Overview of safety performance for 2014

Introduction

On behalf of the industry, RSSB takes a key role in the monitoring and reporting of safety performance on Great Britain’s mainline railway. In advance of our detailed reporting in the Annual Safety Performance Report (ASPR) for the financial year 2014/15 we are presenting a high-level overview of safety performance for the calendar year 2014. The recorded performance should be viewed against an overall context of increasing passenger journeys, with levels having increased by more than 50% over the last 10 years.

Key headlines

- For the seventh calendar year in succession, there were no passenger or workforce fatalities in train accidents.
- Excluding trespass and suicide, the total number of fatalities in 2014 was 17, compared with 18 in 2013.
- Three of the fatalities were passengers, compared with six in 2013; all occurred at stations. Three members of the workforce were fatally injured in 2014; two were fatally injured in 2013. Excluding trespass and suicide, 11 members of the public were fatally injured, compared with 10 in 2013.
- The number of potentially higher-risk train accidents (PHRTAs) in 2014 was 32, compared with 30 occurring in 2013.
- At 292, the number of signals passed at danger (SPADs) in 2014 was a 2% increase on the 285 recorded in 2013. SPAD risk rose to 84% mid-year, before reducing and ending 2014 at 61% of the September 2006 baseline level. This compares with 70% at the end of 2013.
- Fatalities arising from trespass and suicide totalled 320 in 2014, compared with 315 in 2013. 2014 was the third consecutive year the total number increased.

Trends in train accidents

In the past 10 years there has been one train accident that resulted in fatality to people on board the train. This was the train derailment at Grayrigg in 2007, in which one passenger lost her life.

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1 More detailed safety analyses are presented in RSSB’s Annual Safety Performance Report (ASPR); the next ASPR will cover the 12-month period April 2014 to March 2015, and is due for publication at the end of June 2015.
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Potentially higher-risk train accidents (PHRTAs)

PHRTAs are those train accidents that have the greatest chance of resulting in physical injury. They comprise statutorily reportable train collisions (excluding roll back and open door collisions), buffer stop collisions, trains striking road vehicles (with derailment and without derailment), other derailments, and trains being struck by large falling objects. Two PHRTAs resulted in two fatalities to members of the public; each involved a road vehicle being struck at a level crossing. Seven PHRTAs resulted in 12 non-fatal injuries to train occupants. These comprised two passenger minor injuries, four workforce minor injuries and six workforce shock/traumas.

Precursor indicator model (PIM)

RSSB’s PIM measures the underlying risk from train accidents by tracking changes in the occurrence of accident precursors and their potential consequences. The PIM indicates that at the end of 2014, the underlying passenger risk from train accidents was 3.02 FWI, compared with 3.14 FWI at the end of 2013 which is a 3.9% decrease. The overall PIM at the end of 2014 was 6.83 FWI, compared with 7.61 FWI at the end of 2013 which is a decrease of 10.3%. The improvement in overall PIM risk is mainly due to a reduction in public risk.
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Signals passed at danger (SPADs)

At 292, the number of SPADs in 2014 was 2% higher than the 285 occurring in 2013. At the end of 2014, SPAD risk stood at 61% of the September 2006 baseline level, compared with 70% at the end of 2013.

Fatalities

The following chart presents the number of accidental fatalities occurring over the past 10 years to passengers, the workforce and members of the public not involved in trespass. There were three passenger fatalities; the average for the decade as a whole is 6.3 per year.
Summary of fatality events

There were 17 fatalities recorded in 2014, excluding those related to trespass or suicide. Three were passengers, three were members of the workforce, and 11 were members of the public.

Passengers

- On 1 March, a through train struck a person who had fallen on the track at Shepherd’s Bush station. Alcohol was reported as a potential factor in the event.
- On 7 April, a teenage child fell from the platform and onto the track and was electrocuted at Horley station. Alcohol was reported as a potential factor in the event.
- On 5 August, a person running for a train fell down the stairs at Hampstead Heath station. He was taken to hospital but died from his injuries five days later.

Workforce

- On 22 January, a lookout working with a small gang carrying out inspection work on the track outside Newark Northgate station was struck by a train approaching the station.
- On 1 May, an infrastructure worker driving a tractor on the A7 north of Galashiels was involved in a road traffic accident with a lorry.
- On 24 May, a train cleaner working at West Marina Depot came into contact with the live rail and was electrocuted.

Members of the public

- Two people died when their motor vehicles were struck by trains at level crossings.
- Eight pedestrian users of level crossings died as a result of being struck by trains.
- A child died after being struck by a train during an incident where his mother is believed to have accessed the track to commit suicide.

Trespass and suicide

The number of fatalities from trespass, suicide and suspected suicide in 2014 was 320, an increase of five compared with the 315 that were recorded in 2013.

Further information

More detailed safety analyses are presented in RSSB’s ASPRs. The 2014/15 APR will cover the 12-month period April 2014 to March 2015 and is due for publication at the end of June 2015.

RSSB is happy to take questions or comments on the information in this overview. Please contact Liz Davies, Head of Safety Performance, with any queries or feedback: liz.davies@rssb.co.uk, tel. 020 3142 5475.

Information contained in this summary should be treated as provisional.

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2 In June 2014, there was a road traffic collision that tragically resulted in the deaths of a number of infrastructure workers. The incident occurred when the workers were not on duty; such events occurring off-duty are currently not within reporting scope so are not included in the Overview analysis. The issue of scope, with particular reference to road driving risk, is currently being reviewed by the industry.