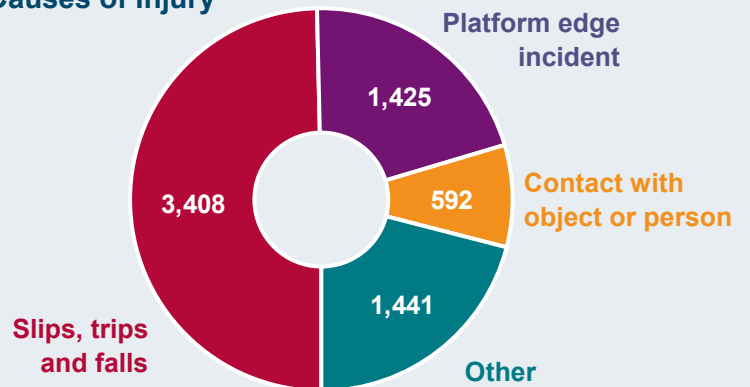
**6,866 injuries** in 2016-17

**5.2%**

compared to 2015-16

Of which **266 were major injuries**

### Causes of Injury



## Passenger Injuries on London Underground

**4,497 injuries** reported in 2016-17

**10.5%**

compared to 2015-16

This is the fourth year in a row where there were **more than 4,000 injuries** on London Underground

There were **80 major injuries** and **4,189 minor injuries**

## Passenger Injuries on trams, metros and other non-Network Rail networks

There were **109 passenger injuries** on trams, metros and non-Network Rail networks in 2016-17.

**More than double** compared to 2015-16

**49 injuries** were a result of the Croydon tram derailment

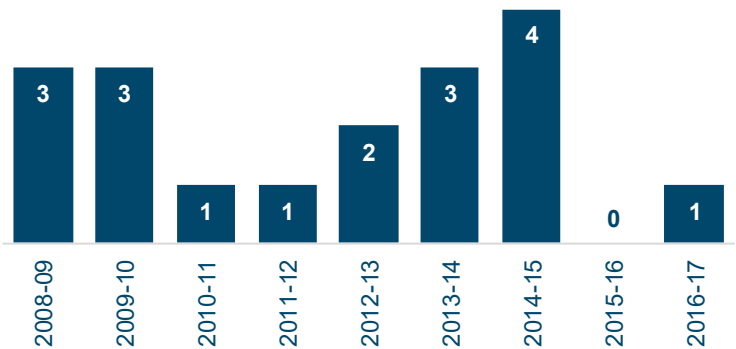


A member of the **workforce** is defined as a person working for the industry on railway activities either as a direct employee or under contract.

## Workforce Fatalities

There was **one workforce fatality** in 2016-17

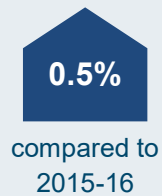
One more than the previous year



## Workforce Injuries on the Mainline



**6,713 injuries**  
in 2016-17



Of which **164 were major injuries**

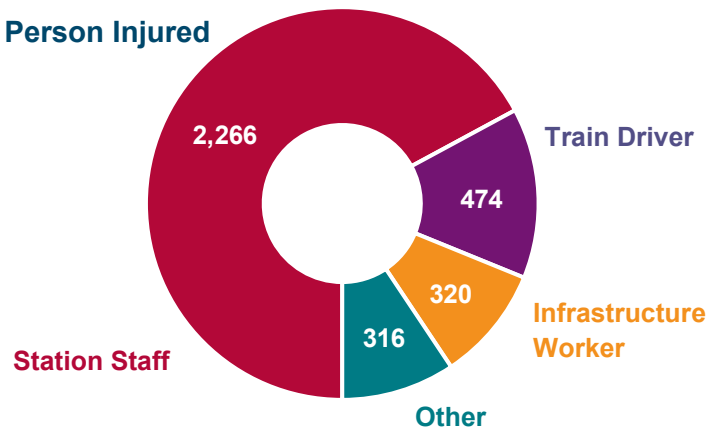
## Workforce Injuries on London Underground



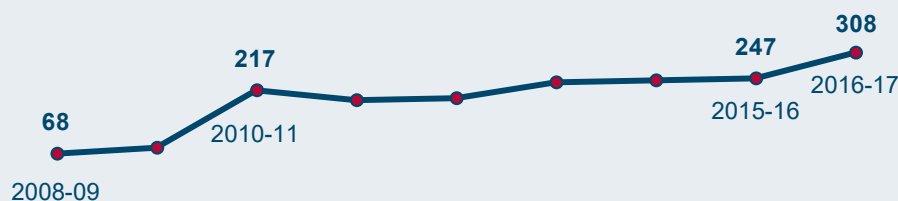
**3,376 injuries** in 2016-17



Person Injured

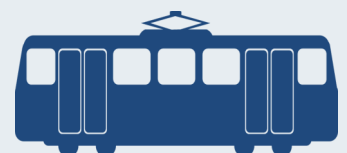


## Workforce Injuries on trams, metros and other non-Network Rail networks



There were **308 workforce injuries** on trams, metros and other non-Network Rail networks in 2016-17

Up **24.7%** compared to 2015-16



Members of the public are defined as neither passengers nor workforce.

It also includes people who trespass or who commit, or attempt to commit, suicide.

## Public Fatalities

There were **309 public fatalities** in 2016-17

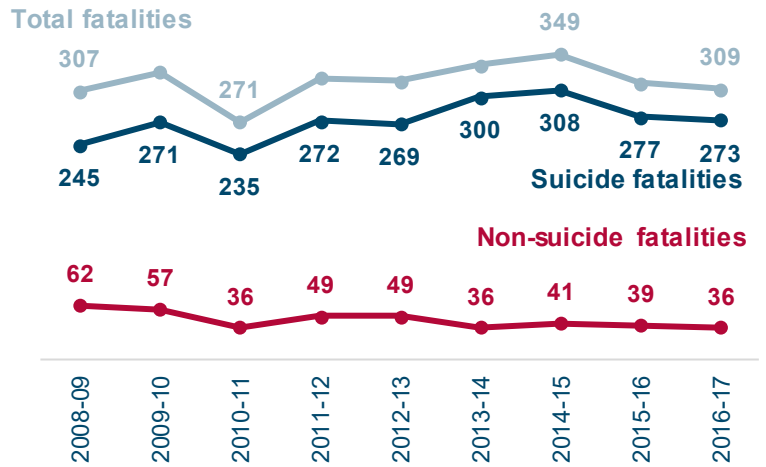
**Down by 2.2%** compared to 2015-16

of which **36 were non-suicide fatalities**

and

**273 were suicide or suspected suicide fatalities**

(237 on mainline and 36 on London Underground)



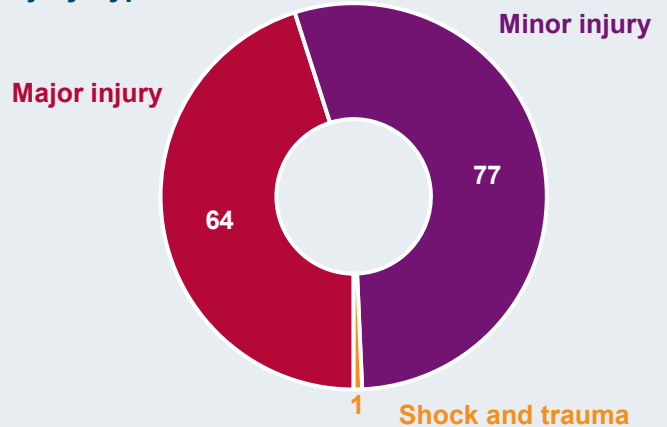
## Public Injuries on the Mainline

**142 injuries** to members of the public as a result of trespass, suicide or suspected suicide in 2016-17

**3.6%**

compared to 2015-16

### Injury Type



Information on public injuries on the mainline as a result of other causes is not currently available

## Public Injuries on London Underground

**17 injuries** to members of the public in 2016-17

**6 fewer** than in 2015-16

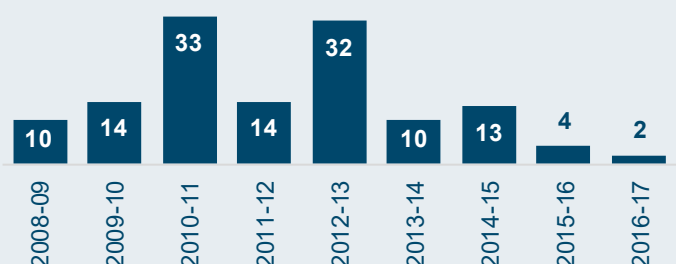
**2** as a result of trespass  
**15** as a result of suicide or suspected suicide

**6** were major injuries

## Public Injuries on trams, metros and other non-Network Rail networks

There were **2 injuries** to members of the public on trams, metros and non-Network Rail networks in 2016-17

The **lowest number** since the comparable time series began



# Train Accidents

2016-17

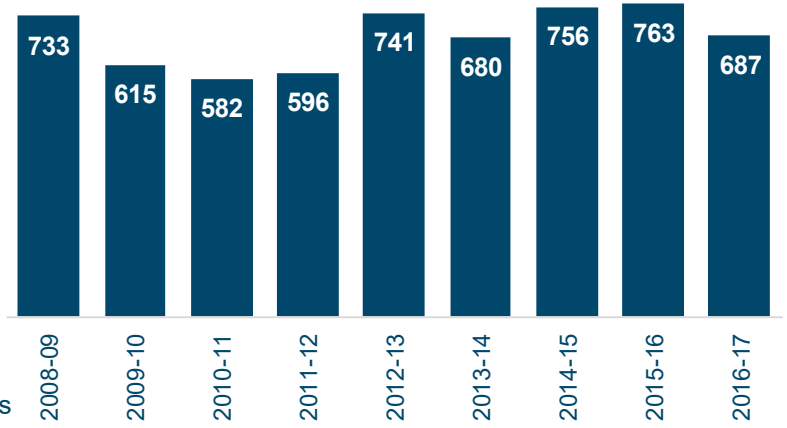
There were **687 accidents** in 2016-17

**10.0%** compared to 2015-16

**80%** occurred on the mainline

**2%** on London Underground

**18%** on trams, metros and other non-Network Rail networks

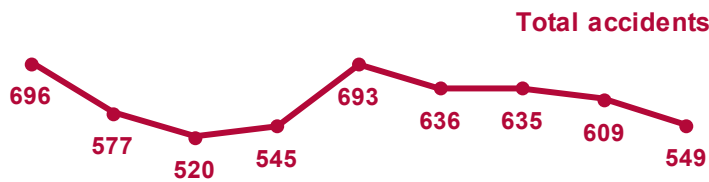


A PHRTA is a **Potentially Higher Risk Train Accident**.

These are RIDDOR reportable accidents and are those that have the greatest risk of resulting in physical injury.

The majority of train accidents carry a notably lower potential for serious consequences. These are known as **non-PHRTAs**.

## Train Accidents on the Mainline

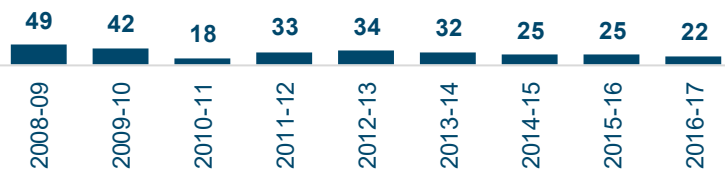


Of the **22 PHRTAs on the mainline** in 2016-17  
**15** involved at least one passenger train

There were:

- 6 derailments
- 6 collisions with vehicles at level crossings
- 4 collisions between trains
- 6 other collisions

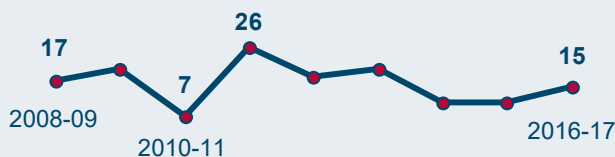
Potentially high risk (PHRTA)



## Train Accidents on London Underground

There were **15 accidents** on London Underground in 2016-17

**4 more** than 2015-16

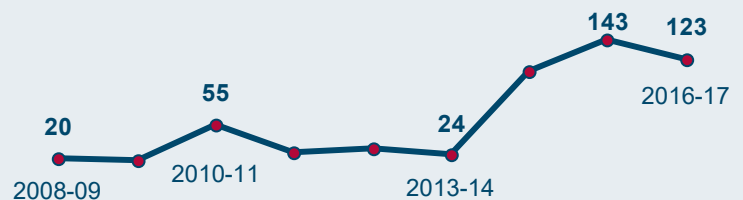


There were **3 PHRTAs**:  
**All were derailments**

## Train Accidents on trams, metros and other non-Network Rail networks

There were **123 accidents** in 2016-17

The large increase in 2014-15 is primarily because of improved reporting in the tramway sector and an extension to the tram network in Manchester and Nottingham



# Notes

## Related Publications

The statistics in this release have previously been reported in two publications:

[Rail Safety and Standards Board - Annual Safety Performance Report](#) (12 July 2017)

[Office of Rail and Road - Annual Health and Safety Report](#) (19 July 2017)

More detailed commentary about the trends and background information can be found in these two reports.

As well as the mainline data that is reported in both the publications above, this statistical release includes information from non-mainline networks, as well as finalised data for London Underground. There may be minor differences in the mainline and London Underground data compared to the other two publications - see the revisions section below for more information.

## Data Sources

Data for the mainline rail network, which is owned, run and maintained by Network Rail, are provided by the **Rail Safety Standards Board** (RSSB). The scope is generally limited to incidents which occur in stations, on trains or elsewhere on Network Rail managed infrastructure, such as the track or trackside. Workforce fatalities which occur away from these locations, but occur during working time, are also included.

The data for London Underground is provided by **London Underground Limited** (LUL). Train accident data for London Underground is not available before 2006-07. Totals presented before this time include mainline and non-mainline data only.

The data for non-mainline networks are derived from the **Office of Rail and Road's** (ORR) webform. The dataset includes safety incidents reported by heritage operators, tramways, light rail systems and other operators on non-Network Rail infrastructure. Data for non-mainline networks is only available from 2005-06. Any totals presented in this release before this time include mainline and London Underground data only.

## Revisions

There have been revisions to data previously published with this statistical release. Details are available in the [revisions log](#).

In particular, there have been some changes to the data that RSSB supply following the introduction of a new industry reporting system in March 2017. Data from 2007-08 onwards has been migrated into the new system, resulting in revisions to previous years.

Information prior to this date can be found in the tables on the Data Portal and, where required, has been marked as a series break. Therefore, comparisons before and after this time should be made with caution.

There has been no effect on headline information, such as the total number of fatalities. However, there will be some differences in the breakdowns by injury severity, injury type or cause.

The rail safety statistics for the mainline network and London Underground are comparable to data published earlier in the year. Occasionally differences may occur as there may have been updates to incident reports since.

Reasons for changes could include changes as a result of further investigations into incidents or the development of injuries sustained in previously reported incidents.

## Injury Categories

Employers, the self-employed and those in control of premises are required by law to report specified workplace incidents to the relevant enforcing authority, as set out by the **Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013**. The ORR have produced [guidance](#) which provides more detail on the types of incidents which are RIDDOR reportable. These statistics also include non-RIDDOR reportable minor injuries.

The injury categories reported in these statistics are generally as follows:

- **Fatality** - death occurs within one year of the incident
- **Major injury** - injuries to passenger, staff or member of the public as defined by Schedule 1 of RIDDOR 2013. This includes most fractures, amputations, loss of sight, crush or burn injuries
- **Minor injury** - RIDDOR reportable minor injuries, which are injuries that are not fatalities or major injuries and the injured person is unable to work for more than seven consecutive days. This also includes all other physical injuries outside the scope of RIDDOR
- **Shock or trauma** - from being involved in or witnessing events that have the potential of a fatal outcome or from other causes such as verbal abuse.

Further information on the quality of the statistics in this release can be found in the [Rail Safety Statistics Quality Report](#)

## Pre-created tables available on the Data Portal

All data tables can be accessed on the [Data Portal](#) free of charge. The data portal provides on screen data reports, as well as the facility to download data in Excel format and print the report. We can provide data in csv format on request.

The data in this report can be found in the following data portal tables:

- Passenger Safety - Key Statistics - [Table 5.18](#)
- Workforce Safety - Key Statistics - [Table 5.34](#)
- Public Safety - Key Statistics - [Table 5.22](#)
- Train Accidents - Key Statistics - [Table 5.26](#)

A number of additional related tables are also available on the data portal.

Not all the tables on the Data Portal have been updated. Work is ongoing to address this and the remaining tables will be published later in the year. Please see the [ORR Publication Schedule](#) for further updates.

## European Safety Benchmarking

The UK is required to submit Common Safety Indicators (CSIs) data to the European Union Agency for Railways on an annual basis. The CSIs can be used to assess and benchmark the performance of the UK railway against other EU member states. The latest available CSIs can be found on the [ERAIL website](#).

The results of analysis of CSIs submitted for 2010 to 2013 can be found on the ORR website: [Railway safety benchmarking - Safety on the UK's mainline railway network](#) (October 2015)

## National Statistics

The [United Kingdom Statistics Authority](#) designated these statistics as National Statistics in accordance with the Statistics and Registration Services Act 2007 and signifying compliance with the Code of Practice for Official Statistics. National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.



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