

Unintentional Injuries in Scotland

**Hospital Admissions: Year ending 31
March 2018**

**Deaths: Year ending 31 December
2017**

**Publication date
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Introduction

Unintentional injury is a common cause of emergency admission to hospital for adults and children. In the financial year ending 31 March 2018, unintentional injuries accounted for approximately 1 in 9 emergency hospital admissions for children and 1 in 10 for adults. Another possible outcome of unintentional injury is death. This was the case for approximately 1 in 16 child and 1 in 25 adult deaths during the calendar year ending 31 December 2017.

The term 'unintentional injury' is preferred to 'accidents' as the latter implies that events are inevitable and unavoidable whereas a high proportion of these incidents are now regarded as being preventable. Unintentional injuries can occur in any age group, but children and the elderly are generally more vulnerable.

This publication summarises information on emergency hospital admissions as a result of unintentional injuries and assaults, sourced from hospital administrative systems across Scotland, up to and including the financial year 2017/18. Deaths are also reported, sourced from death registrations obtained from National Records of Scotland, up to and including calendar year 2017. The figures reported in this publication are based on Scottish residents who died as a result of an unintentional injury or were admitted to hospital as an inpatient with the appropriate type of emergency admission code.

Deaths from drug abuse, specifically acute intoxication, were classified as 'mental and behavioural disorders' prior to 2011. From 2011 onwards these deaths are counted under 'accidental poisoning' (where applicable) and therefore included in the figures presented in this publication. Care is required when comparing these statistics before and after 2011.

For more information see [Appendix A1](#).

Unintentional injuries publications prior to 2013 included information on assaults because injuries occurring this way were considered to be 'unintentional' on the part of the victim. To be consistent with the categorisation of these types of injury used by the National Records of Scotland and the International Collaborative Effort (ICE) on injury statistics, we have changed the classification for intentional injuries and data on assaults have been presented separately in unintentional injuries publications since 2013.

Main Points

- In 2017/18 there were 58,533 emergency admissions for unintentional injuries, representing 1 in 10 of all emergency admissions in Scotland.
- Those from the most deprived areas were around twice as likely as those from the least deprived areas to have an unintentional injury.
- 86% of unintentional injuries among those aged 65 and over were due to falls.
- The rate of falls in those aged 65 and over has increased from 19.6 per 1,000 in 2008/09 to 22.2 in 2017/18.
- Following a period of sharp decline between 2008/09 and 2014/15 the numbers of emergency admissions for assault have stabilised. In 2017/18 there were 2,383 emergency admissions for assault.
- Deaths from poisonings have doubled since 2011. There were 923 deaths due to poisoning in 2017, an increase from 461 in 2011. This is in line with National Records of Scotland statistics showing recent increases in drug related deaths.

Results and Commentary

3.1 Unintentional Injuries in Children

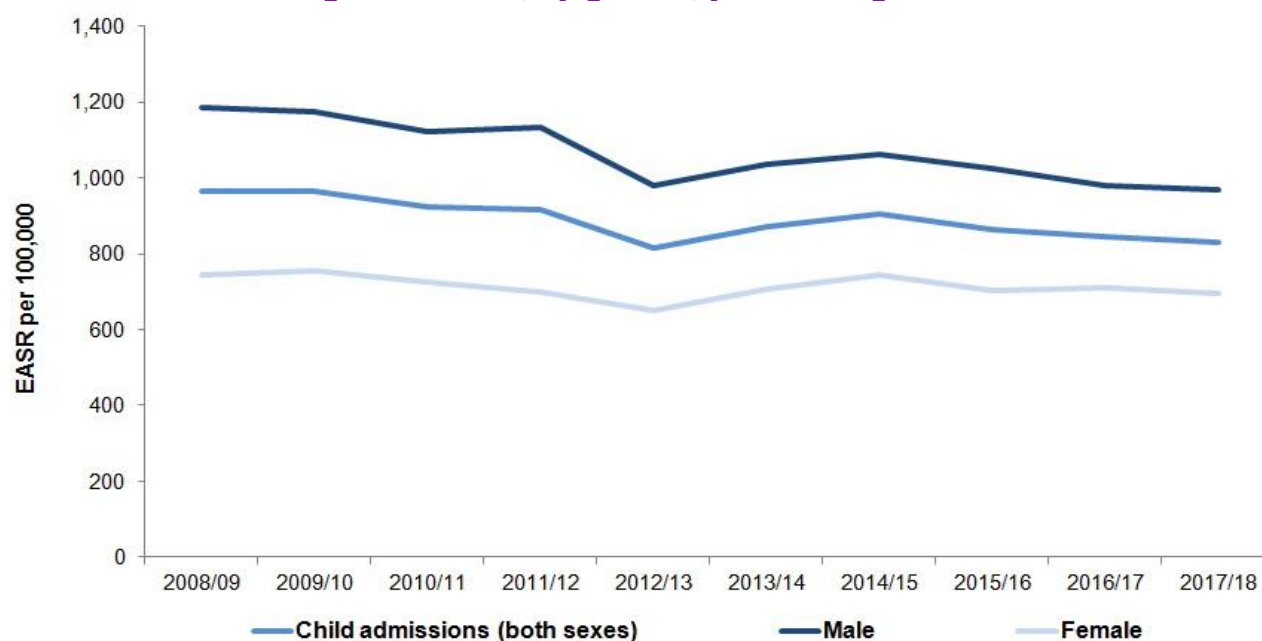
3.1.1 Injuries in children by age group and gender

In Scotland, for children under the age of 15, there were 16 deaths as a result of unintentional injury in the calendar year ending 31 December 2017. There were also 7,259 emergency admissions to hospital for children in the financial year ending 31 March 2018.

However, the majority of unintentional injuries result neither in death nor in hospital admission but are treated by GPs, Accident & Emergency departments or by the child's parent or carer, although accurate data from these sources are not available and so not reported in this publication.

Figures reported in this publication are for Scottish residents who died as a result of an unintentional injury or were admitted to hospital as an inpatient with the appropriate type of emergency admission code.

Chart 1 - Emergency hospital admissions as a result of an unintentional injury; rates¹ for children aged under 15, by gender, year ending 31 March 2009-2018



Source: ISD Scotland (SMR01)

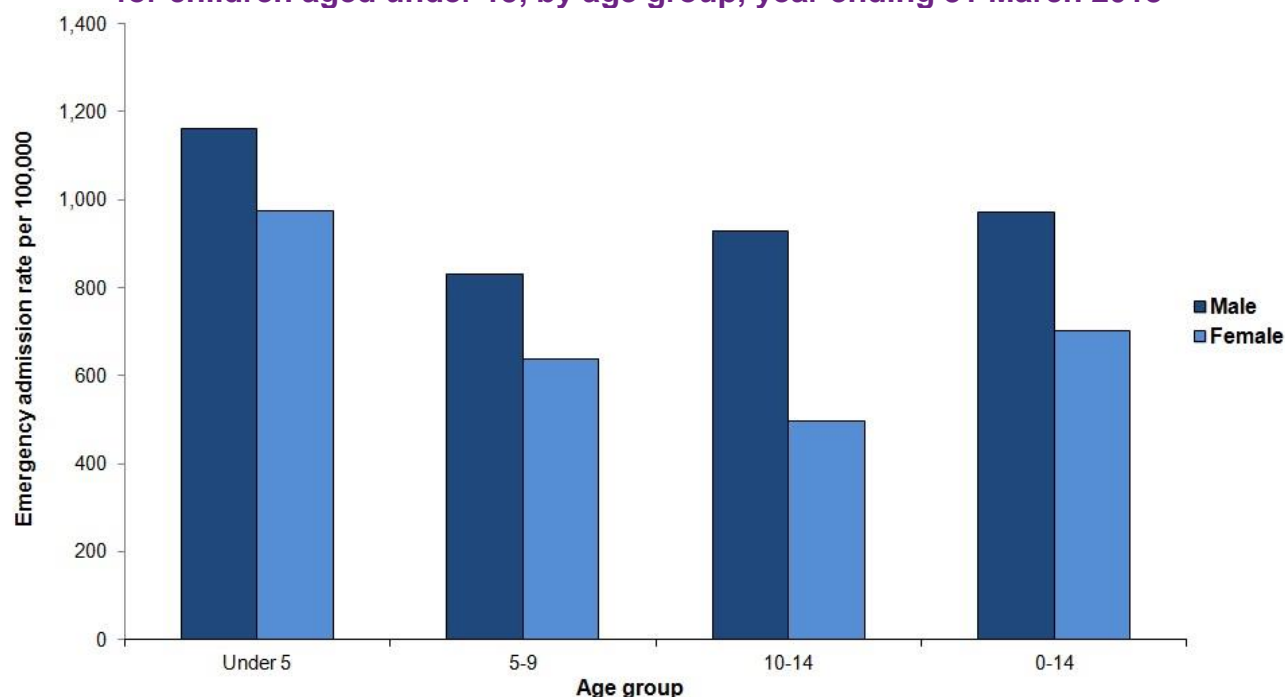
1. Rate per 100,000 directly standardised (age-sex) using the European standard population (2013).

Chart 1 shows the European Age Standardised Rate (EASR) per 100,000 for emergency hospital admissions as a result of an unintentional injury in children for years ending 31 March 2009 to 2018.

The general trend over the last ten years has been decreasing admission rates for both males and females. In 2017/18 the rate of emergency hospital admissions per 100,000 population for males aged under 15 was 968.6 compared to 694.7 for females.

See [Table 3](#) for more information.

Chart 2 - Emergency hospital admissions as a result of an unintentional injury; rates¹ for children aged under 15, by age group, year ending 31 March 2018



Source: ISD Scotland (SMR01)

1. Rate per 100,000 based on National Records of Scotland mid 2017 population estimates.

Chart 2 shows admission rates per 100,000 population. The rate of emergency hospital admission per 100,000 males aged under 15 was 971.7 compared to 701.7 for females in 2017/18. In all the child age groups, males were more likely than females to be admitted to hospital for an unintentional injury.

See [Table 5](#) for more information.

3.1.2 Injuries in children by cause of injury

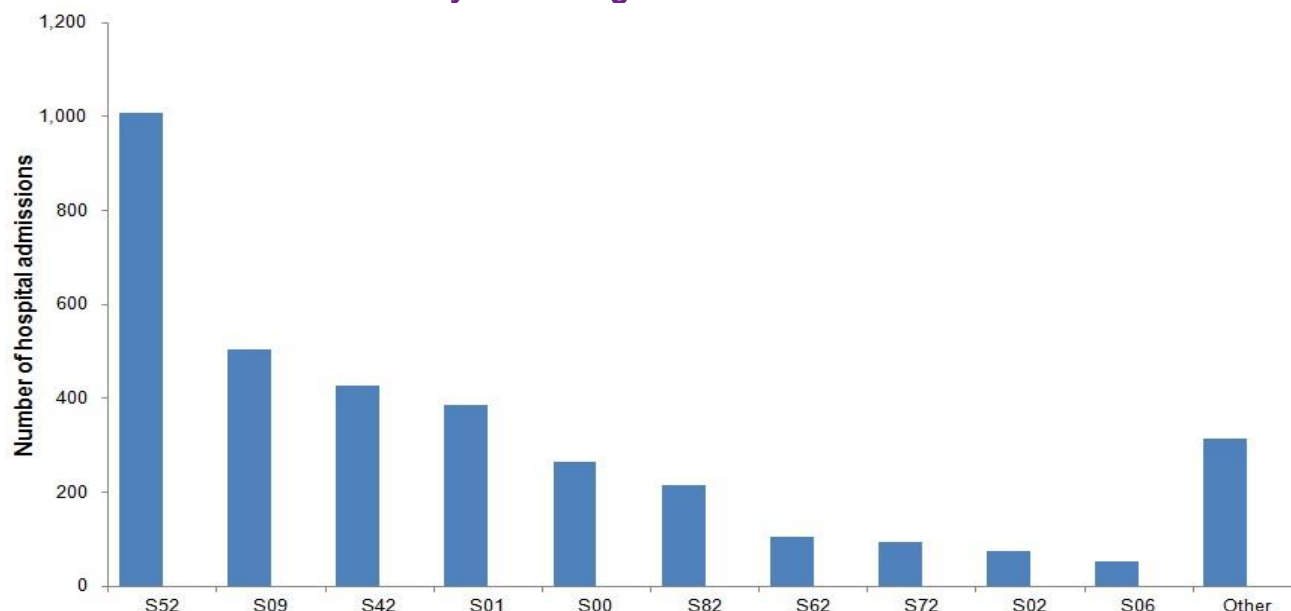
For Scotland in 2017/18, nearly half (47%) of the 7,259 emergency admissions to hospital for children aged under 15 due to an unintentional injury were the result of a fall. Falls were by far the most common cause of emergency admissions due to unintentional injury in children, for males and females.

See [Table 5](#) for more information.

With falls being responsible for such a high proportion of the emergency admissions, fractures and head injuries were the most common main diagnoses among children admitted to hospital due to unintentional injuries. This is illustrated in Chart3.

See [Table 13](#) and [Table 14](#) for more information.

Chart 3 - Number of emergency hospital admissions as a result of a fall in children aged less than 15 by top ten main diagnoses, showing ICD10 code and description, year ending 31 March 2018



Source: ISD Scotland (SMR01)

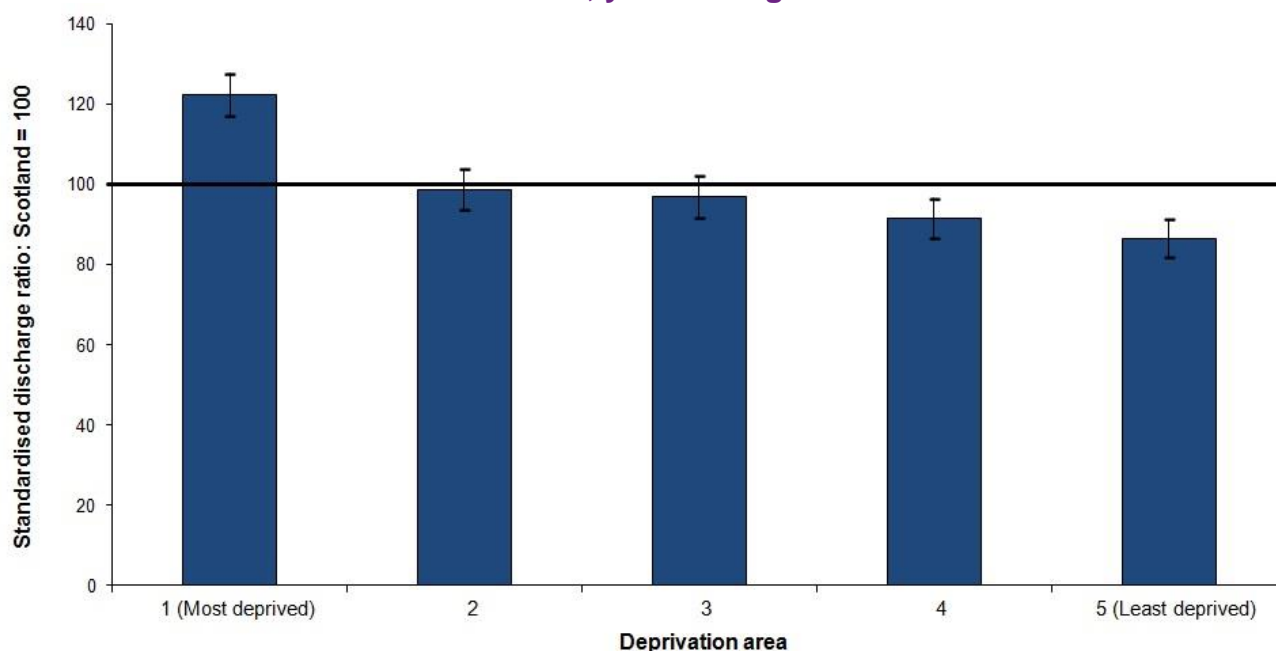
ICD10	Description
S52	Fracture of forearm
S09	Other and unspecified injuries of head
S42	Fracture of shoulder and upper arm
S01	Open wound of head
S00	Injury, poisoning & certain other consequences of external causes
S82	Fracture of lower leg, including ankle
S62	Fracture at wrist and hand level
S72	Fracture of femur
S02	Fracture of skull and facial bones
S06	Intracranial injury
Other	All other admissions

3.1.3 Injuries in children by deprivation

The Scottish Index of Multiple Deprivation (SIMD) is an area-based measurement of multiple deprivation. Areas are divided into five groups with decreasing levels of deprivation. Figures shown here are standardised discharge ratios (SDRs) which express the number of discharges in each deprivation area as a percentage of those which would have occurred had the Scottish discharge rates for each age and sex group prevailed in that deprivation area.

See the [Appendix](#) for more information on standardised ratios, confidence intervals and SIMD.

Chart 4 - Emergency hospital admissions as a result of an unintentional injury; children aged under 15, by deprivation area, standardised discharge ratio¹ with 95% confidence intervals, year ending 31 March 2018



Source: ISD Scotland (SMR01), Scottish Index of Multiple Deprivation (SIMD) 2016

1. Data are standardised for age and sex.

The horizontal line shows the level for Scotland as a whole.

Chart 4 shows that for 2017/18, children aged under 15 living in the most deprived areas were more likely than children in the least deprived areas to have an emergency admission to hospital for an unintentional injury.

The standardised discharge ratio was 22% higher in the most deprived areas compared to the Scottish average. In the least deprived areas, the standardised discharge ratio was 13% lower.

See [Table 10](#) for more information.

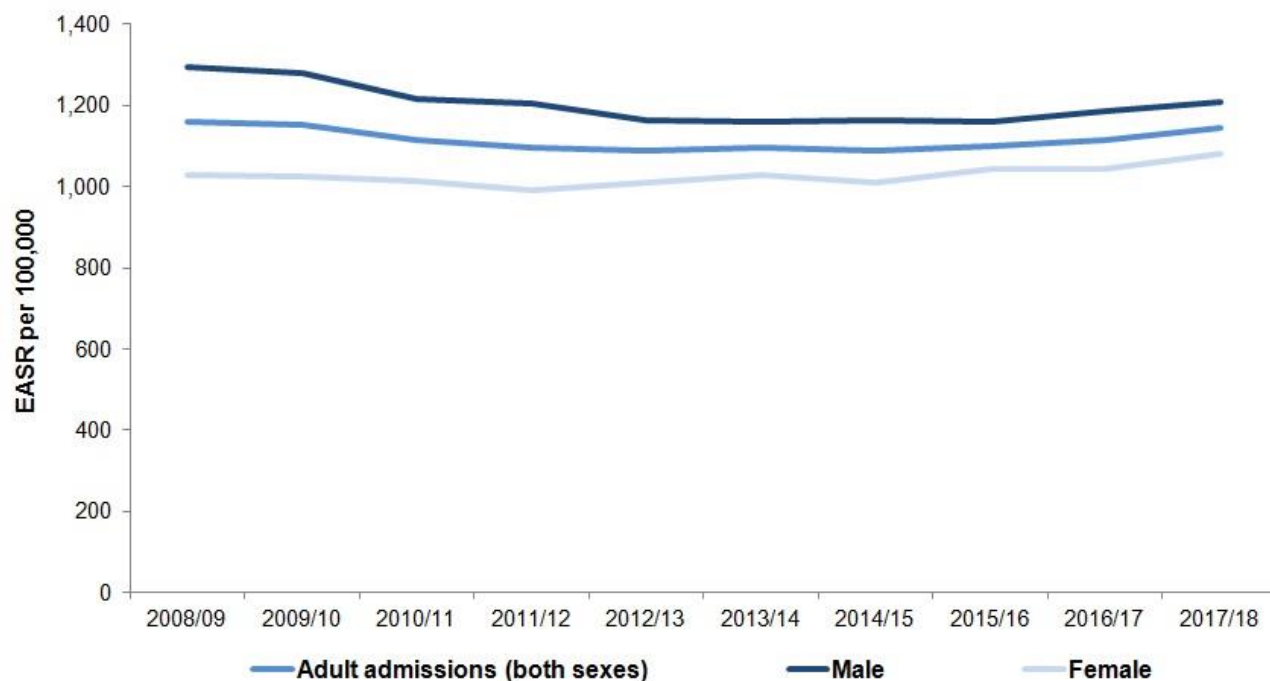
3.2 Unintentional Injuries in Adults

3.2.1 Injuries in adults by age group and gender

In Scotland, for those aged 15 and over, there were 2,332 deaths as a result of unintentional injury in the calendar year ending 31 December 2017. There were also 51,274 emergency admissions to hospital for adults in the financial year ending 31 March 2018.

There was an increase of 6.1% in the number of deaths in Scotland of adults as a result of unintentional injury in 2017 (2,332) compared to 2016 (2,198) and an increase of 3.6% in the number of emergency hospital admissions in 2017/18 (51,274) compared to 2016/17 (49,507).

Chart 5 - Emergency hospital admissions as a result of an unintentional injury; rates¹ for adults aged 15 and over, by gender, year ending 31 March 2009-2018



Source: ISD Scotland (SMR01)

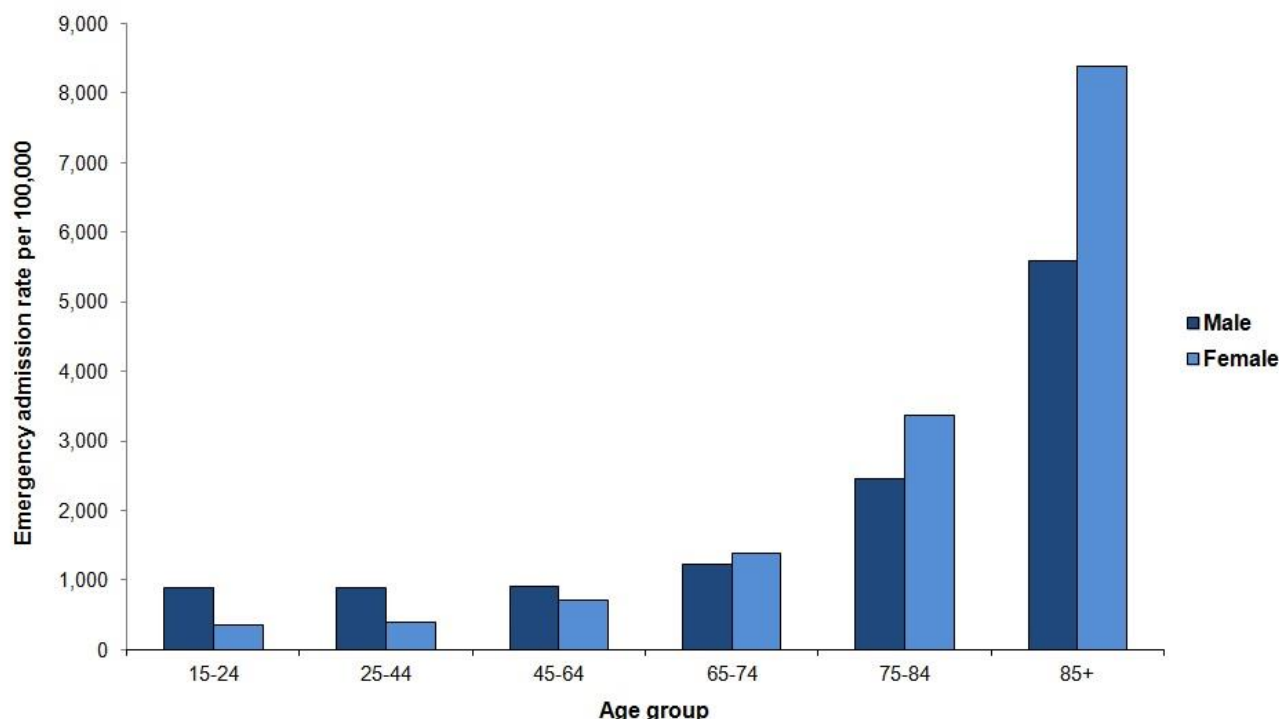
1. Rate per 100,000 directly standardised (age-sex) using the European standard population (2013).

Chart 5 shows the European Age Standardised Rate (EASR) per 100,000 for emergency hospital admissions as a result of an unintentional injury in adults for years ending 31 March 2009 to 2018.

The general trend for adult females over the last ten years shows a slight increase. In contrast, the rate for males shows an overall decrease although the most recent two years show a slight increase. In 2017/18 the rate of emergency hospital admissions per 100,000 for males aged 15 and over was 1,208.6 compared to 1,080.6 for females. The overall adult rate was 1,144.6.

See [Table 3](#) for more information.

Chart 6 - Emergency hospital admissions as a result of an unintentional injury; rates¹ for adults aged 15 and over by age group, year ending 31 March 2018



Source: ISD Scotland (SMR01)

1. Rate per 100,000 based on National Records of Scotland mid 2017 population estimates.

Chart 6 shows admission rates per 100,000 population. Between the ages of 15-64, males were more likely than females to have an emergency admission to hospital due to an unintentional injury. However, this pattern reversed for those aged over 65 where females had higher admission rates.

There were a total of 51,274 admissions of adults aged 15 and over in 2017/18. Just over 51% of these were in the 65 and over age groups. Of those admissions in the 65 and over age group, 86% were the result of a fall.

See [Table 5](#) for more information.

3.2.2 Injuries in adults by cause of injury

Falls were the most common cause of emergency hospital admissions for unintentional injuries in adults, accounting for 66% of unintentional injury admissions to hospitals. This varied across age groups, although each older age group had a higher percentage of admissions caused by a fall, from 30% of emergency admissions by those aged 15-24 to 92% of emergency admissions by those aged 85 and over.

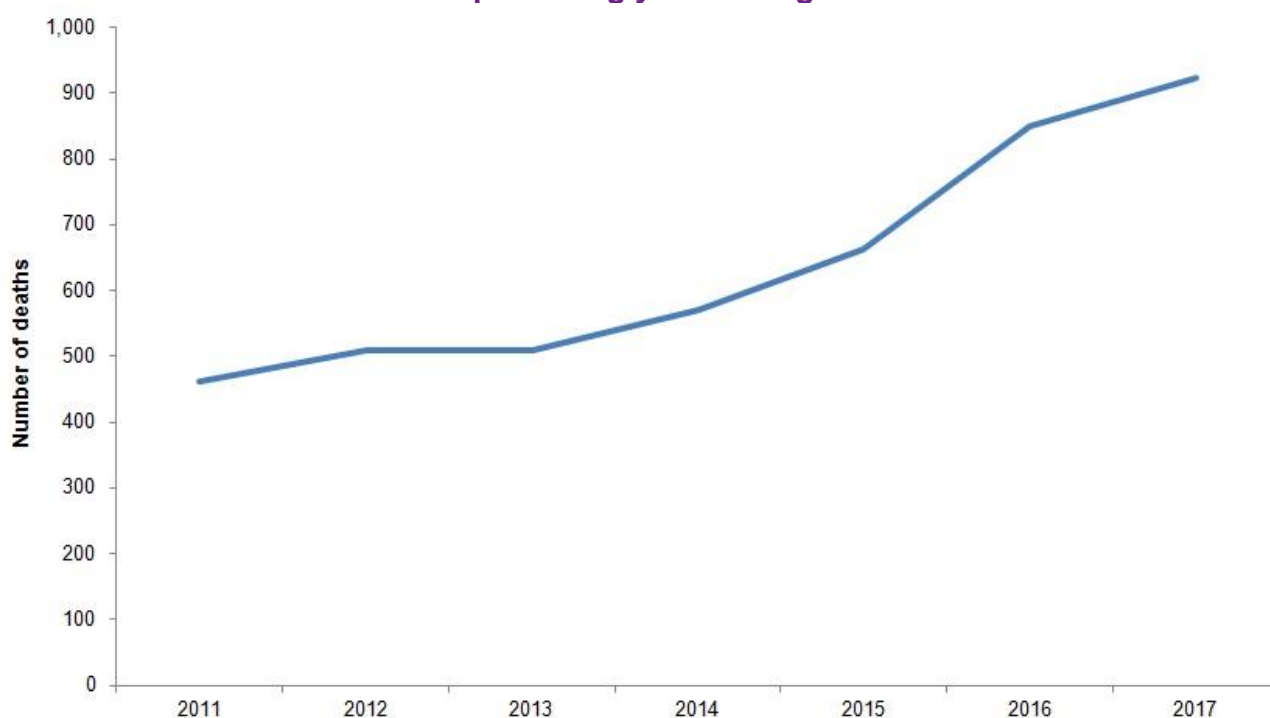
See [Table 5](#) for more information.

Similar to the child age groups, fractures and head injuries were the most common main diagnoses for adults aged 15 and over who had an emergency hospital admission as a result of an unintentional injury.

See [Table 13](#) and [Table 14](#) for more information.

Deaths from poisonings have doubled since 2011. There were 923 deaths due to poisoning in 2017, an increase from 461 in 2011. In 2017 those aged between 25-64 accounted for 855 of the deaths. The majority of deaths from poisoning in all age groups were males with 647 mortalities.

Chart 7 – Deaths due to poisoning year ending 31 December 2011-2017



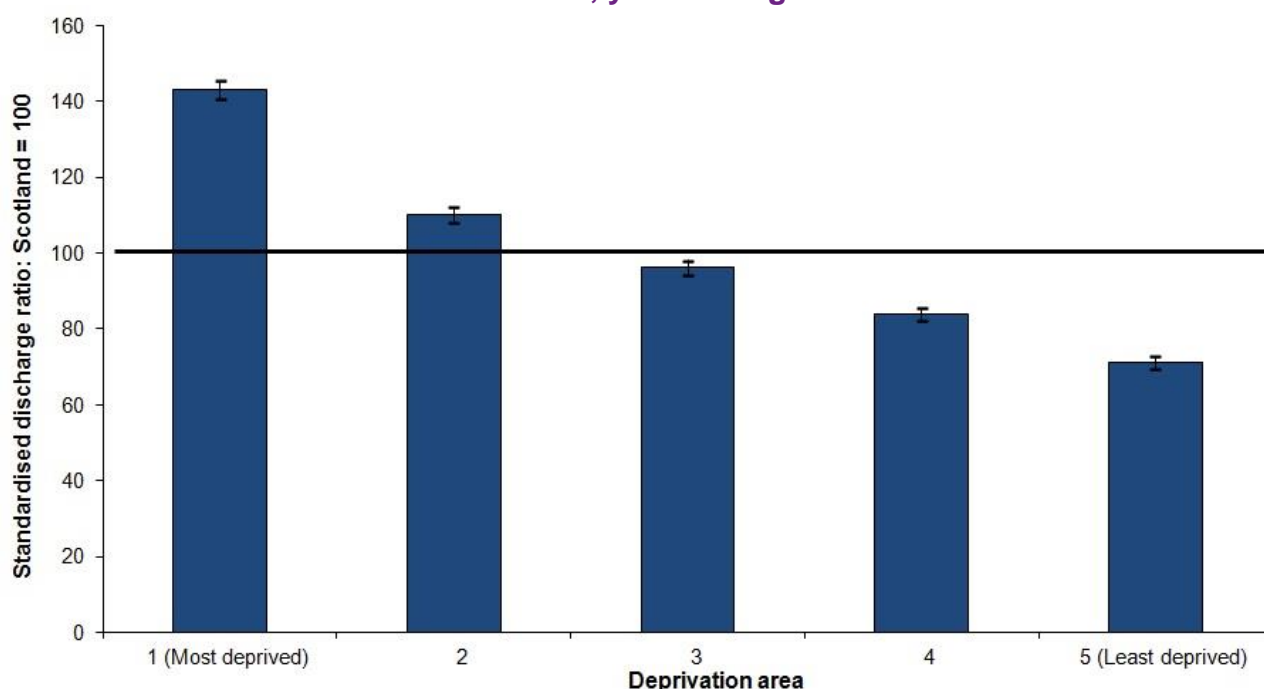
Source: National Records of Scotland

3.2.3 Injuries in adults by deprivation

The Scottish Index of Multiple Deprivation (SIMD) is an area-based measurement of multiple deprivation. Areas in Scotland were divided into five groups, each with decreasing levels of deprivation. Figures shown here are standardised discharge ratios (SDRs) which express the number of discharges in each deprivation area as a percentage of those which would have occurred had the Scottish discharge rates for each age and sex group prevailed in that deprivation area.

See the [Appendix](#) for more information on standardised ratios, confidence intervals and SIMD.

Chart 8 - Emergency hospital admissions as a result of an unintentional injury; adults aged 15 and over, by deprivation area, standardised discharge ratio¹ with 95% confidence intervals, year ending 31 March 2018



Source: ISD Scotland (SMR01), Scottish Index of Multiple Deprivation (SIMD) 2016

1. Data are standardised for age and sex.

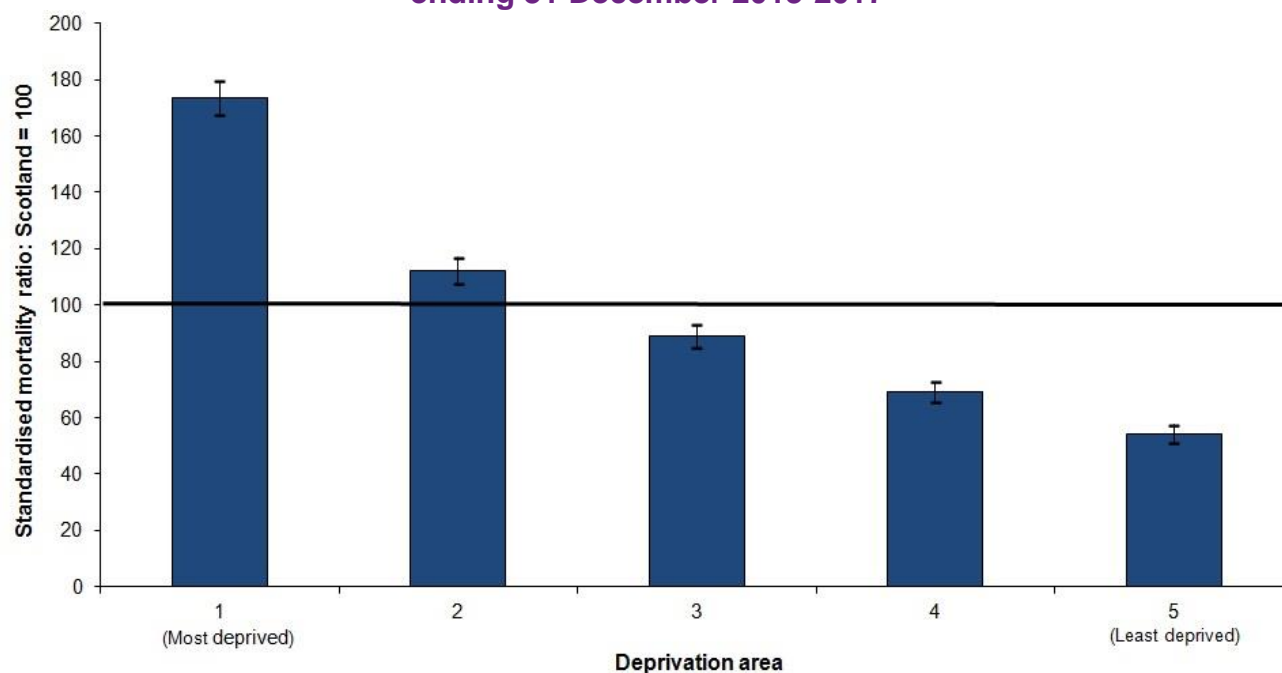
The horizontal line shows the level for Scotland as a whole.

Chart 8 shows that for 2017/18, adults aged 15 and over living in the most deprived areas were more likely than adults in the least deprived areas to have an emergency admission to hospital for an unintentional injury.

The standardised discharge ratio was 43% higher in the most deprived areas compared to the Scottish average. In the least deprived areas, the standardised discharge ratio was approximately 29% lower.

See [Table 10](#) for more information.

Chart 9 - Deaths as a result of an unintentional injury; adults aged 15 and over, by deprivation area, standardised mortality ratios¹ and 95% confidence intervals, year ending 31 December 2013-2017



Source: National Records of Scotland. Scottish Index of Multiple Deprivation (SIMD) 2016

1. Data are standardised for age and sex.

The horizontal line shows the level for Scotland as a whole.

Chart 9 shows the association between mortality from unintentional injury and deprivation for adults aged 15 and over during the period 2013-2017.

Taking into account the age and sex breakdown of the population compared to Scotland there were more deaths from unintentional injuries in deprived areas than less deprived areas. The standardised mortality ratio was approximately 73% higher in the most deprived areas and 46% lower in the least deprived areas, compared to the Scottish average.

See [Table 11](#) for more information.

3.2.4 Injuries in adults aged 65 and over

Unintentional injuries among older people, particularly those aged 65 and over, are a major and growing health concern. Emergency hospital admissions for unintentional injury are expected to rise in this age group over the next decade as our population ages, which has a wide range of social and economic consequences.

Falls are of particular interest as they are the cause of such a higher proportion of hospital admissions, especially in the older age groups.

Since 2010 the National Falls Programme has aimed to support health and social care partnership areas to implement local integrated pathways which enable a systematic and evidence based approach to falls prevention and management.

The 'falls rate per 1,000 population aged 65+' was named as one of the [health and social care indicators](#) in an effort to more accurately measure and ultimately reduce the number of falls among the elderly. Another purpose of these indicators is to measure progress towards the [National Health and Wellbeing Outcomes](#).

In 2017/18 there were 26,161 emergency admissions to hospital for an unintentional injury in those aged 65 and over, with 86% of these being the result of a fall.

Further information on falls in the 65 and over age group can be found in [Table 16](#) which shows numbers and rates at NHS Board and council area level, split by sex and presented across various age groups.

3.3 Assaults

Assaults have, in the past, been included in data on unintentional injuries because they were considered 'unintentional' on the part of the victim. In line with the categorisation of types of injury by the International Collaborative Effort (ICE) and by National Records of Scotland, data on assaults are now presented separately from data on unintentional injuries.

Gun assaults are included in the category 'other assaults'. This is because the number of gun assaults has reduced over recent years and as such, the number of emergency hospital admissions and deaths resulting from gun assaults are very small.

Chart 10 - Emergency hospital admission in Scotland as a result of assault and assault by sharp object, year ending 31 March 2009-2018



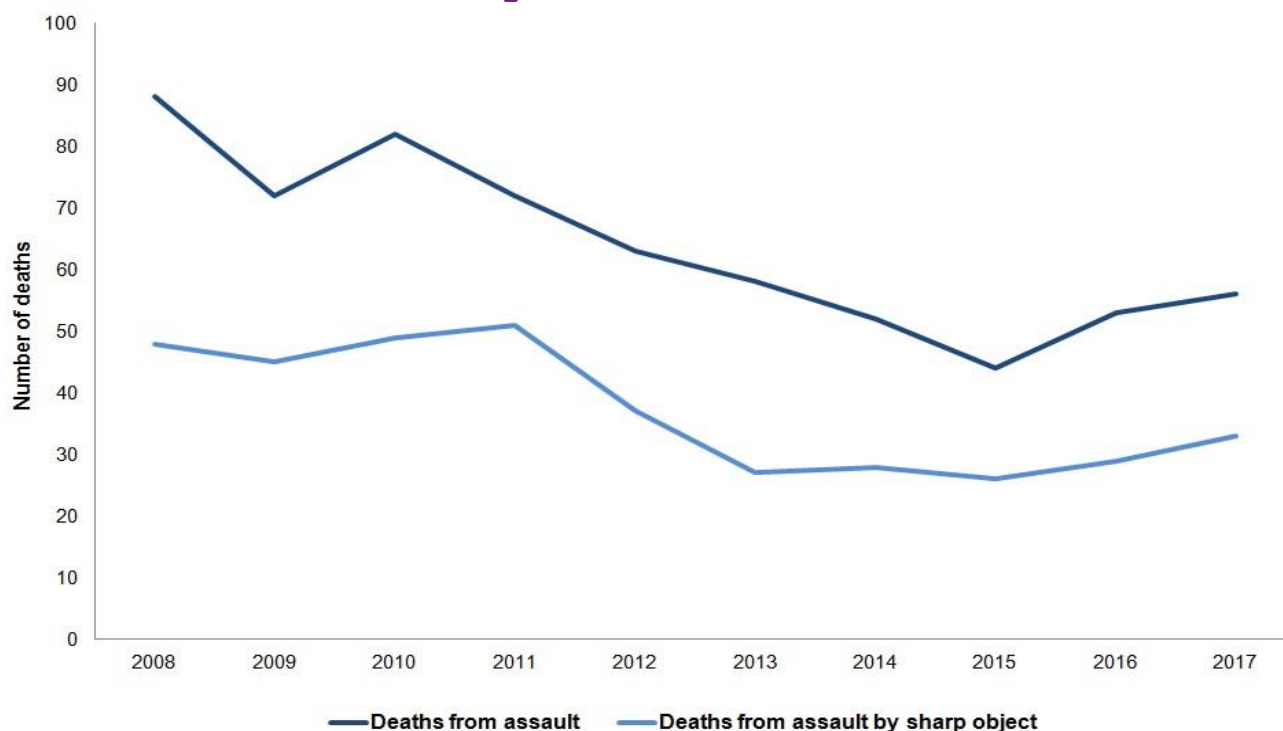
Source: ISD Scotland (SMR01)

Chart 10 shows that for all ages (adults and children) there were a total of 2,383 emergency admissions to hospital in Scotland resulting from assault in 2017/18. The vast majority (96%) of these were adults.

There has been a decrease in the number and rate of emergency admissions as a result of an assault in the past ten years. Since 2008/09 the number of emergency admissions fell from 5,286 to 2,383. Expressed as a percentage, this is a decrease of 55%. Expressed as a rate, the emergency admission rate fell from 101.6 to 43.9 per 100,000. Although numbers have stabilized since 2014/15.

Assaults by sharp object accounted for 23% of all emergency hospital admissions for assault in 2017/18.

Chart 11 - Deaths in Scotland as a result of assault and assault by sharp object, year ending 31 December 2008-2017



Source: National Records of Scotland.

Chart 11 shows that for all ages (adults and children) there were a total of 56 deaths in Scotland resulting from assault in 2017. The number of deaths increased slightly in 2016 and again in 2017.

Overall, there has been a decrease of 36% in the past ten years, falling from 88 deaths in 2008.

3.3.1 Assault by sharp object

Information on emergency hospital admissions and deaths due to assault by a knife or other sharp object provides one way of assessing the impact of knife crime.

In the past ten years there has been a large decrease in the frequency of assaults involving knives or other sharp objects. There were 553 emergency hospital admissions in 2017/18, reflecting an overall decrease of 61% since 2008/09, and 33 deaths in 2017, an overall decrease of 31% since 2008. There has been a small increase in deaths by knife or other sharp object in recent years, rising from 26 in 2015 to 33 in 2017.

See [Table 15](#) for more information.

3.4 Interactive Tables

Interactive tables ([Table 1](#) for emergency admissions and [Table 2](#) for deaths) offer in depth information on unintentional injuries by NHS Board, council area, gender, year, age group, cause of injury and location of injury. Each table allows the user to manipulate the data by selecting the category of interest.

Trend information is provided, although it is vital to take account of the caveats around the data for deaths. Care will need to be taken when comparing statistics for 2011 onwards with figures for earlier years due to changes in coding rules for causes of death. The changes, which affect the coding of accidental poisoning, tend to increase the total number of deaths assigned to unintentional injury. A link with more detailed information on the changes is provided in the relevant tables.

Interactive files are also available on assaults ([Table 15](#)). This table offers information on the most recent ten year period showing the number of emergency hospital admissions and deaths, with numbers and rates each year, type of assault and NHS Board.

[Table 16](#) provides an in depth look at unintentional injuries as a result of falls. This table presents numbers and rates per 1,000 population, by age group, gender, NHS Board and council area.

Glossary

Average length of stay	Mean stay (in days) for each episode.
Confidence interval	Confidence intervals give an indication of the uncertainty around an estimate due to chance variation. For more information and examples, please see the Appendix .
Deprivation area	Deprivation areas each contain 20% of the total population in Scotland. Deprivation area 1 contains the most deprived 20% of the population, while area 5 contains the least deprived 20%.
Discharge	A discharge marks the end of an episode of care. Discharges include deaths and transfers to other specialties/significant facilities and hospitals.
Emergency Admission	This occurs when, for clinical reasons, a patient is admitted at the earliest possible time after seeing a doctor.
Emergency admission rate per 100,000 population	Number of emergency admissions for a specific age group divided by the population of that age group multiplied by 100,000. For example, the rate in males aged 5-9 years is the number of emergency admissions for males aged 5-9 divided by the mid-year population estimate of the number of males in Scotland aged 5-9 multiplied by 100,000.
Episode	An SMR01 episode is generated when a patient is discharged from hospital but also when a patient is transferred between hospitals, significant facilities, specialties or to the care of a different consultant.
ICD10	International Statistical Classification of Diseases and Related Health Problems, 10th Revision. This is an internationally used system produced by the World Health Organisation and used for classifying diagnoses. It is

used in Scotland for coding both hospital discharges and deaths.

Inpatient

This is when a patient occupies an available staffed bed in a hospital and either; remains overnight whatever the original intention or is expected to remain overnight but is discharged earlier.

Non-routine admission

These are inpatients discharged following an emergency unplanned admission (includes emergency transfers).

Scottish Index of Multiple Deprivation (SIMD)

The SIMD is an area-based measurement of multiple material deprivation which combines seven domains (income, employment, education, housing, health, crime and geographical access) into an overall index.

Standardised Discharge Ratio

Expresses the numbers of discharges in each area of interest (e.g. deprivation area) as a percentage of those which would have occurred had the Scottish discharge rates for each age and sex group prevailed in that area of interest.

Standardised Mortality Ratio

Expresses the numbers of deaths in each area of interest (e.g. deprivation area) as a percentage of those which would have occurred had the Scottish death rates for each age and sex group prevailed in that area of interest.

Further details on data definitions and standards are available in the [NHS Scotland Health & Social Care data dictionary](#).

List of Tables

Table No.	Name	Time period	File & size
1	<u>Emergency hospital admissions as a result of unintentional injury by age group and cause of injury.</u> Selection of year, sex, NHS Board and Council area.	Year ending 31 March 2009 – 2018	Excel [4024kb]
2	<u>Deaths in Scotland as a result of unintentional injury by age group and cause of injury.</u> Selection of year, sex, NHS Board and Council area.	Year ending 31 December 2008 – 2017	Excel [2242kb]
3	<u>Emergency hospital admission as a result of unintentional injury.</u> Number, standardised rates and confidence intervals.	Year ending 31 March 2009 – 2018	Excel [44kb]
4	<u>Deaths as a result of unintentional injury.</u> Number, standardised rates and confidence intervals.	Year ending 31 December 2008 – 2017	Excel [54kb]
5	<u>Emergency hospital admissions as a result of unintentional injury, by cause of injury.</u> Both sexes, males, females.	Year ending 31 March 2018	Excel [62kb]
6	<u>Deaths as a result of unintentional injury by cause of injury and age group.</u> Adults, children.	Year ending 31 December 2017	Excel [24kb]
7	<u>Emergency hospital admissions as a result of unintentional injury by NHS Board of residence.</u> Number, standardised ratio and confidence intervals.	Year ending 31 March 2018	Excel [23kb]
8	<u>Deaths as a result of unintentional injury, adults aged 15 and over by NHS Board of residence.</u> Number, standardised ratio and confidence intervals. Adults only.	Year ending 31 December 2013 - 2017	Excel [18kb]
9	<u>Emergency hospital admissions as a result of unintentional injury by council area of residence.</u> Number, standardised ratio and confidence intervals.	Year ending 31 March 2018	Excel [27kb]

10	<u>Emergency hospital admissions as a result of unintentional injury by deprivation, for all and road traffic accidents.</u> Number, standardised ratio and confidence intervals.	Year ending 31 March 2018	Excel [57kb]
11	<u>Deaths as a result of unintentional injury by deprivation</u> Number, standardised ratio and confidence intervals. Adults only.	Year ending 31 December 2013 – 2017 (Combined)	Excel [27kb]
12	<u>Emergency hospital admission as a result of a road traffic accident.</u> Number of emergency hospital admissions with average length of stay.	Year ending 31 March 2018	Excel [37kb]
13	<u>Number of emergency hospital admissions as a result of unintentional injury by sex and top 10 main diagnoses.</u> Adults, children.	Year ending 31 March 2018	Excel [40kb]
14	<u>Number of emergency hospital admissions as a result of unintentional injury by cause and top 10 main diagnoses.</u> Adults, children.	Year ending 31 March 2018	Excel [43kb]
15	<u>Emergency hospital admissions and deaths as a result of assault.</u> Number of emergency hospital admissions, by type, for adults and children. Number of deaths as the result of an assault, by type, for adults and children.	Year ending 31 March 2009 - 2018 & Year ending 31 December 2008 – 2017	Excel [71kb]
16	<u>Emergency hospital admissions as a result of falls by age group.</u> Selection of year, sex, NHS Board and Council area.	Year ending 31 March 2009 – 2018	Excel [429kb]

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Further Information

Further Information can be found on the [ISD website](#).

For more information on emergency care see the [emergency care section of the ISD website](#).

The next release of this publication will be March 2020.

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Appendices

A1 – Background Information

Sources

Information relating to unintentional injury and assault is derived from two sources:

- Non-obstetric/non-psychiatric hospital inpatient data (SMR01)
- Mortality data (NRS death registrations)

Many unintentional injuries result neither in death nor hospital admission but are treated by the individual, GPs, at Accident and Emergency departments or by a child's parent or carer. This information is not included in this publication. The figures reported in this publication are those who died as a result of an unintentional injury or were admitted to hospital as an inpatient under an appropriate emergency admission code.

Furthermore, only Scottish residents with a known area of residence are included.

SMR01

Hospital inpatient activity data is collected across NHS Scotland and is based on nationally available information routinely drawn from hospital administrative systems across the country. The principal data source is the SMR01 (acute inpatients and day cases) return. Information on SMR data completeness can be found on the [Hospital Records Data Monitoring SMR Completeness web page](#), while information on the timeliness of SMR data submissions can be found on the [SMR Timeliness web page](#). It is estimated that hospital admissions data (SMR01) for NHS Scotland for 2017/18 are 99% complete nationally.

The ISD Data Quality Assurance (DQA) team is responsible for evaluating and ensuring SMR datasets are accurate, consistent and comparable across time and between sources. Details of the quality assurance process for SMRs are published on the [DQA methodology web page](#). The most recent report '[Assessment of SMR01 Data Scotland 2014-2015](#)' [1.87MB] was published in August 2016. The DQA team's [previous projects](#) web page contains details of past Data Quality Assurance Assessments, including final reports and findings.

Mortality Data

The deaths data are obtained from the National Records of Scotland (NRS). NRS are part of the devolved Scottish Administration and are responsible for the registration of births, marriages, civil partnerships, deaths, divorces, and adoptions. They also run the Census and use the Census and other data to publish information about population and households. Further information about the NRS death data can be found on their [Deaths statistics web page](#). Information on the quality of NRS data on deaths can be found on the NRS website; <http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/deaths-background-information>

Recoding of drug abuse deaths from acute intoxication

Deaths from drug abuse, specifically acute intoxication, were classified as 'mental and behavioural disorders' prior to 2011. From 2011 onwards these deaths are counted under 'accidental poisoning' (where applicable). Care is required when comparing these statistics before and after 2011. For more detailed information on the changes, please see link below:

<http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths/the-definition-of-the-statistics>

For information on the impact of this coding change, please see the following link – Table 2.

<http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths/list-of-tables-and-chart>

The National Records for Scotland website states:

‘How ‘drug abuse’ deaths from ‘acute intoxication’ are coded has changed: in 2010 and earlier years, they were counted under ‘mental and behavioural disorders due to psychoactive substance use’; now they are classified as ‘poisoning’, so some of them will be counted as accidental deaths. NRS has estimated what the figures for 2011 onwards would have been, had the data been coded using the old rules, to show the trends without the break in series caused by the new coding rules. Of the deaths that were registered in 2011, it appears that 362 more were counted as being due to ‘accidental poisoning’ under the new coding rules than would have been counted under the old coding rules.’

Source: National Records of Scotland, Accidental Deaths

Revisions since previous publication

Hospital admissions for 2016/17 were estimated to be 99% complete at the time of publication of the previous Unintentional Injuries report. However, as SMR01 is a dynamic dataset any updates to data for previous years will be reflected in this publication.

Subsequent changes in numbers from previous publications are expected to be small.

Place of Injury

Prior to the 2013 publication the emergency admission type codes were used to denote ‘location of injury’. From the 2014 publication onwards we have used the fourth digit of the ICD10 codes W000-X599 to denote ‘place of occurrence’ using the following categories:

ICD10 4 th digit Place of Occurrence category		Location of Injury classification presented
0	Home	Home
1	Residential Institute	Other
2	School, other institution and public	
3	Sports and athletics area	
4	Street and highway	
5	Trade and service area	
6	Industrial and construction area	
7	Farm	
8	Other specified places	
9	Unspecified place	Unknown

Cause of Injury

The cause of injury classifications are determined using guidance from the International Collaboration Effort (ICE) on injury statistics (see below for further information on causes of injury and relevant ICD10 codes).

Age groups

Data are presented in the tables for children (0-14 years) and adults (15+ years). Some tables provide the additional age groups: 0-4, 5-9, 10-14, 15-24, 25-44, 45-64, 65-74 and 75+ years. Tables which include data on falls also include the additional age groups of 65+ and 85+.

Table 12, which shows hospital admissions for road traffic accidents, counts children as those aged under 17 and includes an additional age category, which represents young adult drivers (17-24 years).

Deaths

The ICD10 codes used for identifying deaths due to an unintentional injury and assault are outlined below:

Deaths - Unintentional Injury	ICD10 (from 2000)
All injuries	V01-X59, Y85-Y86
Land transport accidents	V01-V89
Poisonings	X40-X49
Falls	W00-W19
Struck by, against	W20-W22, W50-W52
Crushing	W23
Scalds	X10-X19
Accidental exposure	X58-X59
Other	Other in range V01-X59, Y85-Y86 that is not included in any of the other categories.

Deaths - Assault	ICD10 (from 2000)
All assaults	X85-Y09
Assault by sharp object	X99
Other	Other in range X85-Y09 that is not included in any of the other categories.

Emergency Hospital Admissions

The SMR01 codes used for identifying emergency hospital admissions due to an unintentional injury and assault are outlined below:

Admissions - Unintentional Injury	SMR01 admission code(s) and ICD10 codes
All injuries	SMR01 admission type code 32 - Patient injury - road traffic accident SMR01 admission type codes 33-35 and ICD10 codes V01-X59, Y85-Y86 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Road traffic accidents	SMR01 admission type code 32 32 - Patient injury - road traffic accident
Poisonings	Admission type code 33-35 and ICD10 codes X40-X49

	33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Falls	Admission type code 33-35 and ICD10 codes W00-W19 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Struck by, against	Admission type code 33-35 and ICD10 codes W20-W22, W50-W52 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Crushing	Admission type code 33-35 and ICD10 code W23 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Scalds	Admission type code 33-35 and ICD10 code X10-X19 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Accidental exposure	Admission type code 33-35 and ICD10 codes X58-X59 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Other	Admission type code 33-35 and other ICD10 codes in the range V01-X59 Y85-Y86 that are not included in any of the other categories in the table 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury

Admissions - Assault	SMR01 admission code(s) and ICD10 codes
All assaults	SMR01 admission type codes 33-35 and ICD10 codes X85-Y09 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Assault by sharp object	Admission type code 33-35 and ICD10 code X99 33 - Patient injury - home incident 34 - Patient injury - incident at work 35 - Patient injury - other injury
Other	Admission type code 33-35 and other ICD10 codes in the range X85-Y09 that are not included in any of the other categories.

Population estimates

Mid-year population estimates for 2017 are based on the results of the 2011 Census. This will be the case for all years going forwards until the next Census results are released.

Standardised Mortality Ratio

The standardised mortality ratio (SMR) provides a rate for one group of people as a percentage of the rate in the reference population (in this case Scotland as a whole). It is adjusted to take account of differences in the age and sex structures of the populations being compared. The SMR is calculated as the number of observed deaths divided by the number of expected deaths times 100, where the number of observed deaths is the actual number of deaths in each area of interest (e.g. NHS Board, deprivation area) and the number of expected deaths is the number of deaths that would have been 'expected' in the area of interest if the Scottish death rates for each age and sex group had prevailed.

Standardised Discharge Ratio

The standardised discharge ratio (SDR) is the discharge rate in an area as a percentage of the rate in a reference area (in this case Scotland as a whole). It is adjusted to take account of differences in the age and sex structure of the populations being compared. The SDR is calculated as the number of observed discharges divided by the number of expected discharges times 100, where the number of observed discharges is the actual number of discharges in each area of interest (e.g. NHS Board, deprivation area) and the number of expected discharges is the number of discharges that would have been 'expected' in the area of interest if the Scottish discharge rates for each age and sex group had prevailed.

95% Confidence Intervals

Confidence intervals give an indication of the uncertainty around an estimate due to chance variation.

Standardised Mortality Ratio (SMR) example:

An estimate of the statistical significance of the standardised ratio (for SMRs or SDRs) can be obtained from the 95% confidence interval. If the confidence interval does not include 100, the difference in unintentional injury rates recorded for a particular population compared with the standard population (Scotland) is said to be 'statistically significant'. For example, for a ratio of 158 with 95% confidence intervals of 129-188, the difference from the standard population is deemed to be statistically significant since the range 129-188 does not include 100.

European Age Standardised Rate (EASR) example:

An estimate of the statistical significance of the standardised rate can be obtained from the 95% confidence interval. For example for a standardised admission rate per 100,000 population of 1,082.2 with 95% confidence intervals of 1,072.6-1,091.9, we can say there is a 95% certainty the true admission rate lies between 1,072.6 and 1,091.9.

If we wish to compare this to a standardised admission rate for a different time period, for example a rate of 1,053.4 with 95% confidence interval of 1,044.4-1,062.5, we can say that the rate of 1,082.2 (95% confidence intervals 1,072.6-1,091.9) is statistically significantly higher than the rate of 1,053.4 (95% confidence intervals 1,044.4-1,062.5) due to there being no overlap of the confidence intervals for these rates.

Scottish Index for Multiple Deprivation 2016

The SIMD is an area-based measurement of multiple material deprivation which combines seven domains (income, employment, education, housing, health, crime and geographical access) into an overall index. For the purposes of this report the population have been divided into five equal groups where quintile 1 to 5 represent areas with decreasing levels of deprivation. Further information on the SIMD can be found at:

<http://www.isdscotland.org/Products-and-Services/GPD-Support/Deprivation/SIMD/>

Disclosure

Where statistics provide information on small numbers of individuals, Information Services Division have a duty, under the Data Protection Act, to avoid directly or indirectly revealing any personal details. Due to the sensitive nature of some topics, some small numbers have been suppressed in this publication. These are shown in the publication as asterisks. In addition, some secondary suppression may be required to prevent the calculation of suppressed data.

Future publications

We aim to make our publications as useful and informative as possible for users. If you have any comments on recent changes or suggestions for improvement for future publications please email nss.isdmaternity@nhs.net.

Appendix 2 – Publication Metadata

Metadata Indicator	Description
Publication title	Unintentional Injuries
Description	Summary of admissions to hospital and deaths in Scotland from unintentional injuries and assaults.
Theme	Health and Social Care.
Topic	Unintentional Injuries.
Format	PDF report and Excel workbooks.
Data source(s)	SMR01 hospital discharges & NRS deaths.
Date that data are acquired	January 2019.
Release date	5 March 2019.
Frequency	Annual.
Timeframe of data and timeliness	Data ranges from 2008-2017 (deaths) and 2008/09-2017/18(admissions).
Continuity of data	Data are reported from 2008 for deaths and from 2008/09 for emergency admissions.
Revisions statement	Any incomplete data due to shortfalls in submissions from NHS Boards are revised at the next publication.
Revisions relevant to this publication	Details of any revisions since the previous publication can be found in Appendix A1 – Background Information .
Concepts and definitions	Appendix A1 – Background Information .
Relevance and key uses of the statistics	Making information publicly available for planning, provision of services, research and provision of comparative information.
Accuracy	SMR01 data are subjected to validation on submission. The figures are compared to previous years' figures and to expected trends. The SMR01 data are also occasionally assessed for accuracy by ISD's Data Quality Assurance.
Completeness	Hospital admissions data for NHS Scotland for 2017/18 are estimated to be 99% complete at time of publication.
Comparability	Cause of injury classifications are determined using guidance from the International Collaboration Effort (ICE) on injury statistics.
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines .
Coherence and clarity	Unintentional Injuries tables are accessible via the ISD website. Drop down menus are presented where appropriate.
Value type and unit of measurement	Numbers, crude, age-specific and standardised rates are presented.
Disclosure	The ISD protocol on Statistical Disclosure Protocol is followed.
Official Statistics designation	National Statistics.
UK Statistics Authority Assessment	UK Statistics Authority Assessment
Last published	6 March 2018
Next published	March 2020 (provisional)
Date of first publication	2006
Help email	nss.isdmaternity@nhs.net
Date form completed	January 2019

Appendix 3 – Early access details

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", HPS is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department
NHS Board Chief Executives
NHS Board Communication leads

Appendix 4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the **ISD website**.