

# Fife unintentional injuries summary paper

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Fife Council Research Team

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## 1. Introduction

Unintentional injury is a common cause of A+E attendance and emergency admission to hospital, and is recorded in approximately 8% of deaths among children and 3% among adults.<sup>1</sup>

The Fife Community Safety Strategy 2015-2020 includes the outcome of 'People are safe from fire and unintentional harm', with the Safer Communities Co-ordinating Group monitoring progress towards meeting this goal.

In order to assist with early intervention and targeted prevention, it was recognised that an evidence-based approach was required, one that sought to examine unintentional injuries throughout Fife, at both a Fife-wide and area specific level, in order to effectively plan early intervention and targeted prevention measures.

A Scottish unintentional harm strategic assessment is currently being produced under the Scottish Government's Building Safer Communities programme. This aims to create the first evidence base of its kind for unintentional harm in Scotland and from this develop and coordinate evidence-based preventative approaches for tackling unintentional harm, encourage local partnerships to prioritise this area and seek to influence the embedding of unintentional harm as a consideration across a number of policy areas.

This Fife study is intended to complement this where possible, following a similar approach and replicating the parameters at a smaller, area-based level.

### **Aims**

- To highlight the scale of unintentional injury in Fife, and any pertinent differences across the seven Fife committee areas.
- To place Fife in a Scottish context and evaluate whether its unintentional injury rates are comparable to areas of similar demography.
- To examine existing resources in Fife and investigate how they are used to address the issue of unintentional injury.
- To encourage further partnership working and a joined-up approach where appropriate
- To build on existing good practice by providing an evidence base for targeted further action.

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<sup>1</sup> *Unintentional injuries*, (Information Services Division, March 2016), p 2.

## 2. [Data sources and methodology](#)

ISD Scotland report that unintentional injury is a common cause of emergency admission to hospital for both children and young adults, and is recorded in approximately 8% of deaths among children and 3% among adults. While unintentional injuries can occur in any age group it is recognised that children and the elderly are more vulnerable, and the analysis of the data within this report will reflect this fact.

Research from across Scotland has reported that unintentional injuries among older people are a major and growing concern, and something that will be adversely affected by demographic changes and an ageing population over the coming years. Falls are a primary concern linked to this age group, with 84% of Scottish emergency hospital admissions for an unintentional injury in those aged 65 and over resulting from a fall in 2014/15.

A variety of data sources have been utilised in order to ensure that a comprehensive analysis of unintentional injury within Fife is produced. Data sets that have been utilised for this purpose include:

- a) Unintentional injury hospital admission data (ISD Scotland)
- b) Fife Ambulance service deployments
- c) A+E attendance information (NHS Fife)
- d) Accidental dwelling fire statistics (Fire Service Scotland)
- e) Accidental death reports (National Records of Scotland)
- f) Water safety statistics

While these sources of information do provide some insight into unintentional injury within Fife, it is recognised that one of the most valuable sources of information for Fife-specific information will be A+E attendance data. Following negotiations with NHS Tayside, it has been agreed that information on Fife residents attending Ninewells Hospital and Perth Royal Infirmary will be shared on a recurring basis. This will be particularly useful in providing a more complete picture of North East Fife, allowing a fairer comparison between committee areas.

One of the primary benefits of producing a local strategic assessment is that it allows specific trends or needs to be identified that may not be apparent when analysis is conducted at a higher level. Wherever possible, data will be placed in a Fife context, and taken down to a Fife committee area level where the opportunity allows.

### 3. [Key findings](#)

#### **Summary**

- Fife has a larger pensioner population than the Scottish average. Residents aged 65 and over account for an average of 18% across all Scottish council areas, but make up 20% in Fife. As a result, the proportion of working age population in Fife is below the Scottish average.
- For both adults and children admitted to Hospital as a result of an unintentional injury, Fife has an admission rate per 1,000 significantly better than the Scottish average. By population size, Fife is the third largest council area for adults, and the fourth largest for children (0-14). By admissions per 1,000 population, Fife is 16<sup>th</sup> of 32 local authorities for adults, and 29<sup>th</sup> of 32 for children.
- Fall admissions in Fife have seen a marked increase since 2011, particularly in the 85+ age group. The Fife discharge rate for this age group in 2015 was 76.1 per 1,000, compared to a Scottish discharge rate of 63.7. The number of deaths in Fife attributed to falls has remained static over the same period, possibly linked to early identification of vulnerable individuals.
- The under 5 age group in Fife are significantly less likely to be admitted to Hospital as a result of scalds and poisonings than their counterparts in other areas of Scotland. Under 5s reduced from 54.5% of the Fife scald total in 2010/11, to 16% in 2014/15. The equivalent 2014/15 figure for Scotland was 42.8%. Similarly, under 5s were linked with 8.9% of Fife's poisoning admissions in 2014/15, against a Scottish figure of 23.4%.
- South West Fife contains 13.6% of the Fife population, but was only linked with 6.4% of ambulance calls. It is also the Fife area linked with the smallest number of Fall A+E attendances in 2014/15.
- Falls account for a significant proportion of Fife ambulance calls, increasingly so as age increases. Falls accounted for 61.4% of ambulance calls in 2015/16, and 81.7% of calls for the 75+ age group
- Adjusted for population size, the Cowdenbeath area is linked with a greater proportion of ambulance calls and A+E attendances than its population would indicate. .
- Living alone and smoking are both factors strongly linked with Fife accidental dwelling fires (ADFs). 39.1% of ADFs were recorded within a single occupancy dwelling house, while 8 of 11 fatalities were smoking related.
- There is a strong link between accidental dwelling fires and deprivation. 55% of casualties and 7 of 11 fatalities were in 20% most deprived datazones.

### Fife demography

1. The age structure within Fife is similar to the Scottish average. A higher proportion of pensioners in Fife is due to significant numbers in several areas of Fife, most notably North East Fife (22% of area total) and Levenmouth (21%).
2. Dunfermline and Cowdenbeath are the Fife areas with the highest proportion of young people, almost 1/5 of each area's population (19%).

### Emergency Hospital admissions

3. By number of adults admitted to hospital as a result of unintentional injury, Fife is the third highest council area. When this is broken down to admissions per 1,000 people, Fife falls to 16<sup>th</sup> of 32 local authorities.
4. By number of children admitted to hospital as a result of unintentional injury, Fife is the fourth highest council area. When broken down to admissions per 1,000 people, Fife is 29<sup>th</sup> of 32 local authorities.

### Emergency Hospital admissions – Fall analysis

5. Scottish fall admissions linked to patients over 65 increased by 28.5% between 2005 and 2015. This increase was most pronounced in the 85+ age group, which rose by 43.5% over this period, accounting for 21.6% of emergency fall admissions in 2015.
6. Between 2011 and 2015 fall discharges in Scotland increased by 8.2%, and in Fife by 34%. Between 2006 and 2015 the discharge rate for Fife residents aged 85+ overtook the Scottish rate. In 2006 the Fife discharge rate for this age group was 51.3 per 1,000 population, below the Scottish average of 57.3. By 2015 the Fife rate had increased to 76.1 per 1,000, above the Scottish rate of 63.7.

### Emergency Hospital admissions – Unintentional injury breakdown

7. In 2014/15, falls accounted for 61.5% of Scottish unintentional injury hospital admissions, and 65.8% in Fife. Over half of Fife fall admissions (54.9%) were for people aged 75 or over.
8. The under 5 age group shows a clear link to Scottish unintentional injury admissions, particularly scalds (42.8%) and poisonings (23.4%). Scald admissions for this age group have seen a steady decrease in Fife over the 2010/11-2014/15 period, decreasing from 54.5% of all scalds to 16%.

### Fife unintentional injury deaths

9. Between 2010 and 2014 there were 388 accidental deaths in Fife, of which 84 were in 2014. The 75+ age group made up 63% of the 2014 accidental death total, against a Scottish figure of 56%.
10. Primary causes of Fife accidental deaths over 2010-2014 were falls (56.7% - 220) and transport accidents (16.5% - 64). This is broadly similar to the Scottish percentages for the same time period – 55.7% for falls and 16.9% for transport accidents.
11. Transport accidents account for 64.7% of Fife accidental deaths for the 15-29 age group. Fatalities linked to this age group make up 34.4% of all transport related deaths.
12. Elderly females are more likely than males in the same age group to be involved in falls leading to accidental death. 90% of the 111 female fatalities in the 75+ age group (100) were as a result of falls, compared with 78.8% of males (82 of 104).
13. Almost half of deaths linked to poisonings (23 of 47) were ascribed to 'accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens]'.

14. Fife unintentional injury deaths increased from 64 to 84 between 2012 and 2014. With the exception of Glenrothes, all Fife areas saw an increase in accidental deaths over this time.
15. Kirkcaldy was linked with the largest number of area Unintentional injury deaths in 2014 (23.8%).
16. Kirkcaldy and Levenmouth are both linked with a proportion of 2014 Unintentional injury deaths that is higher than their share of the Fife population. By contrast, Glenrothes and Dunfermline are both linked with a proportion of Unintentional injury deaths that is significantly below their population share.
17. The number of Fife Unintentional injury deaths linked to falls has remained broadly static between 2012 and 2014, only increasing by one. In contrast, deaths linked to 'other' causes have doubled over the same period, from 19 to 38.

#### Ambulance calls

18. South West Fife has 13.6% of the Fife population, but only 6.4% of ambulance calls logged within Fife. Cowdenbeath has 16.3% of ambulance calls and is the only area to see consistent call growth over the three-year period examined (+5.7%).
19. Cowdenbeath is linked with 42.7 calls per 1,000 population (0-4), and 322.7 calls per 1,000 population (75+). North East Fife, despite the highest number of calls for the 75+ age group, has a much reduced rate per 1,000 population (195 calls).
20. Calls relating to burns have decreased over the three year period, from 59 to 48. The primary reduction has been in burns relating to children aged 0-4, decreasing from 18 to 8.
21. As a proportion of total ambulance calls, falls have increased from 58.4% of all calls in 2013/14 to 61.4% of all calls in 2015/16. There has been affected by an increase in falls linked to pensioners. In 2013/14, 61.3% of falls were linked to callers aged 65 or over; in 2015/16, this had risen to 68.2%. 81.7% of calls for the 75+ age group concerned falls.
22. Fall calls for the 75+ group increase in the early hours of the morning, before peaking at 9am.
23. July and December are the peak months for falls, with December linked with the largest number of 75+ fall calls – possibly due to weather related issues.

#### Unintentional injury hospital admissions

24. For the 0-14 age group, boys are more likely than girls to be admitted to hospital as a result of unintentional injury (58% over 2012/13 – 2014/15 period).
25. Falls are linked to over half of hospital admissions for the 0-14 age group. Glenrothes had the strongest area link to childhood falls (57.9% of child admissions), while Kirkcaldy is the only area to show a continual increase in fall admissions over the three years.
26. Females were linked with more Fife hospital admissions in the 15+ age group, with it being likely that this is affected by the higher number of female pensioners.
27. Falls are linked to 66.4% of 15+ admissions over the three year period, ranging from 63% of Glenrothes admissions to 73% in South West Fife. North East Fife is the only committee area to see a decrease in Unintentional injury hospital admissions over the three years.
28. Patients aged 75+ are linked with 54.3% of fall admissions over the three year period. Falls are the primary factor linked with hospital admissions for this age group – 89% of all hospital admissions.

### A+E attendance

29. NEF contains 20% of the Fife population, yet is only linked with 9% of A+E attendances over the surveyed time period. Patient-level information from the Adamson and St Andrews Memorial Hospitals remains unavailable.
30. Due to their status as the next largest committee areas and their proximity to the hospitals surveyed, Kirkcaldy (20.2% of attendees) and Dunfermline (18.7%) are linked with the largest number of attendees. Per population size, Cowdenbeath has a disproportionately large number of attendees.
31. The primary age groups linked with unintentional injury A+E attendance within Fife are 0-4 and 75+. Attendees aged 75+ accounted for 18.8% of Fife attendances in 2014/15. Dunfermline and South West Fife are the only two areas where the number of children (0-4) attending A+E is greater than the number of older pensioners (75+).
32. Accidents and Falls account for almost 98% of Fife Unintentional injury attendances.
33. Fall attendances are heavily linked with Fife's older population, accounting for 63% of A+E attendance from the 60-74 age group, and 89% from the 75+ age group in 2014-15FY.
34. Dunfermline and South West Fife are the areas with the highest proportion of falls linked to the 0-4 age group.
35. Of the 307 incidents linked to Care Homes in 2014/15, 84 (27.4%) were in Kirkcaldy. Dunfermline was linked with 21.2% of Garden incidents. The 0-4 and 75+ age groups are most likely to be linked to accidents in the home, reflecting the fact that they are most likely to spend a greater proportion of their time there.

### Accidental dwelling fires

36. Per 100,000 dwellings Fife continues to show lower levels of Accidental Dwelling Fires (ADFs) (126.7) compared to the Scottish average (185.7). The proportion of ADF fires resulting in casualties has decreased between 2010-11 and 2014-15, with the 2014-15 figure a five year low of 19.5%.
37. In the 2014-15 fiscal year Levenmouth and Cowdenbeath display the highest level of activity per 10,000 population, at 8.0 and 7.9 respectively. The Buckhaven, Methil and Wemyss Villages ward recorded the highest area total, with its 85 ADFs over the five year period accounting for 7% of the Fife total.
38. 'Dwelling house - single occupancy' followed by 'purpose built flat/maisonette - multiple occupancy, up to 3 storeys' have consistently been the prominent property type for ADFs within Fife, reflecting the main property type within the local authority area.
39. Over the 5 year period analysed, there were 258 casualties resulting from ADFs in Fife. Of the total, 11 were categorised as fatalities. 101 or 39.1% of casualties were recorded within a 'dwelling house - single occupancy' suggesting persons living alone or without dependents are at greater risk of involvement.
40. Both men and women are more likely to become a casualty between the ages of 20 and 29 years (47 of 258, or 18.2%), increasing again in men between 60 and 69 years (19 or 7.4%). 8 of the total 11 fatalities in the five year period were male. Increased risk appears to be associated with older age bands – eight of the eleven fatalities being aged 50+.
41. 8 of the 11 ADFs in the period examined were classed as smoking related.



### Water safety

42. In 2013 there were 381 drownings and water-related deaths from accidents or natural causes across the UK, with Scotland (56 deaths) being the region of the UK linked with the largest number. This amounted to 14.7% of such deaths in the UK, above Scotland's UK population share of 8.3%.
43. Of the seven harbours in Fife, five (Pittenweem, St Monans, Wormit, Tayport and St Andrews) are in the North East Fife committee area, one in the Kirkcaldy area (Pettycur) and one in Levenmouth (West Wemyss). They are all owned by the council except for Tayport and West Wemyss (both private) and St Andrews (owned by a trust).
44. At UK level, males in the 20-24 age group accounted for the highest number of fatalities (31) in 2013. Youths aged 0-19 accounted for 46 deaths, of which the largest portion was teenagers aged 15 to 19 (27). Ten children aged 4 or under drowned.

#### 4. Scale of unintentional harm - Scotland

Before examining the ways in which unintentional injuries differ across Fife, it will first be beneficial to examine the Scottish picture and then Fife's position within this. It is important to consider figures within the correct context and it is therefore important to understand, first how population demographics in Scotland compare with other areas of Scotland, and also how population groupings may differ across areas of Fife.

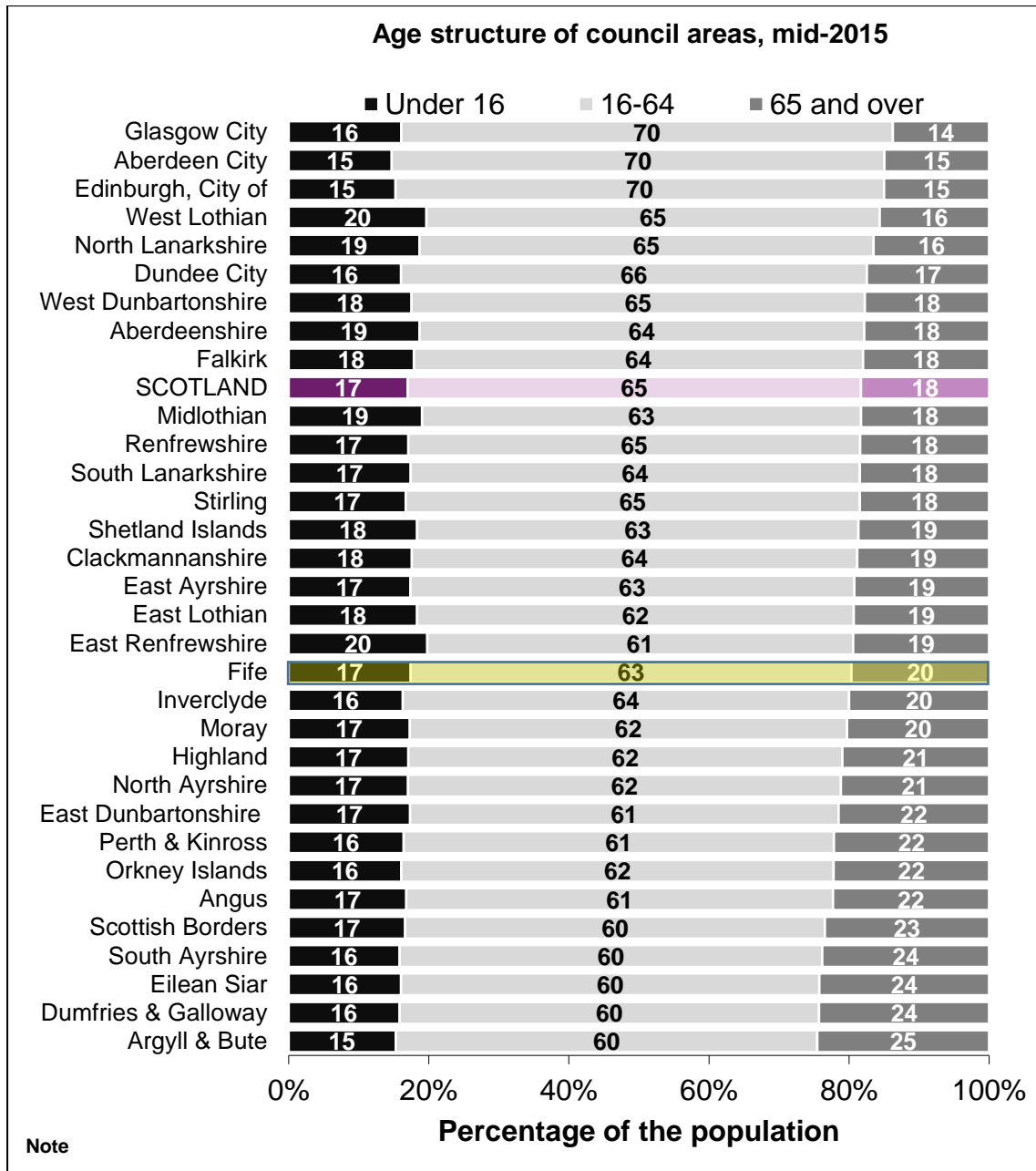
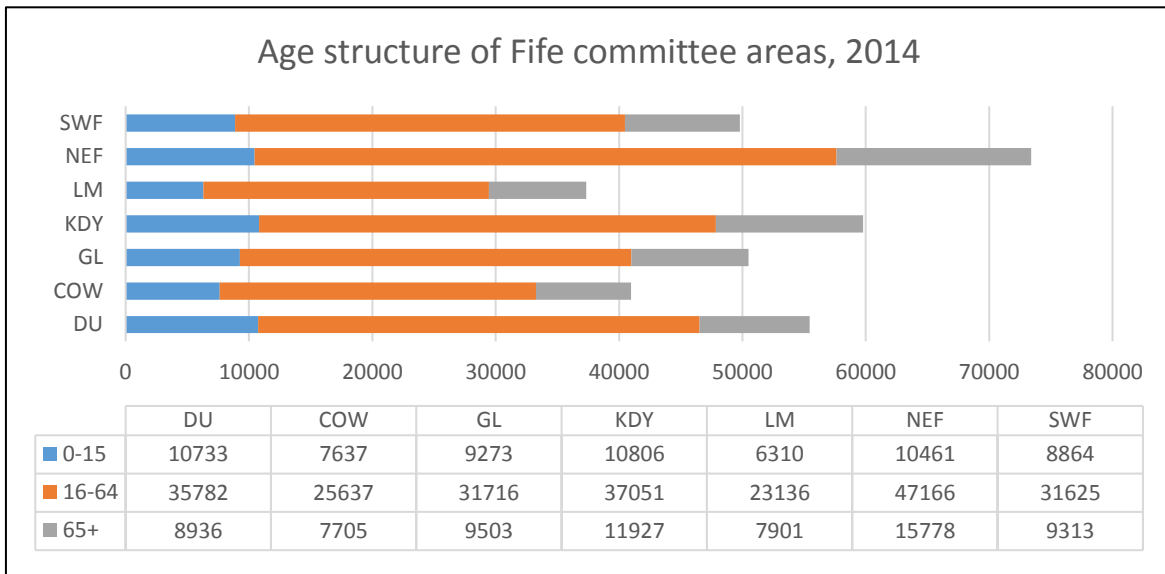


Figure 4.1. Age structure of council areas (2015)

- As the age structure diagram highlights, population demographics within Fife are broadly in line with the Scottish average. The percentage of under 16s is the same, at 17%, while the percentage of the population aged 65+ is 20% compared with the national average of 18%.



**Figure 4.2. Age structure of Fife committee areas (2014)**

As figure 4.3 demonstrates, across the seven Fife committee areas there are minor variations in age groupings:

- **Children (0-15)** – NEF is the Fife area with the lowest number of children as a proportion of total population – 14% against a Fife average of 17% and 19% in Dunfermline and Cowdenbeath, the two areas with the highest proportion of young people.
- **Working age population (16-64)** – With the exception of Dunfermline, every committee area in Fife is below the Scottish average of 65% working age population. Glenrothes and Kirkcaldy, both with 62%, are the areas with the lowest totals.
- **Pensioners (65+)** – There is a wide disparity in the pensioner population across the Fife committee areas. With 16%, Dunfermline is the area with the lowest proportion. 22% of the North East Fife population are pensioners, the largest proportion in any area.

**Key points**

1. The age structure within Fife is similar to the Scottish average. A higher proportion of pensioners in Fife is due to significant numbers in several Fife areas, most notably North East Fife (22% of area total) and Levenmouth (21%).
2. Dunfermline and Cowdenbeath are the Fife areas with the highest proportion of young people, almost 1/5 of the area population (19%).

a. Deaths

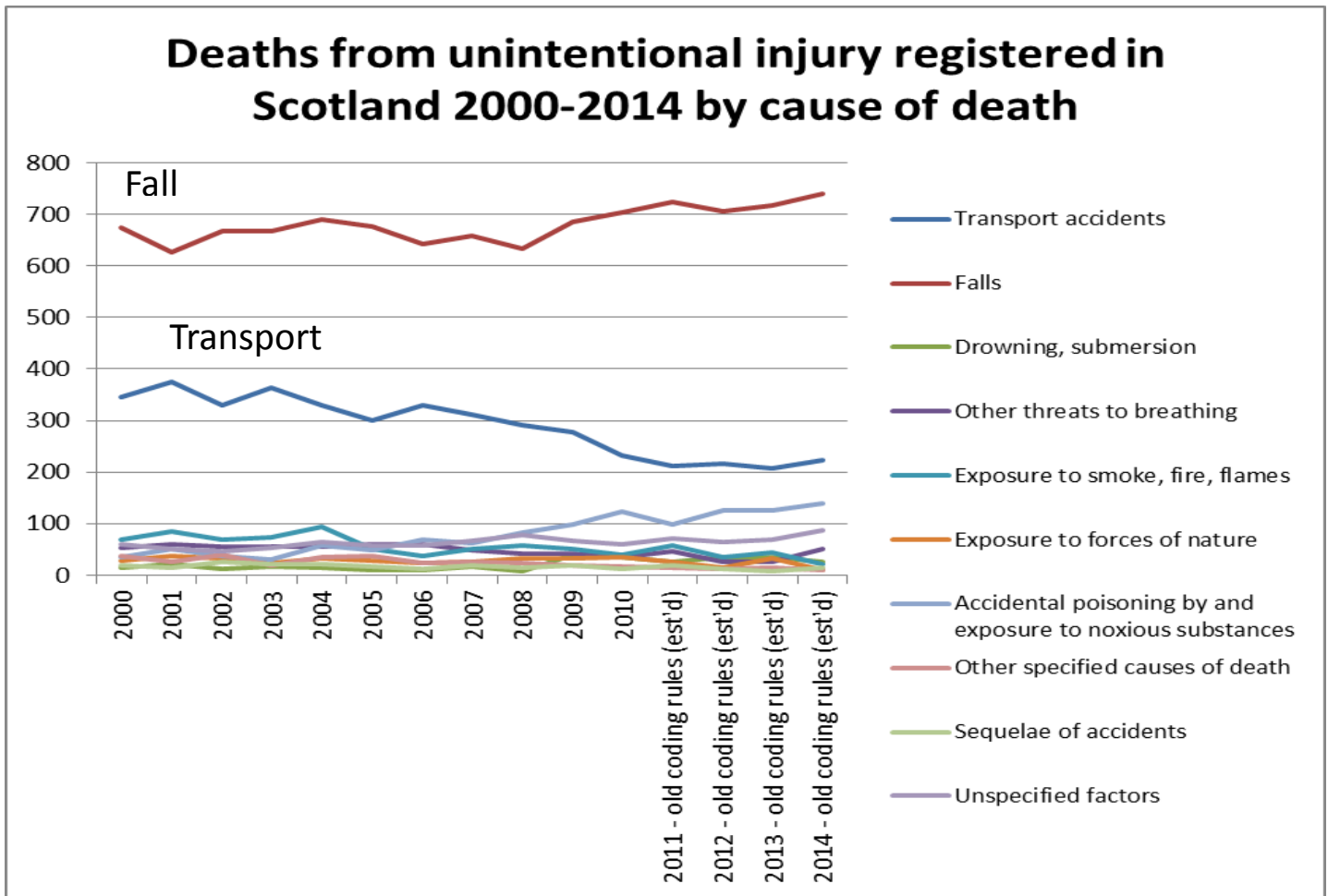


Figure 4.3. Deaths in Scotland from unintentional injury, 2000-2014 (National Records of Scotland)

- The reduction in unintentional injury deaths seen since the 1970s has been heavily affected by a decline in deaths as a result of transport collisions (and to a lesser extent, fire/flame). Since 2011 there have been signs that deaths as a result of transport collisions are starting to plateau, while deaths from accidental poisoning and falls are both showing a steady increase.
- Falls account for the highest number of unintentional injury deaths, as well as the highest number of unintentional injuries overall. Local authorities, NHS and the fire service are some of the many organisations across Scotland to have aligned resources to address this problem, recognising the significant impact that falls have within the unintentional injury sphere.
- Falls were linked with 739 Scottish deaths in 2014, approximately 42% of all deaths from unintentional harm. With the clear link between falls and the elderly population (16 deaths per 100k population for all adults/138 deaths per 100k population for over 75s), this issue is likely to increase in coming years, in line with an ageing population within Scotland.

b. Emergency Hospital admissions

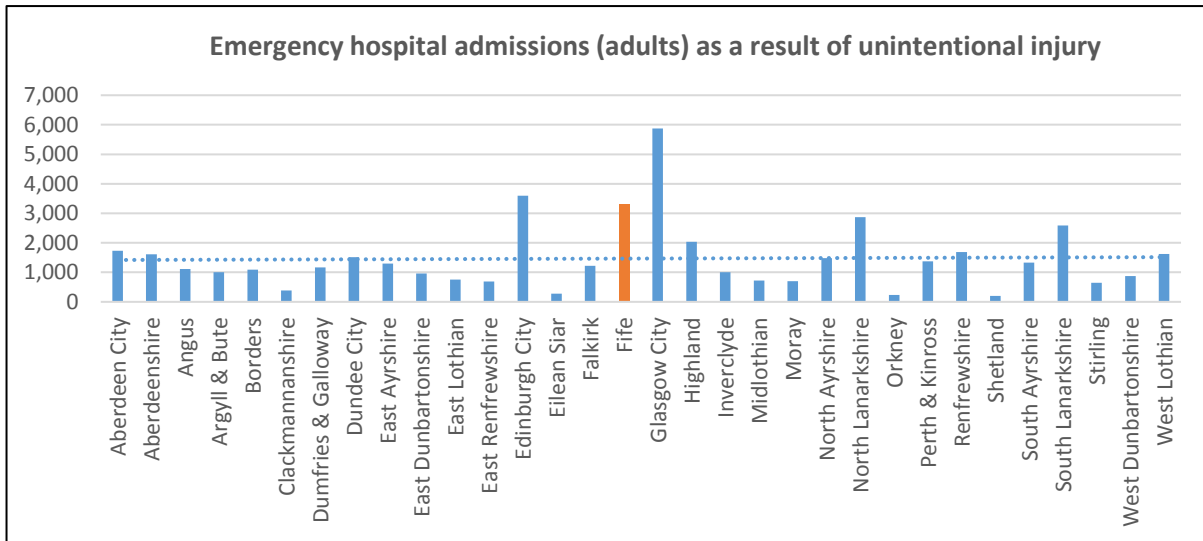


Figure 4.4. Emergency Hospital admissions (adults) by council area, year ending 31<sup>st</sup> March 2015

As figure 4.4 shows, Fife is the Scottish council area with the third highest number of emergency hospital admissions (15+) for unintentional injury, behind only Glasgow City and Edinburgh City, reflecting its position as the third largest council area in Scotland. Fife accounts for 7% of adults (15+) admitted as a result of an unintentional injury in this period.

| Council area          | 15+ population | Admission rate (1,000 population) |
|-----------------------|----------------|-----------------------------------|
| Inverclyde            | 67,385         | 14.9                              |
| South Ayrshire        | 95,798         | 13.9                              |
| Argyle and Bute       | 74,482         | 13.5                              |
| North Ayrshire        | 114,428        | 12.9                              |
| East Ayrshire         | 102,217        | 12.7                              |
| Orkney Islands        | 18,393         | 12.7                              |
| Eilean Siar           | 23,000         | 12.2                              |
| Dundee City           | 125,826        | 12.0                              |
| West Dunbartonshire   | 74,853         | 11.6                              |
| Renfrewshire          | 146,653        | 11.5                              |
| Glasgow City          | 514,498        | 11.4                              |
| Angus                 | 98,550         | 11.3                              |
| Borders               | 96,313         | 11.3                              |
| West Lothian          | 145,499        | 11.2                              |
| East Dunbartonshire   | 89,653         | 10.8                              |
| <b>Fife</b>           | <b>307,769</b> | <b>10.8</b>                       |
| Perth and Kinross     | 127,080        | 10.8                              |
| Shetland Islands      | 19,238         | 10.5                              |
| Highland              | 196,698        | 10.4                              |
| North Lanarkshire     | 279,011        | 10.3                              |
| Midlothian            | 71,399         | 10.1                              |
| Aberdeen City         | 173,305        | 10.0                              |
| South Lanarkshire     | 264,791        | 9.8                               |
| Falkirk               | 131,854        | 9.3                               |
| Dumfries and Galloway | 127,506        | 9.1                               |
| East Renfrewshire     | 75,791         | 9.1                               |
| Clackmannanshire      | 42,940         | 8.9                               |
| East Lothian          | 85,317         | 8.8                               |
| Edinburgh, City of    | 426,936        | 8.4                               |
| Stirling              | 78,443         | 8.3                               |
| Moray                 | 80,103         | 8.1                               |
| Aberdeenshire         | 216,114        | 7.4                               |

A somewhat different picture emerges when figures are sorted by 1,000 population.

This shows that while Fife may have the third highest number of adult admissions, it is 16<sup>th</sup> out of 32 local authorities for adult unintentional injury admissions.

Its rate of 10.8 per 1,000 is considerably below Inverclyde's total of 14.9, and slightly above the Scottish average of 10.4 admissions per 1,000.

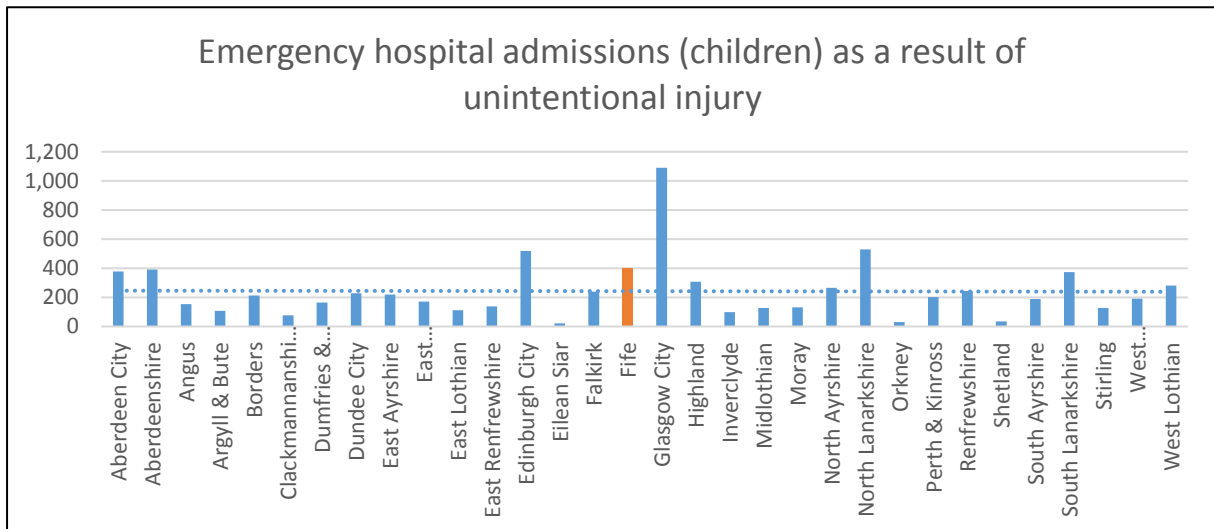


Figure 4.5. Emergency Hospital admissions (children) by council area, year ending 31<sup>st</sup> March 2015

Figure 4.5 shows that Fife is the council area with the fourth highest number of emergency hospital admissions (children) for unintentional injury, behind Glasgow City, Edinburgh City and North Lanarkshire. Fife accounts for 5.2% of children admitted as a result of an unintentional injury in this period.

| Council area          | Child population | Admission rate (1,000 population) |
|-----------------------|------------------|-----------------------------------|
| West Dumbartonshire   | 14,737           | 13                                |
| North Ayrshire        | 21,702           | 12.3                              |
| Borders               | 17,717           | 12                                |
| Glasgow City          | 91,842           | 11.9                              |
| East Ayrshire         | 19,843           | 11.1                              |
| Dundee City           | 22,384           | 10.2                              |
| East Dumbartonshire   | 17,307           | 9.9                               |
| Orkney Islands        | 3,277            | 9.2                               |
| Clackmannanshire      | 8,420            | 9.1                               |
| Falkirk               | 26,606           | 9.0                               |
| North Lanarkshire     | 21,702           | 8.9                               |
| Perth and Kinross     | 22,850           | 8.8                               |
| Shetland Islands      | 3,962            | 8.8                               |
| Stirling              | 14,187           | 8.8                               |
| Renfrewshire          | 27,907           | 8.7                               |
| Argyle and Bute       | 12,408           | 8.6                               |
| Moray                 | 15,407           | 8.6                               |
| Aberdeenshire         | 45,846           | 8.6                               |
| West Lothian          | 33,001           | 8.5                               |
| Angus                 | 18,350           | 8.4                               |
| Highland              | 37,412           | 8.2                               |
| Inverclyde            | 12,115           | 8.1                               |
| East Renfrewshire     | 17,149           | 8.1                               |
| Midlothian            | 15,991           | 7.9                               |
| Dumfries and Galloway | 22,164           | 7.4                               |
| South Ayrshire        | 16,602           | 7.3                               |
| South Lanarkshire     | 51,439           | 7.3                               |
| Edinburgh, City of    | 71,874           | 7.2                               |
| <b>Fife</b>           | <b>60,311</b>    | <b>6.7</b>                        |
| Aberdeen City         | 57,405           | 6.6                               |
| East Lothian          | 17,733           | 6.4                               |
| Eilean Siar           | 4,070            | 5.4                               |

When child unintentional injury admissions are sorted by 1,000 population, it becomes clear that Fife is performing better than the majority of Scottish Council areas.

Its rate of 6.7 admissions per 1,000 population is the fourth lowest total by council area, and almost half the admission rate of West Dumbartonshire, the council area with the highest total.

Fife's admission rate is also considerably below the Scottish average of 9 admissions per 1,000 population.

**Key points**

3. By number of adults admitted to hospital as a result of unintentional injury, Fife is the third highest council area. When this is broken down to admissions per 1,000 people, Fife falls to 16<sup>th</sup> of 32 local authorities.
4. By number of children admitted to hospital as a result of unintentional injury, Fife is the fourth highest council area. When broken down to admissions per 1,000 people, Fife is 29<sup>th</sup> of 32 local authorities, highlighting that children in the area are less likely to be admitted to hospital for this reason.

### Emergency Hospital admissions – Fall analysis

Examining falls and their link to hospital admissions reveals that the Scottish picture shows some interesting variations over the past decade. While the overall number of admissions as a result of a fall has gone up between 2006 and 2015 (31,111 to 33,688), the ratio of pensioners to children has seen a shift over this time.

- Admissions for patients aged under 15 – Reduced from 5,193 to 3,678 between 2006 and 2015 (reduction of 29.2%). Between 2006 and 2015 the percentage of fall admissions accounted for by this age group reduced from 16.7% to 11%.
- Admissions for patients aged 65+ - Increased from 15,429 to 19,832 between 2006 and 2015 (increase of 28.5%). The largest increase was in the 85+ age group, which saw a 43.5% increase over this period, accounting for 21.6% of emergency fall admissions in 2015.
- It should be noted that changing population demographics within Scotland will have influenced these changes. Between 2005 and 2015, the under 15 population in Scotland decreased by 1.5%, with the 85+ population increasing by 30.7%.

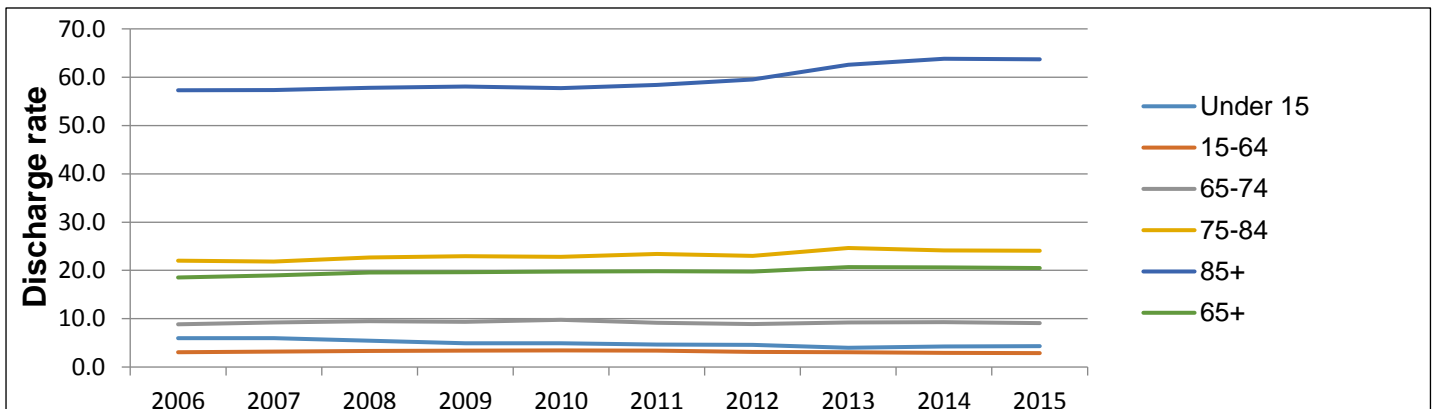


Figure 4.6. Emergency hospital fall discharge rates (Scotland), years ending 31 March, 2006 to 2015

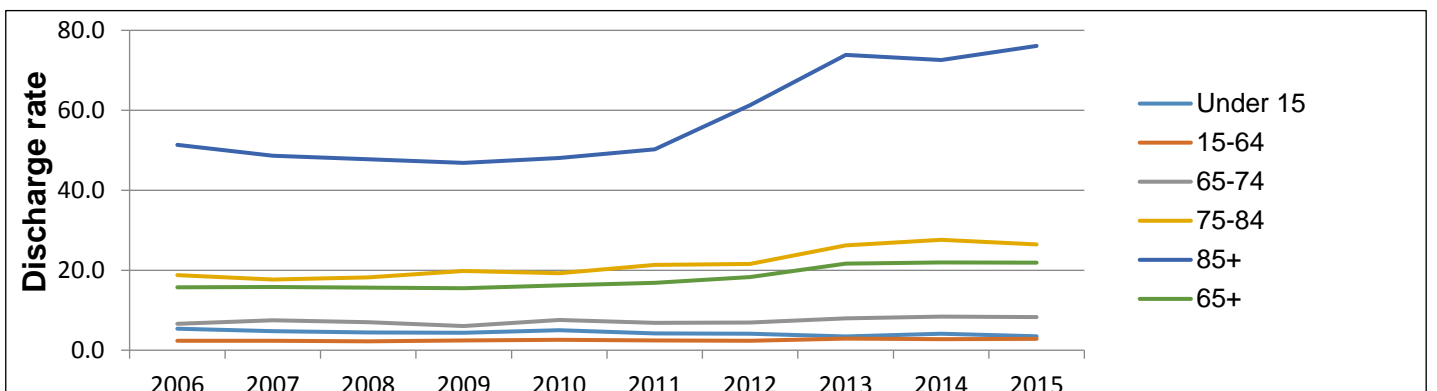


Figure 4.7. Emergency hospital fall discharge rates (Fife), years ending 31 March, 2006 to 2015

- As table 4.7 highlights, the increase in Fife fall admissions since 2011 has outpaced the Scottish average. Over this period falls in Scotland increased by 8.2%, with falls in Fife increasing by 34%. This was particularly apparent for patients aged 85+. In 2006 the Fife discharge rate for this age group was 51.3 per 1,000 population, slightly below the Scottish average of 57.3. By 2015 the Fife rate had increased to 76.1 per 1,000, above the Scottish rate of 63.7.



- The Scottish total for falls linked to the 85+ age group increased by 43.5% between 2006 and 2015. In Fife the increase was 89.7% over the same period. Fife's proportion of the Scottish total for this age group increased from 6.5% to 8.6% over this time.

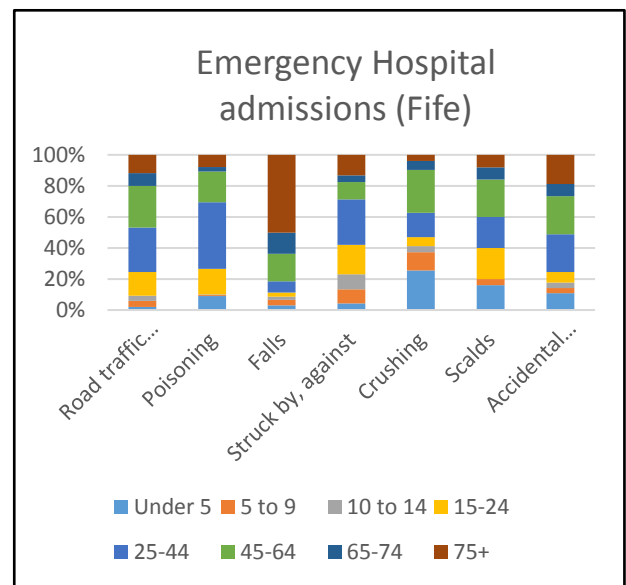
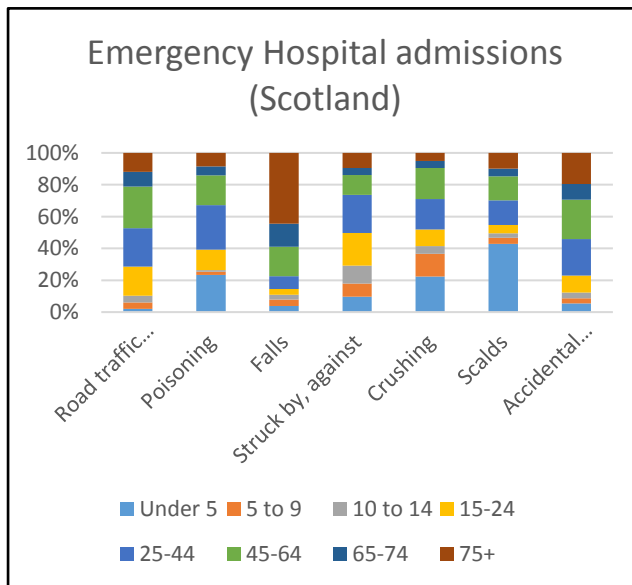
**Key points**

5. Scottish fall admissions linked to patients over 65 increased by 28.5% between 2005 and 2015. This increase was most pronounced in the 85+ age group, which rose by 43.5% over this period, accounting for 21.6% of emergency fall admissions in 2015.
6. Between 2011 and 2015 falls in Scotland increased by 8.2%, and falls in Fife by 34%. Between 2006 and 2015 the discharge rate for 85+ Fife residents overtook the Scottish rate. In 2006 the Fife discharge rate for this age group was 51.3 per 1,000 population, below the Scottish average of 57.3. By 2015 the Fife rate had increased to 76.1 per 1,000, above the Scottish rate of 63.7.

Emergency Hospital admissions – Unintentional injury breakdown

|  | Under 5      | 5-9          | 10-14        | 15-24        | 25-44        | 45-64         | 65-74        | 75+           | Total         |
|--|--------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|---------------|
| <b>Road traffic accidents</b>                              | 57           | 120          | 121          | 538          | 702          | 758           | 272          | 347           | 2,915         |
| <b>Poisoning</b>   | 705          | 58           | 33           | 382          | 841          | 564           | 168          | 258           | 3,009         |
| <b>Falls</b>   | 1,328        | 1,341        | 1,009        | 1,219        | 2,730        | 6,229         | 4,868        | 14,964        | 33,688        |
| <b>Struck by, against</b>                                  | 238          | 198          | 273          | 499          | 583          | 305           | 105          | 233           | 2,434         |
| <b>Crushing</b>  | 218          | 140          | 47           | 102          | 187          | 190           | 44           | 49            | 977           |
| <b>Scalds</b>  | 190          | 17           | 13           | 23           | 69           | 67            | 21           | 44            | 444           |
| <b>Accidental exposure to other and unspecified causes</b> | 228          | 138          | 146          | 454          | 955          | 1,043         | 410          | 818           | 4,192         |
| <b>Total <sup>3</sup></b>                                  | <b>3,364</b> | <b>2,385</b> | <b>2,014</b> | <b>4,280</b> | <b>8,105</b> | <b>10,930</b> | <b>6,394</b> | <b>17,238</b> | <b>54,710</b> |

Table 4.8 (Both sexes) - Emergency hospital admissions (Scotland) as result of unintentional injury, year ending 31 Mar 2015



|  | Under 5    | 5-9        | 10-14     | 15-24      | 25-44      | 45-64      | 65-74      | 75+          | Total        |
|--|------------|------------|-----------|------------|------------|------------|------------|--------------|--------------|
| <b>Road traffic accidents</b>                              | 4          | 8          | 7         | 31         | 59         | 55         | 17         | 24           | 205          |
| <b>Poisoning</b>   | 24         | 2          | 1         | 44         | 115        | 53         | 8          | 21           | 268          |
| <b>Falls</b>   | 76         | 83         | 52        | 67         | 175        | 430        | 334        | 1,225        | 2,442        |
| <b>Struck by, against</b>                                  | 6          | 13         | 14        | 27         | 42         | 16         | 6          | 19           | 143          |
| <b>Crushing</b>  | 13         | 6          | 2         | 3          | 8          | 14         | 3          | 2            | 51           |
| <b>Scalds</b>  | 4          | 1          |           | 5          | 5          | 6          | 2          | 2            | 25           |
| <b>Accidental exposure to other and unspecified causes</b> | 19         | 6          | 6         | 12         | 43         | 43         | 14         | 33           | 176          |
| <b>Total</b>   | <b>146</b> | <b>119</b> | <b>82</b> | <b>189</b> | <b>447</b> | <b>617</b> | <b>384</b> | <b>1,326</b> | <b>3,310</b> |

Table 4.9 (Both sexes) - Emergency hospital admissions (Fife) as result of unintentional injury, year ending 31 Mar 2015

- Table 4.8 shows that falls account for the greatest proportion of unintentional injury hospital admissions in Scotland, with 61.5% of the 2014/15 total. The Fife total is slightly larger, with falls

accounting for 65.8% of admissions. Similarly, Fife shows an enhanced link between falls and an elderly population. While adults aged 75+ account for 44.4% of all Scottish admissions relating to a fall, this group accounts for 54.9% in Fife. This may be explained, in part, by pensioners making up a larger proportion of the Fife population – 20% compared with the Scottish average of 18%.

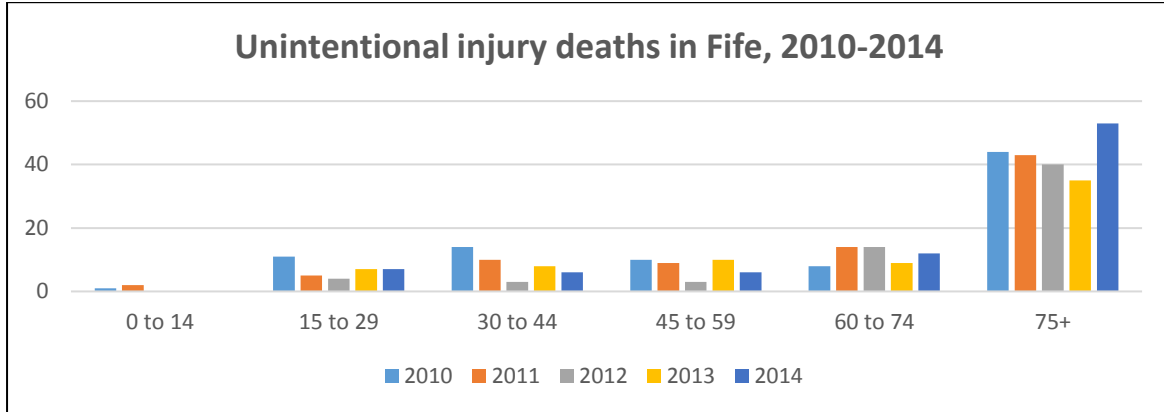
- At a Scottish level, injuries relating to the under 5s clearly show the dangers that may arise from this age group becoming more mobile and independent, including the largest age group total for 'crushing' (22.3% of total) and 'scalds' (42.8% of total). Poisoning admissions for under 5s are the second highest total by age group (705 - 23.4%), with ingestion of tablets (painkillers and aspirin/paracetamol) and the toxic effects of soaps and detergents (e.g. ingestion of liquitabs) being the primary factors.
- Of note is that while scalds are closely identified with the under 5 age group on a Scotland-wide level (42.8% of total), they are more closely associated with adults in Fife, with under 5s only accounting for 16% of the Fife total. The reasons for this are unclear but it may point to previous education or targeted campaigns being carried out on this topic, as well as safety advice given out by services such as Fife Cares. This is supported by the fact that there is evidence of a gradual decline in childhood scalds over the last five years, the percentage for this age group in Fife decreasing from 54.5% in 2010/11 to 16% in 2014/15.

#### **Key points**

7. In 2014/15, falls accounted for 61.5% of Scottish unintentional injury hospital admissions, and 65.8% in Fife. Over half of Fife fall admissions (54.9%) were for people aged 75 or over.
8. The under 5 age group shows a clear link to Scottish unintentional injury admissions, particularly scalds (42.8%) and poisonings (23.4%). Scald admissions for this age group have seen a steady decrease in Fife over the 2010/11-2014/15 period, decreasing from 54.5% of all scalds to 16%.

## 5. Scale of unintentional harm - Fife

### a. Fife unintentional injury deaths



**Figure 5.1. Fife unintentional injury deaths by age group, 2010-2014**

Information has been provided by the National Records of Scotland concerning the number of unintentional injury deaths in Fife. This shows that between 2010 and 2014 there were 388 such deaths, with the 2014 total (84 deaths) being the highest since 2010 (88). The primary reason for this increase is fatalities for the 75+ age group, who make up 63% of the 2014 accidental death total - the highest proportion in the five year period examined. This is slightly above the Scottish figure, where the 75+ age group makes up 56% of accidental deaths in 2014.

|   | 0 to 14 | 15 to 29 | 30 to 44 | 45 to 59 | 60 to 74 | 75+ | All        |
|---|---------|----------|----------|----------|----------|-----|------------|
| Transport accidents                               | 1       | 22       | 14       | 14       | 6        | 7   | <b>64</b>  |
| Falls   | 1       | 3        | 4        | 7        | 23       | 182 | <b>220</b> |
| Drowning and submersion                           | 1       | 2        | 2        | .        | 1        | .   | <b>6</b>   |
| Other threat to breathing                         | .       | .        | 3        | .        | 6        | 5   | <b>14</b>  |
| Exposure to smoke, fire, flames                   | .       | .        | 2        | 2        | 7        | 2   | <b>13</b>  |
| Exposure to forces of nature                      | .       | .        | .        | 1        | .        | .   | <b>1</b>   |
| Poisoning by, and exposure to, noxious substances | .       | 7        | 16       | 10       | 8        | 6   | <b>47</b>  |
| Other specified accidents                         | .       | .        | .        | .        | 2        | 1   | <b>3</b>   |
| Sequelae of accidents                             | .       | .        | .        | 1        | 2        | 2   | <b>5</b>   |
| Unspecified factors                               | .       | .        | .        | 3        | 2        | 10  | <b>15</b>  |
| All   | 3       | 34       | 41       | 38       | 57       | 215 | <b>388</b> |

**Figure 5.2. Fife unintentional injury deaths by cause of death, 2010-2014**

As table 5.2 shows, primary causes of Fife unintentional injury deaths identified over the five year period are falls (56.7% - 220) and transport accidents (16.5% - 64). This is broadly similar to the Scottish percentages for the same time period – 55.7% for falls and 16.9% for transport accidents.

Points of interest for identified key causes of death in Fife are detailed below. Due to low numbers involved it is possible to provide high-level information on detailed cause of death, but not to take this down to gender level.

### Transport accidents

- Transport accidents account for 64.7% of accidental deaths for the 15-29 age group. Fatalities linked to this age group make up 34.4% of all transport related deaths.
- Transport accidents account for a higher percentage of accidental deaths for females in the 15-29 age group than for males (77.7% against 60%).
- The primary cause of death via transport accidents was 'car occupant injured in collision with car, pick up or van' (28% of transport fatalities). Car occupants (38 fatalities), pedestrians (8) and motorcyclists (7) were linked with the largest number of fatalities.

### Falls

- Falls account for 56.7% of accidental deaths across all age groups, and 84.7% of accidental deaths for the 75+ age group across the period 2010-2014.
- Elderly females are more likely than males in the same age group to be involved in falls leading to accidental death. 90% of the 111 female fatalities in the 75+ age group (100) were as a result of falls, compared with 78.8% of males (82 of 104).
- Only 33 of the 220 Fife deaths linked to falls had further details listed. Of these, 'fall on and from stairs or steps' was linked with 15 fatalities.

### Poisoning

- Males are more likely to be linked to accidental deaths through poisoning (30 of 47 deaths).
- 47% of female deaths were in the 45-59 age group, while 36.7% of male deaths were in the 30-44 age group. The primary substances linked to deaths by poisoning were: methadone (11 mentions), asbestos (9), morphine (6), heroin (5), and diazepam (5).
- Almost half of deaths linked to poisonings (23 of 47) were ascribed to 'accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens]'.

### Unintentional injury deaths, Fife committee area breakdown



Figure 5.3. Unintentional injury deaths by committee area, 2012-2014<sup>2</sup>

<sup>2</sup> Only information for adult unintentional injury deaths have been provided, due to the low number of children when examined on an area level basis

- As figure 5.3 shows, Fife unintentional injury deaths have increased from 64 to 84 between 2012 and 2014. With the exception of Glenrothes, all areas have seen an increase in accidental deaths over this time. Points of note include:
  - While Kirkcaldy is linked with the largest number of deaths in 2014 (23.8%), Levenmouth has seen the largest area increase over the three year period, deaths increasing by 140% over this time.
  - Kirkcaldy and Levenmouth are both linked with a proportion of 2014 Unintentional injury deaths that is higher than their share of the Fife population. By contrast, Glenrothes and Dunfermline are both linked with a proportion of Unintentional injury deaths that is significantly below their population share.

|                     | % of Fife population | % of Unintentional injury deaths |
|---------------------|----------------------|----------------------------------|
| Cowdenbeath         | 11                   | 13                               |
| Glenrothes          | 13.6                 | 7.1                              |
| Kirkcaldy           | 16.2                 | 23.8                             |
| City of Dunfermline | 14.7                 | 8.3                              |
| Levenmouth          | 10.2                 | 14.3                             |
| North East Fife     | 20.8                 | 17.9                             |
| South West Fife     | 13.5                 | 15.5                             |

Figure 5.4. Proportion of Unintentional injury deaths by committee area, 2014

- Due to small numbers involved, detailed information on cause of Unintentional injury death is not available at an area committee level. However, the number of falls has been extracted, as highlighted in figure 5.5.

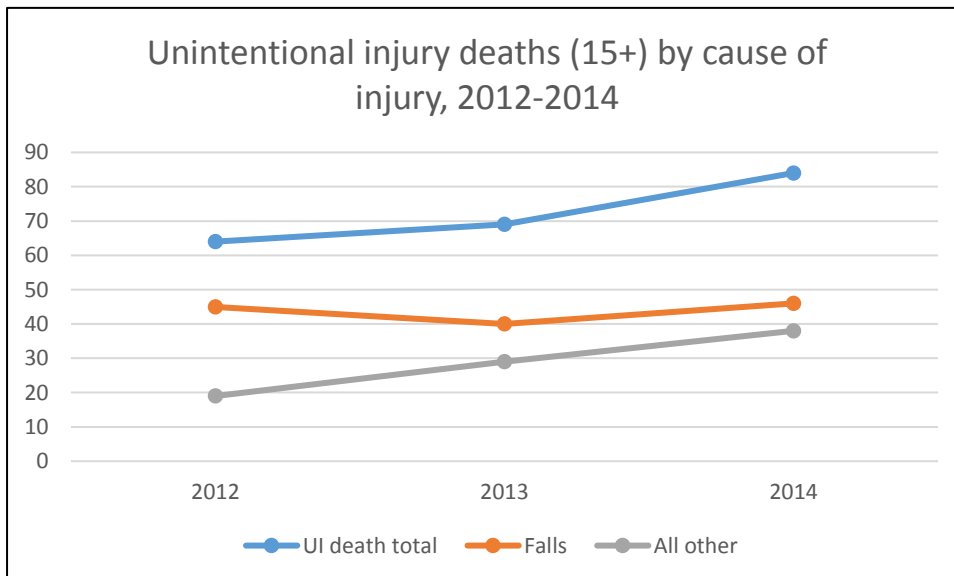


Figure 5.5. Proportion of Unintentional injury deaths by committee area, 2014

- As figure 5.5 illustrates, the number of Fife Unintentional injury deaths linked to falls has remained broadly static between 2012 and 2014, only increasing by one. In contrast, deaths linked to 'other' causes have doubled over the same period, from 19 to 38. As hospital admissions linked to falls have increased over this period (as detailed in section 4), it is possible that the low increase in fall

deaths may be linked to an improved fall response service, and early identification of vulnerable individuals.

### **Key points**

9. Between 2010 and 2014 there were 388 unintentional injury (Unintentional injury) deaths in Fife, of which 84 were in 2010. The 75+ age group made up 63% of the 2014 Unintentional injury death total, against a Scottish figure of 56%.
10. Primary causes of Fife Unintentional injury deaths over 2010-2014 were falls (56.7% - 220) and transport accidents (16.5% - 64). This is broadly similar to the Scottish percentages for the same time period – 55.7% for falls and 16.9% for transport accidents.
11. Transport accidents account for 64.7% of Fife Unintentional injury deaths for the 15-29 age group. Fatalities linked to this age group make up 34.4% of all transport related deaths.
12. Elderly females are more likely than males in the same age group to be involved in falls leading to Unintentional injury deaths. 90% of the 111 female fatalities in the 75+ age group (100) were as a result of falls, compared with 78.8% of males (82 of 104).
13. Almost half of deaths linked to poisonings (23 of 47) were ascribed to 'accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens]'
14. Fife unintentional injury deaths increased from 64 to 84 between 2012 and 2014. With the exception of Glenrothes, all Fife areas saw an increase in accidental deaths over this time.
15. Kirkcaldy was linked with the largest number of area Unintentional injury deaths in 2014 (23.8%).
16. Kirkcaldy and Levenmouth are both linked with a proportion of 2014 Unintentional injury deaths that is higher than their share of the Fife population. By contrast, Glenrothes and Dunfermline are both linked with a proportion of Unintentional injury deaths that is significantly below their population share.
17. The number of Fife Unintentional injury deaths linked to falls has remained broadly static between 2012 and 2014, only increasing by one. In contrast, deaths linked to 'other' causes have doubled over the same period, from 19 to 38.

b. Ambulance service data

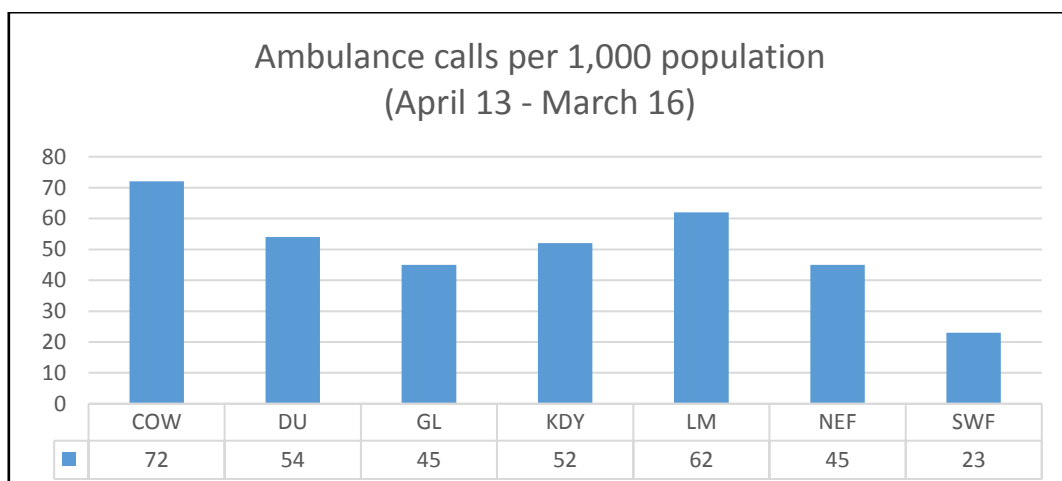
Ambulance service data has been provided for three full fiscal years: 2013/14, 2014/15 and 2015/16. This data is for every ambulance engagement as the service's system does not differ between locations that are 'home' and 'outside'. There is also no specific recording of calls as concerning 'unintentional injury' – what is included is emergency calls where a resource arrives on scene and the crew input a diagnostic code from one of the following categories:

|                        |                      |                        |          |
|------------------------|----------------------|------------------------|----------|
| Haemorrhage/Laceration | Traumatic injury     | Inhalation/Hazchem     | Drowning |
| Electrocution/Lighting | Eye problems/Injury  | Animal bites           | Falls    |
| Industrial accident    | Stab/Gun/Penetrating | Road traffic collision | Burns    |

| Committee area     | 2013/14     | 2014/15     | 2015/16     | Grand Total  | Area population |
|--------------------|-------------|-------------|-------------|--------------|-----------------|
| COW                | 963         | 973         | 1018        | 2954         | 41,000          |
| DU                 | 1012        | 1006        | 982         | 3000         | 55,500          |
| GL                 | 731         | 796         | 720         | 2247         | 50,490          |
| KDY                | 1093        | 1052        | 985         | 3130         | 59,800          |
| LM                 | 799         | 791         | 719         | 2309         | 37,300          |
| NEF                | 1123        | 1077        | 1134        | 3334         | 73,400          |
| SWF                | 354         | 400         | 378         | 1132         | 49,800          |
| <b>Grand Total</b> | <b>6075</b> | <b>6095</b> | <b>5936</b> | <b>18106</b> | <b>367,300</b>  |

Table 5.6. Ambulance calls, April 13 – March 16

- Table 5.6 shows that while the number of ambulance calls broadly relate to the area proportion, there are a number of interesting anomalies, primarily relating to Cowdenbeath and South West Fife.
  - South West Fife has 13.6% of the Fife population, but only 6.4% of ambulance calls logged within Fife. Although ambulances may be dispatched to SWF from other council areas, it is the postcode of the caller's address that is recorded, so the reasons for this discrepancy are unclear.
  - Cowdenbeath only has 11.2% of the Fife population, but has 16.3% of ambulance calls, just behind Dunfermline. It is the only area that has seen consistent call growth over the three-year period, the number of calls increasing by 5.7% over this period.





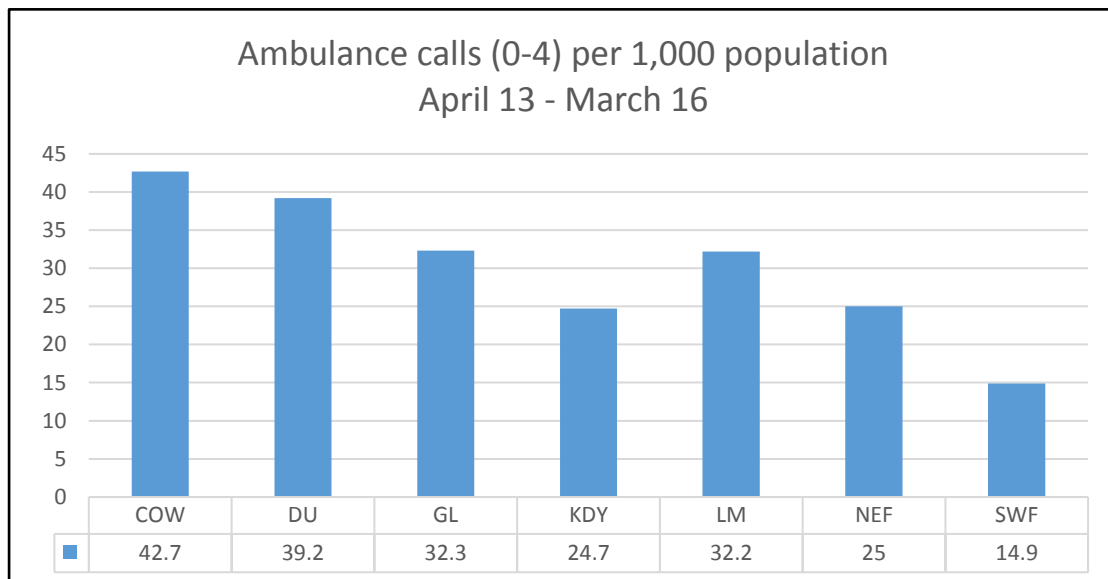
### Age range

Examining ambulance calls by age of patient suggests that the number of calls may be weighted, in part, by the demographics of each area - e.g. the effect of the significant elderly population in North East Fife and the high proportion of under 5s within the Cowdenbeath area.

### **0-4 age group**

| Committee area     | 2013/14    | 2014/15    | 2015/16    | Grand Total |
|--------------------|------------|------------|------------|-------------|
| COW                | 38         | 33         | 39         | 110         |
| DU                 | 61         | 38         | 37         | 136         |
| GL                 | 31         | 31         | 32         | 94          |
| KDY                | 29         | 36         | 27         | 92          |
| LM                 | 27         | 21         | 18         | 66          |
| NEF                | 28         | 18         | 32         | 78          |
| SWF                | 16         | 13         | 11         | 40          |
| <b>Grand Total</b> | <b>230</b> | <b>190</b> | <b>196</b> | <b>616</b>  |

Table 5.7. Ambulance calls (0-4 age group), April 13 – March 16

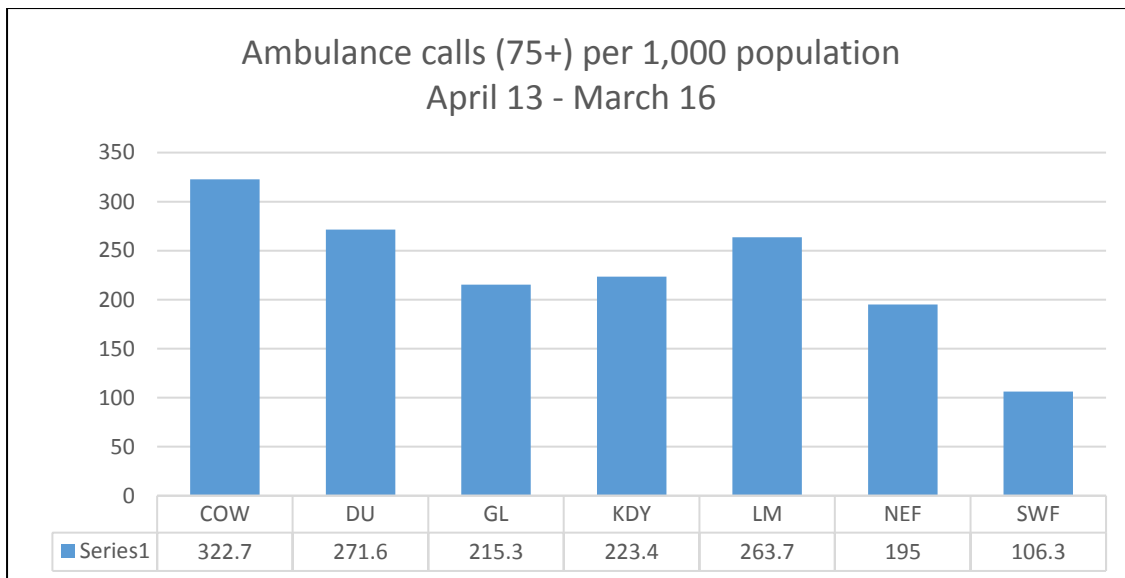


- The Cowdenbeath area is linked with 39 ambulance calls in the 2015/16 fiscal year, more than any other area. This is an increase from its position in 2013/14 (2<sup>nd</sup>) and 2014/15 (3<sup>rd</sup>). For the three year period Cowdenbeath is linked with 17.9% of ambulance calls for this age group, behind only Dunfermline with 22%. Despite having the largest population in Fife, North East Fife is only linked with 78 calls for this age group (12.7%), the second-lowest of any Fife area.
- When examined by calls per 1,000 population, Cowdenbeath is again the highest area, with 42.7 calls per 1,000 population. Despite their status as the two largest committee areas in Fife, Kirkcaldy and North East Fife are 5<sup>th</sup> and 6<sup>th</sup> for volume of ambulance calls when they are examined per 1,000 population. South West Fife is linked with only 14.9 calls per 1,000 population, considerably below other Fife committee areas.

**75+ age group**

| Committee area     | 2013/14     | 2014/15     | 2015/16     | Grand Total |
|--------------------|-------------|-------------|-------------|-------------|
| COW                | 308         | 396         | 364         | 1068        |
| DU                 | 330         | 336         | 337         | 1003        |
| GL                 | 234         | 337         | 292         | 863         |
| KDY                | 404         | 417         | 407         | 1228        |
| LM                 | 290         | 330         | 316         | 936         |
| NEF                | 440         | 464         | 483         | 1387        |
| SWF                | 104         | 136         | 147         | 387         |
| <b>Grand Total</b> | <b>2110</b> | <b>2416</b> | <b>2346</b> | <b>6872</b> |

Table 5.8. Ambulance calls (75+ age group), April 13 – March 16



- For each of the three fiscal years the North East Fife area is linked with the largest number of ambulance calls for the 75+ age group, and has 20.1% of the three-year call total. While every area has seen an increase in calls over the three fiscal years, only Dunfermline, North East Fife and South West Fife have seen a steady increase maintained over three years.
- As with the 0-4 age group, examining calls per 1,000 population highlights significant area differences. While NEF is linked with the largest number of area calls, it is 6<sup>th</sup> out of 7 areas for calls per 1,000 population. Cowdenbeath, with 322.7 calls per 1,000 population is the top area, with South West Fife again showing a significantly reduced rate – 106.3 calls per 1,000, less than 1/3 the Cowdenbeath rate.

### Additional factors linked to calls

- a) **Burns** – The number of ambulance service calls concerning burns has seen a gradual decrease over the last three years, from 59 calls to 48 over the three year period. The primary reduction has been in burns relating to children aged 0-4, decreasing from 18 to 8. Burns relating to individuals aged over 75 have increased from four calls to eight over the same period.
- b) **Fracture** – The number of calls relating to fractures has decreased from 774 to 679 over this period. A decrease has been seen across all age groups, with the exception of a minor increase (+2) in the 65-74 age group. The 75+ age group are linked with 36.6% of fracture calls, primarily due to falls.
- c) **Alcohol** – The number of calls relating to alcohol has seen a significant decrease over the three year period – from 492 to 317. This decrease has been driven by a decline in calls relating to the 5 to 64 age group, which saw a 40% decrease over this time. The decrease among patients aged 65+ has been less notable, at 15% (albeit from a much smaller initial base).
  - a. When broken down by area there are evident differences seen in the proportion of ambulance calls linked to alcohol, with areas ranging between 3.8% (NEF) and 8.6% (Dunfermline).
  - b. Males are much more likely to be linked with alcohol calls, accounting for 70% of the Fife total. This again sees area differences, ranging from 66.8% in Cowdenbeath to 80.3% in South West Fife.

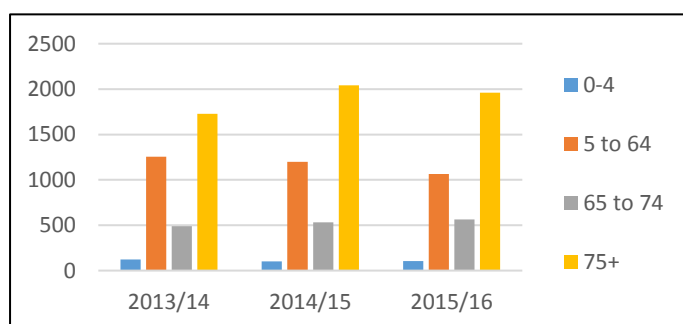
**Falls** - As a proportion of total ambulance calls, falls have seen a gradual increase, from 58.4% of all calls in 2013/14 to 61.4% of all calls in 2015/16. There has been a noticeable movement towards falls suffered by pensioners. In 2013/14, 61.3% of falls were linked to callers aged 65 or over. In 2015/16, this had risen to 68.2%. Levenmouth is the only committee area to see a decrease in falls – across every age group – over the three year period.

| Age group          | 2013/14     | 2014/15     | 2015/16     | Grand Total  |
|--------------------|-------------|-------------|-------------|--------------|
| 0-4                | 121         | 102         | 105         | 328          |
| 5 to 64            | 1255        | 1198        | 1065        | 3518         |
| 65 to 74           | 491         | 531         | 562         | 1584         |
| 75+                | 1726        | 2040        | 1962        | 5728         |
| (blank)            | 4           | 5           | 8           | 17           |
| <b>Grand Total</b> | <b>3597</b> | <b>3876</b> | <b>3702</b> | <b>11175</b> |

**Table 5.9. Calls linked to 'fall' category description, April 13 – March 16**

As table 5.9 highlights, the link between falls and older patients is particularly strong. While 52.6% of calls for 0-4 year olds related to falls, the equivalent figure was 72.9% for 65-74 year olds and 81.7% for those aged 75+. Falls accounted for 60.8% of ambulance calls over the three years.

**Figure 5.10. Age groups linked to Fife 'falls' calls, April 13 – March 16**



This trend is illustrated in figure 5.10, which shows that while the 0-4 and 5 to 64 age groups have both seen a decrease in fall calls over the three year period, both the 65 to 74 and the 75+ age groups have seen an increase (albeit the 75+ age group saw a slight decrease in calls in the last year (-78 between 2014/15 and 2015/16).

Time of call

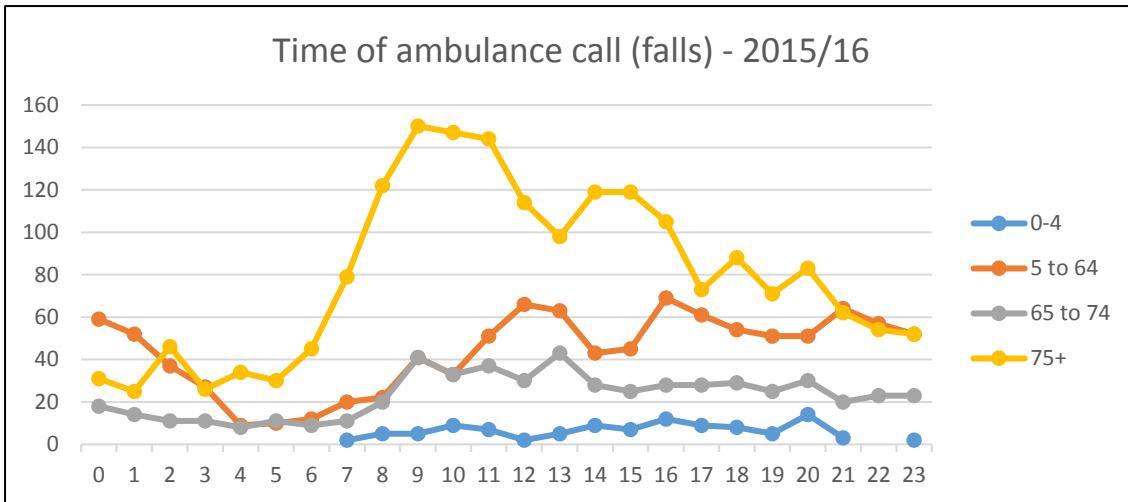


Figure 5.11. Time of ambulance calls relating to 'falls', April 15 – March 16

Figure 5.11 highlights that, for the 75+ age group, there is a clear peak in fall ambulance calls in the early hours of the morning. Calls steadily increase from 6am onwards before peaking at 9am. It is likely that this will be affected by people getting out of bed and going about their morning routine, and falls that may arise from this. The peak at 9am may tie in with carers or family members attending at the household at this time and subsequently reporting the accident.

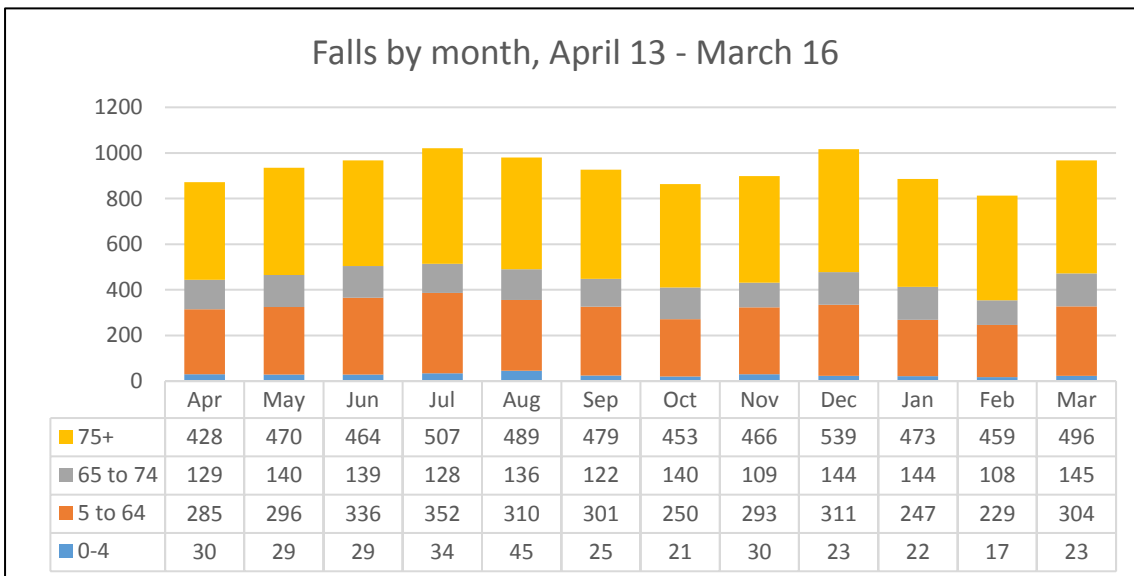


Figure 5.12. Month of ambulance calls relating to 'falls', April 13 – March 16

Figure 5.12 illustrates the relationship between falls and time of year. Data has been examined for the full three years in order to allow for weather variations over this period, such as a mild winter or a poor summer.

While it shows that falls are spread throughout the year, it is clear that July and December are the peak months. Fall calls in December account for 9.3% of the 75+ total, and it is possible that weather conditions – such as ice on paths – may play a part in this. Unfortunately, as the data analysed does not differentiate between the house and the garden, this is currently impossible to verify.

### **Key points**

18. South West Fife has 13.6% of the Fife population, but only 6.4% of ambulance calls logged within Fife. Cowdenbeath has 16.3% of ambulance calls and is the only area to see consistent call growth over the three-year period (+5.7%).
19. Cowdenbeath is linked with 42.7 calls per 1,000 population (0-4), and 322.7 calls per 1,000 population (75+). North East Fife, despite the highest number of calls for the 75+ age group, has a much reduced rate per 1,000 population (195 calls).
20. Calls relating to burns have decreased over the three year period, from 59 to 48. The primary reduction has been in burns relating to children aged 0-4, decreasing from 18 to 8.
21. As a proportion of total ambulance calls, falls have increased from 58.4% of all calls in 2013/14 to 61.4% of all calls in 2015/16. There has been affected by an increase in falls linked to pensioners. In 2013/14, 61.3% of falls were linked to callers aged 65 or over; in 2015/16, this had risen to 68.2%. 81.7% of calls for the 75+ age group concerned falls.
22. Falls calls for the 75+ group increase in the early hours of the morning, before peaking at 9am.
23. July and December are the peak months for falls, with December linked with the largest number of 75+ fall calls – possibly due to weather related issues.

### c. [ISD Scotland information](#)

#### [Emergency hospital admissions<sup>3</sup>](#)

\*The following data covers inpatient admissions to hospital – people who are admitted to an available staffed bed in a hospital (either electively or as an emergency) and either remain overnight whatever the original intention or are expected to remain overnight but are discharged earlier.\*

#### [Children](#)

| LAC             |        | 2013 | 2014 | 2015 |
|-----------------|--------|------|------|------|
| Dunfermline     | Male   | 28   | 23   | 33   |
| Dunfermline     | Female | 27   | 24   | 23   |
|                 | All    | 55   | 47   | 56   |
| Cowdenbeath     | Male   | 38   | 39   | 33   |
| Cowdenbeath     | Female | 21   | 21   | 28   |
|                 | All    | 59   | 60   | 61   |
| Glenrothes      | Male   | 31   | 42   | 29   |
| Glenrothes      | Female | 17   | 34   | 25   |
|                 | All    | 48   | 76   | 54   |
| Kirkcaldy       | Male   | 41   | 45   | 47   |
| Kirkcaldy       | Female | 28   | 33   | 27   |
|                 | All    | 69   | 78   | 74   |
| Levenmouth      | Male   | 20   | 35   | 15   |
| Levenmouth      | Female | 18   | 27   | 20   |
|                 | All    | 38   | 62   | 35   |
| North East Fife | Male   | 50   | 56   | 44   |
| North East Fife | Female | 32   | 38   | 30   |
|                 | All    | 82   | 94   | 74   |
| South West Fife | Male   | 35   | 41   | 27   |
| South West Fife | Female | 22   | 19   | 23   |
|                 | All    | 57   | 60   | 50   |
| Fife total      | Male   | 243  | 281  | 228  |
|                 | Female | 165  | 196  | 176  |
|                 | All    | 408  | 477  | 404  |

**Figure 5.13. Fife unintentional injury hospital admissions (0-14) by committee area, 2012/13-2014/15**

Figure 5.13 shows how the number of child unintentional injury hospital admissions has fluctuated in Fife over a period of three fiscal years.

What is apparent is that there is no uniform trend across each of the seven areas, with admission rates for males and females fluctuating from year to year and across areas.

What can be seen is that for every committee area, boys are more likely than girls to be admitted as a result of an unintentional injury. They comprise 56% of the 2014/15 total, and 58% for the three year period.

Unfortunately the low number of childhood admissions when broken down on an area basis means that they cannot be separated into age ranges. It is hoped that this is something that the provision of A+E attendance data will rectify, thereby providing a more complete picture of the age groups and sexes at risk of unintentional injury.

The Kirkcaldy and North East Fife areas were linked with the largest number of admissions over the three year period. Levenmouth had the lowest number of admissions overall, which may reflect its position as the smallest Fife committee area by population size.

<sup>3</sup> Hospital admission data in this section is for a period of three fiscal years: 2012/13, 2013/14 and 2014/15.

| LAC             | Year | Total      | Falls      | All Other <sup>4</sup> |
|-----------------|------|------------|------------|------------------------|
| Dunfermline     | 2013 | 55         | 32         | 23                     |
| Dunfermline     | 2014 | 47         | 20         | 27                     |
| Dunfermline     | 2015 | 56         | 34         | 22                     |
|                 |      | <b>158</b> | <b>86</b>  | <b>72</b>              |
| Cowdenbeath     | 2013 | 59         | 33         | 26                     |
| Cowdenbeath     | 2014 | 60         | 31         | 29                     |
| Cowdenbeath     | 2015 | 61         | 32         | 29                     |
|                 |      | <b>180</b> | <b>96</b>  | <b>84</b>              |
| Glenrothes      | 2013 | 48         | 28         | 20                     |
| Glenrothes      | 2014 | 76         | 48         | 28                     |
| Glenrothes      | 2015 | 54         | 27         | 27                     |
|                 |      | <b>178</b> | <b>103</b> | <b>75</b>              |
| Kirkcaldy       | 2013 | 69         | 35         | 34                     |
| Kirkcaldy       | 2014 | 78         | 38         | 40                     |
| Kirkcaldy       | 2015 | 74         | 42         | 32                     |
|                 |      | <b>221</b> | <b>115</b> | <b>106</b>             |
| Levenmouth      | 2013 | 38         | 15         | 23                     |
| Levenmouth      | 2014 | 62         | 36         | 26                     |
| Levenmouth      | 2015 | 35         | 17         | 18                     |
|                 |      | <b>135</b> | <b>68</b>  | <b>67</b>              |
| North East Fife | 2013 | 82         | 36         | 46                     |
| North East Fife | 2014 | 94         | 45         | 49                     |
| North East Fife | 2015 | 74         | 33         | 41                     |
|                 |      | <b>250</b> | <b>114</b> | <b>136</b>             |
| South West Fife | 2013 | 57         | 28         | 29                     |
| South West Fife | 2014 | 60         | 28         | 32                     |
| South West Fife | 2015 | 50         | 26         | 24                     |
|                 |      | <b>167</b> | <b>82</b>  | <b>85</b>              |

**Figure 5.14. Fife unintentional injury hospital admissions (0-14) by cause of injury, 2012/13-2014/15**

Figure 5.14 highlights how falls are linked to a significant proportion of hospital admissions in the 0-14 age group – 51.5% over the three fiscal-year period.

Without an age breakdown or information on the location of accident, it is difficult to identify the circumstances that may have led to such incidents. However, some general points can be observed:

- Kirkcaldy is the only committee area to show an increase in fall-related hospital admissions over the entire three year period, increasing from 35 to 42 over the period. This saw falls as a percentage of Kirkcaldy children admissions increase from 50.7% to 56.8%.
- Certain areas, including Glenrothes, Levenmouth and North East Fife, saw a large increase in fall admissions in the 2014 fiscal year. In each area admissions reduced the following year to a level close to the 2013FY total.
- Glenrothes has the strongest area link to falls – 57.9% of children admissions over the three year period. North East Fife was the area with the weakest link – 45.6% over the three year period.

<sup>4</sup> (Inc. road traffic accidents, poisoning, struck, crush, scald, accidental exposure + 'other')

## Adults

| LAC             |        | 2013 | 2014 | 2015 |
|-----------------|--------|------|------|------|
| Dunfermline     | Male   | 163  | 162  | 172  |
| Dunfermline     | Female | 185  | 209  | 233  |
|                 | All    | 348  | 371  | 405  |
| Cowdenbeath     | Male   | 197  | 206  | 207  |
| Cowdenbeath     | Female | 216  | 219  | 223  |
|                 | All    | 413  | 425  | 430  |
| Glenrothes      | Male   | 179  | 235  | 226  |
| Glenrothes      | Female | 242  | 242  | 254  |
|                 | All    | 421  | 477  | 480  |
| Kirkcaldy       | Male   | 262  | 319  | 286  |
| Kirkcaldy       | Female | 336  | 362  | 341  |
|                 | All    | 598  | 681  | 627  |
| Levenmouth      | Male   | 174  | 213  | 190  |
| Levenmouth      | Female | 202  | 214  | 199  |
|                 | All    | 376  | 427  | 389  |
| North East Fife | Male   | 280  | 279  | 269  |
| North East Fife | Female | 356  | 383  | 340  |
|                 | All    | 636  | 662  | 609  |
| South West Fife | Male   | 166  | 160  | 190  |
| South West Fife | Female | 182  | 204  | 179  |
|                 | All    | 348  | 364  | 369  |
| Fife total      | Male   | 1421 | 1574 | 1540 |
| Fife total      | Female | 1719 | 1833 | 1769 |
|                 | All    | 3140 | 3407 | 3309 |

**Figure 5.15. Fife unintentional injury hospital admissions (15+) by committee area, 2012/13-2014/15**

Table 5.15 highlights the increase in unintentional injury admissions linked to adults across Fife, with admissions increasing by 5.4% over the period.

Unlike children, where boys are more likely to be linked to unintentional injury admissions, females were linked with more admissions in every committee area. This figure may be weighted by a higher number of elderly females in the Fife population.

As was also the case with childhood injuries, Kirkcaldy and North East Fife were the areas linked with the largest number of admissions.



| LAC             | Year | Total       | Falls       | All Other <sup>5</sup> |
|-----------------|------|-------------|-------------|------------------------|
| Dunfermline     | 2013 | 348         | 241         | 109                    |
| Dunfermline     | 2014 | 371         | 242         | 131                    |
| Dunfermline     | 2015 | 405         | 271         | 134                    |
|                 |      | <b>1124</b> | <b>754</b>  | <b>374</b>             |
| Cowdenbeath     | 2013 | 413         | 282         | 131                    |
| Cowdenbeath     | 2014 | 425         | 269         | 157                    |
| Cowdenbeath     | 2015 | 430         | 308         | 122                    |
|                 |      | <b>1268</b> | <b>859</b>  | <b>410</b>             |
| Glenrothes      | 2013 | 421         | 275         | 146                    |
| Glenrothes      | 2014 | 477         | 293         | 185                    |
| Glenrothes      | 2015 | 480         | 301         | 181                    |
|                 |      | <b>1378</b> | <b>869</b>  | <b>512</b>             |
| Kirkcaldy       | 2013 | 598         | 421         | 177                    |
| Kirkcaldy       | 2014 | 681         | 431         | 251                    |
| Kirkcaldy       | 2015 | 627         | 436         | 191                    |
|                 |      | <b>1906</b> | <b>1288</b> | <b>619</b>             |
| Levenmouth      | 2013 | 376         | 269         | 107                    |
| Levenmouth      | 2014 | 427         | 262         | 169                    |
| Levenmouth      | 2015 | 389         | 261         | 132                    |
|                 |      | <b>1192</b> | <b>792</b>  | <b>408</b>             |
| North East Fife | 2013 | 636         | 419         | 218                    |
| North East Fife | 2014 | 662         | 442         | 220                    |
| North East Fife | 2015 | 609         | 405         | 204                    |
|                 |      | <b>1907</b> | <b>1266</b> | <b>642</b>             |
| South West Fife | 2013 | 348         | 239         | 112                    |
| South West Fife | 2014 | 364         | 242         | 124                    |
| South West Fife | 2015 | 369         | 249         | 121                    |
|                 |      | <b>1081</b> | <b>730</b>  | <b>357</b>             |

**Figure 5.16. Fife unintentional injury hospital admissions (15+) by cause of injury, 2012/13-2014/15**

Figure 5.16 highlights how falls are linked to a significant proportion of hospital admissions in the 15+ age group – 66.4% over the three fiscal-year period.

The proportion of adult fall admissions is broadly the same across five of the seven Fife areas. In Dunfermline, Cowdenbeath, Kirkcaldy, Levenmouth and North East Fife, falls account for 67-68% of adult admissions. In Glenrothes this is a lower proportion of 63%, while in South West Fife it was 73%. This makes Glenrothes the lowest committee area for adult fall admissions, but the highest for child admissions.

Levenmouth and North East Fife are notable for being the only two areas to see a decrease in fall admissions over the three year period (-8 in Levenmouth and -14 in North East Fife). North East Fife is also the only area to see a decrease in the total number of adult hospital admissions over this period.

Patients aged 75+ are linked with 54.3% of fall admissions over the three year period. Falls are the primary factor linked with hospital admissions for this age group – 89% of all hospital admissions.

<sup>5</sup> (Inc. road traffic accidents, poisoning, struck, crush, scald, accidental exposure + 'other')

### Common injury types

Data has been supplied for the fiscal year 2014-15, detailing the main injury types linked with unintentional injury emergency hospital admissions. This shows:

- **Children under 15** – ‘Fracture of the forearm’ was the most common reason for admission in five out of the seven committee areas (Glenrothes and NEF excepted), with 86 cases in the 2014-15 fiscal year. Cowdenbeath had the highest area total, at 21% of Fife admissions for this injury type. This was followed by ‘fracture of the shoulder and upper arm’ (43 cases) and ‘open wound of head’ (43 cases). Such injuries are consistent with the main causes of unintentional injury linked to this age group – falls and accidents.
- **Adults (15+)** – For those in the 15-74 age group, the most common injury is ‘fracture of lower leg’ (235 cases – primary injury type for every area apart from Kirkcaldy). For the 75+ age group it is ‘fracture of femur’ (387 cases – primary injury type in every committee area).

#### **Key points**

24. For the 0-14 age group, boys are more likely than girls to be admitted to hospital as a result of unintentional injury (58% over 2012/13 – 2014/15 period).
25. Falls are linked to over half of hospital admissions for the 0-14 age group. Glenrothes had the strongest area link to childhood falls (57.9% of child admissions), while Kirkcaldy is the only area to show a continual increase in fall admissions over the three years.
26. Females were linked with more Fife hospital admissions in the 15+ age group, with it being likely that this is affected by the higher number of female pensioners.
27. Falls are linked to 66.4% of 15+ admissions over the three year period, ranging from 63% of Glenrothes admissions to 73% in South West Fife. North East Fife is the only committee area to see a decrease in Unintentional injury hospital admissions over the three years.
28. Patients aged 75+ are linked with 54.3% of fall admissions over the three year period. Falls are the primary factor linked with hospital admissions for this age group – 89% of all hospital admissions.

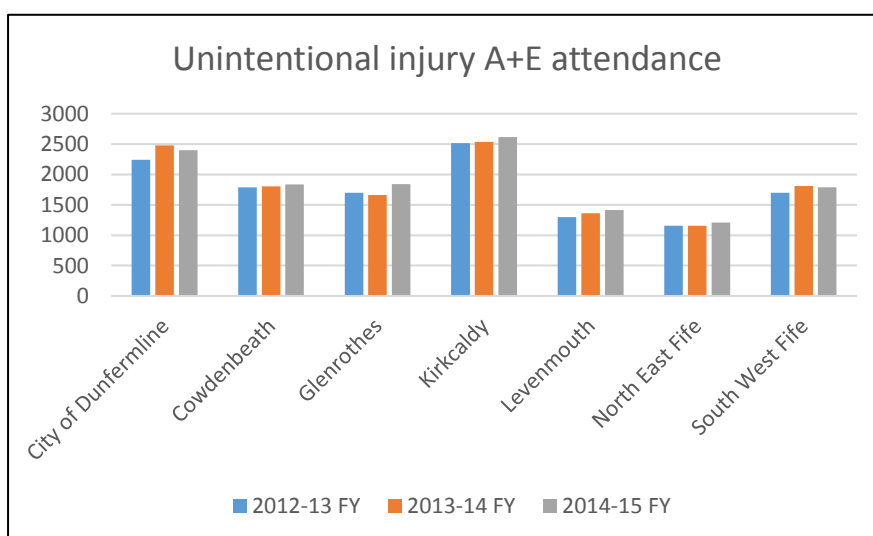
#### d. A+E attendance

Following the successful completion of the Caldicott process, information has been received from NHS Tayside that gives information on Fife residents who attend A+E/minor injury units in the Tayside council area. Using only data from the Victoria and Queen Margaret Hospitals makes it obvious that a significant number of NEF residents go elsewhere for treatment – if only figures from NHS Fife are used, this shows that NEF accounts for 20% of the Fife population, yet only 3.2% of A+E attendances. The provision of Tayside data is therefore of great importance in helping to provide a clear picture of unintentional injuries affecting NEF residents.

There is one final data gap that prevents the NEF figures from being fully complete. Between them, the minor injury units at Adamson Hospital Cupar and St Andrews Memorial Hospital record approximately 6,000 attendances per year. Unfortunately, recording practices at these locations can currently only capture the overall number of attendees, with no supporting detail around the nature of the injury or the demographic of the patient. As a result, no information from these two locations can be used for comparison in its current form.

| Committee area name | 2012-13 FY | 2013-14 FY | 2014-15 FY | Grand Total |
|---------------------|------------|------------|------------|-------------|
| City of Dunfermline | 2272       | 2506       | 2419       | 7197        |
| Cowdenbeath         | 1790       | 1803       | 1834       | 5427        |
| Glenrothes          | 1701       | 1663       | 1843       | 5207        |
| Kirkcaldy           | 2551       | 2575       | 2673       | 7779        |
| Levenmouth          | 1296       | 1359       | 1413       | 4068        |
| North East Fife     | 1156       | 1154       | 1209       | 3519        |
| South West Fife     | 1700       | 1808       | 1786       | 5294        |
| Grand Total         | 12466      | 12868      | 13177      | 38511       |

**Table 5.17, Unintentional injury A+E attendance by committee area, 2012-13FY – 2014-15FY**

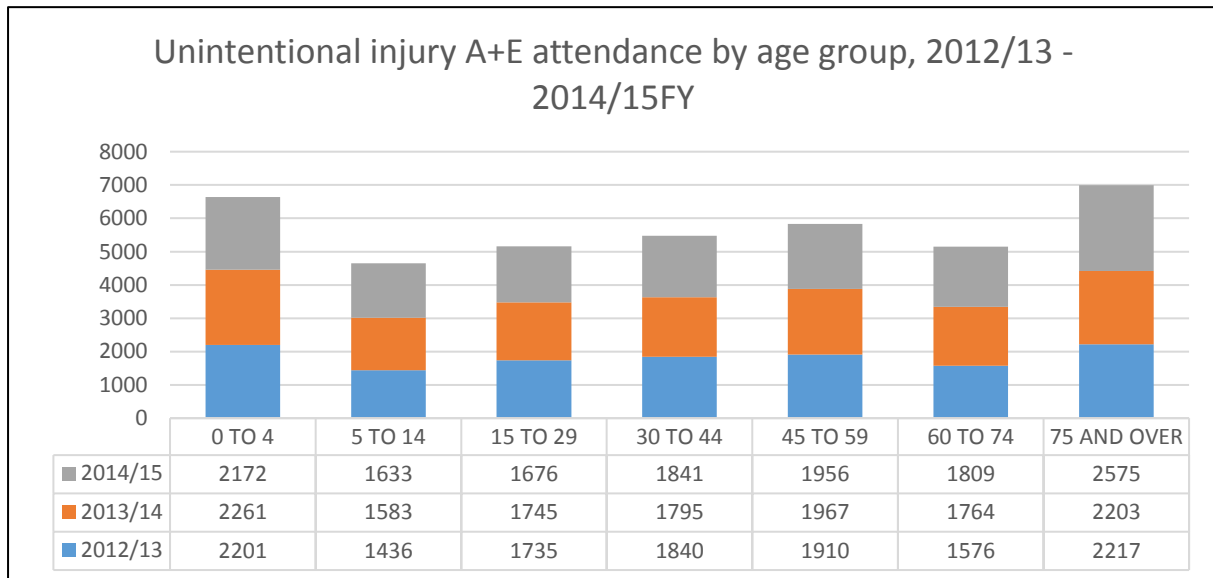


The figures clearly show the impact that the addition of Tayside attendance figures has. Without them, NEF accounts for 3.2% of the Fife A+E total. With them, this increases to 9%, with a further increase likely once data is secured for the Adamson and Memorial Hospitals.

As expected, due to their status as the next largest committee areas and their proximity to the Hospitals surveyed, Kirkcaldy (20.2% of attendees) and Dunfermline (18.7%) are linked with the largest number of attendees.

Cowdenbeath has a number of attendees above what its population size would suggest. More attendees are from the Cowdenbeath area than are from either Glenrothes or South West Fife, both of which are areas containing a population several thousand larger than Cowdenbeath.

Age groups



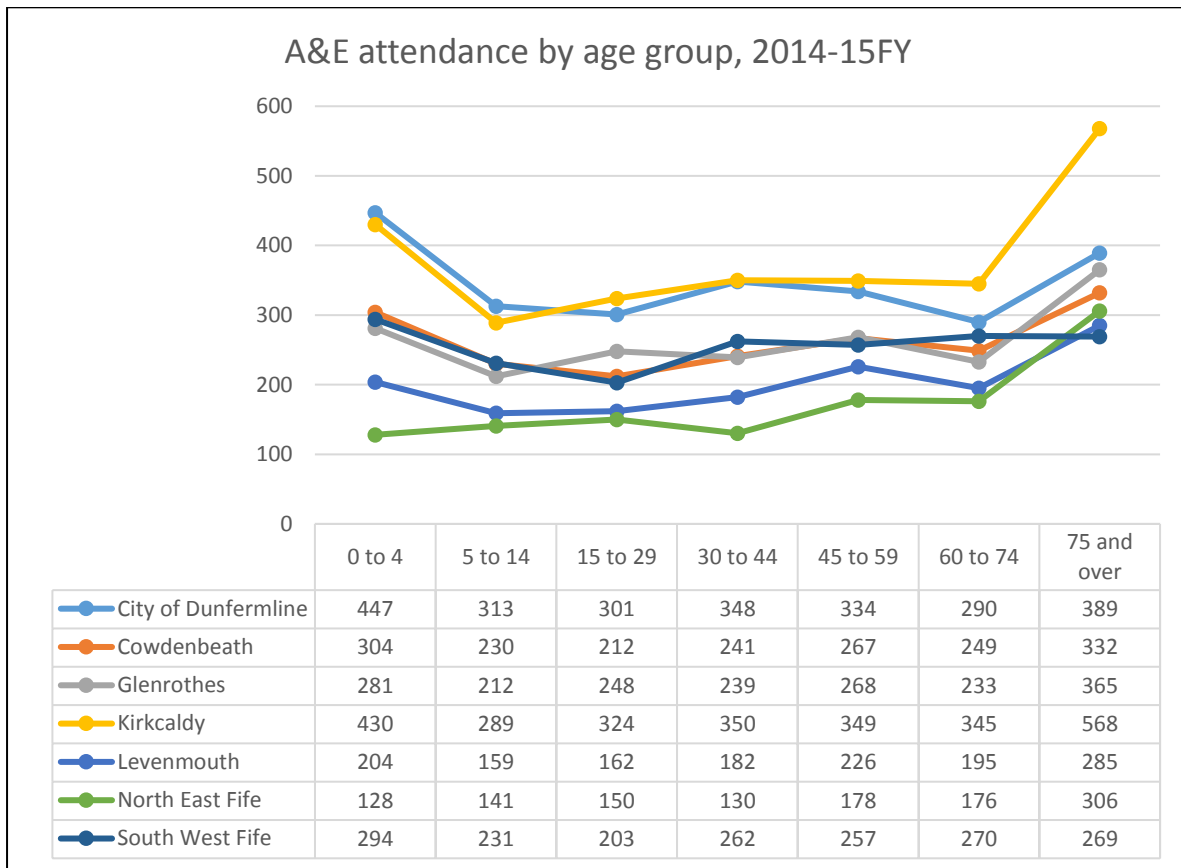
**Figure 5.18, Unintentional injury A+E attendance by age group, 2012/13-2014/15FY**

As figure 5.18 highlights, the primary age groups linked with unintentional injury A+E attendance within Fife are 0-4 and 75+. This will be heavily affected by the risk taking activities of young children (e.g. young children falling or sustaining injuries while learning to walk) and increased frailty in older pensioners.

The 0-4 age category is one of only two to have seen a reduction in overall A+E attendance over the three-year time period, with a net reduction of ten over this time. This contrasts with the 75+ age group, linked with an increase of 3,058 over the same period – the largest of any age group. As a result while the combined proportion of these two age groups remains similar over the period (increasing from 34.2% of the total to 34.7%), the proportion of attendances linked to 75+ increases from 17.2% to 18.8%.

This is representative of population change in Fife over this period. Between 2012 and 2014 the 0-4 population in Fife decreased by 514 (2.3%). Over the same period the 75+ population increased by 1,176 (+3.9%). Both the decrease in 0-4 and the increase in 75+ were greater than the equivalent Scotland-wide figures, suggesting that Fife has an ageing population.<sup>6</sup>

<sup>6</sup> The 0-4 population in Scotland decreased from 295,871 to 292,230 – a decrease of 1.2%. The 75+ population increased from 714,357 to 725,465 – an increase of 1.5%.

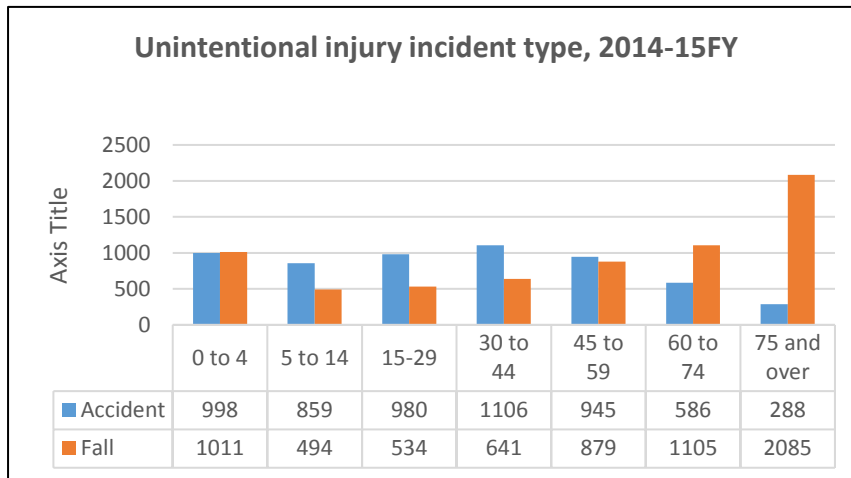


**Figure 5.19, Unintentional injury A+E attendance by age group, 2014-15FY**

As figure 5.19 highlights, the primary age categories linked with Fife A+E attendance for Unintentional Injuries are 0-4 (15.9% of total) and 75 and over (19% of total). Within this, there are some interesting differences across committee areas.

Dunfermline and South West Fife are the only two areas where the number of children (0-4) attending A+E is greater than the number of older pensioners (75+). Attendees aged 75+ account for 19% of Fife attendances, but only 16.1% in Dunfermline and 15% in South West Fife. In contrast, 25.3% of NEF attendances are from the 75+ age group, almost 4% above the next highest area (Kirkcaldy). NEF is also notable for a particularly low level of 0-4 attendances, at only 10.6% of the area total. The difference between 0-4 and 75+ admissions in NEF is the greatest for any area.

Accident type<sup>7</sup>



**Figure 5.20, Unintentional injury incident type, 2014-15FY**

Accidents and Falls have been focused on for 2014/15, due to these two incident types accounting for 97.7% of Fife Unintentional injury attendances.

It is apparent that falls are heavily linked with Fife's

older population, accounting for 63% of A+E attendance from the 60-74 age group, and 89% from the 75+ age group. This mirrors trends seen in emergency hospital admissions for older age groups, where 89% of admissions for the 75+ age group were linked to falls.

The decrease in fall attendances (-51%) between the 0 to 4 and 5 to 14 age groups far outstrips the decrease in accidents (-14%) for these ages, likely as a result of children learning to walk and being less vulnerable to their surroundings.

| Committee area name | 0 to 4 | 5 to 14 | 15 to 29 | 30 to 44 | 45 to 59 | 60 to 74 | 75 and over | Grand Total | % of Fife fall attendance |
|---------------------|--------|---------|----------|----------|----------|----------|-------------|-------------|---------------------------|
| City of Dunfermline | 175    | 82      | 79       | 86       | 119      | 167      | 317         | 1025        | 14.5                      |
| Cowdenbeath         | 154    | 66      | 70       | 98       | 122      | 165      | 293         | 968         | 13.7                      |
| Glenrothes          | 162    | 89      | 101      | 103      | 152      | 157      | 332         | 1096        | 15.5                      |
| Kirkcaldy           | 228    | 106     | 124      | 153      | 196      | 234      | 505         | 1546        | 21.9                      |
| Levenmouth          | 106    | 62      | 67       | 75       | 123      | 155      | 259         | 847         | 12                        |
| North East Fife     | 79     | 53      | 63       | 51       | 103      | 130      | 281         | 760         | 10.8                      |
| South West Fife     | 122    | 65      | 57       | 85       | 103      | 151      | 224         | 807         | 11.4                      |
| Grand Total         | 1026   | 523     | 561      | 651      | 918      | 1159     | 2211        | 7049        |                           |

**Figure 5.21, Fall A+E attendance by committee area age group, 2014-15FY**

<sup>7</sup> Data received from NHS Tayside specifies 'fall' but not 'accident'. Therefore, to ensure a fair comparison only NEF figures for the Queen Margaret and Victoria have been used for figure 5.20. Where falls have been considered in their own right, information from NHS Tayside has been included.

Figure 5.21 highlights how fall attendance is broken down among the Fife committee areas. Kirkcaldy is linked with the largest proportion of falls, with almost one quarter of the Fife total (23.4%). North East Fife is only linked with 4.2% due to the incomplete nature of its attendance records. However, owing to the age demographic within the area it is reasonable to assume that the true figure, particularly among the 75+ age group, will be much higher.

When the 0-4 age group is focused on, NEF is linked with the lowest proportion of falls for this age group – only 10% of NEF falls being linked to this age category. This is below all other areas, and significantly behind Dunfermline (17%) and South West Fife (15%) – the areas where falls linked to the 0-4 age group are most common.

#### Accident location

- **Care Homes** – Of the 307 incidents linked to Care Homes in 2014/15, 84 (27.4%) were in Kirkcaldy.
- **Garden** – Dunfermline was linked with 21.2% of Garden incidents. This was largely due to attendances categorised as 'accidents', with Dunfermline having 24.1% of the Fife total. The 5-14 age range are linked to the largest number of garden accidents in Dunfermline, and Fife as a whole. This may be due to children in this age range being increasingly likely to play without adult supervision, increasing the potential for accidents.
- **Home** – The 0-4 and 75+ age groups are most likely to be linked to accidents in the home, reflecting the fact that they are most likely to spend a greater proportion of their time there. Ages 1 and 2 are the age groups linked with the largest number of falls, again reflecting their progress towards full mobility and their desire to explore their surroundings.

### **Key points**

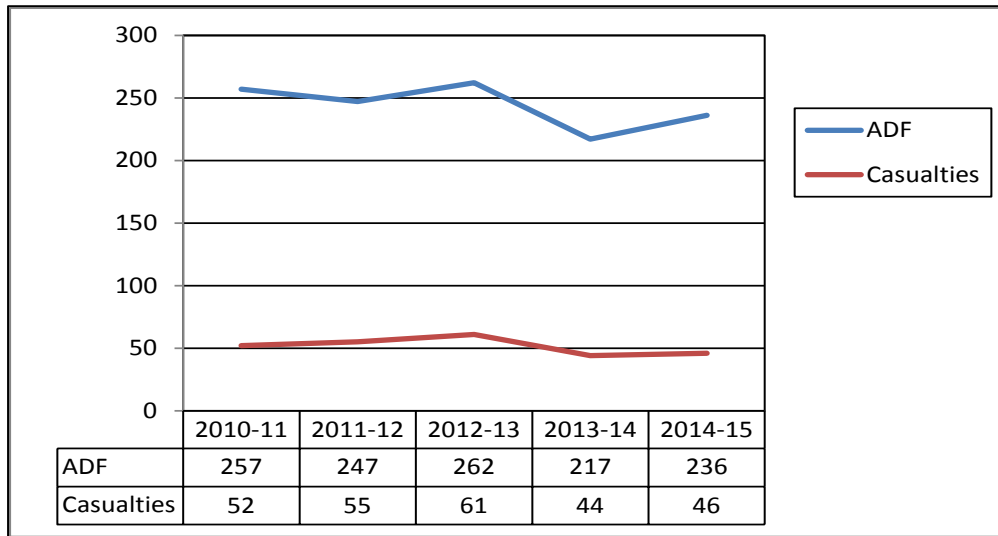
29. NEF contains 20% of the Fife population, yet is only linked with 9% of A+E attendances over the surveyed time period. It is likely that this proportion would increase if attendance information from the Adamson and Memorial Hospitals was secured.
30. Due to their status as the next largest committee areas and their proximity to the hospitals surveyed, Kirkcaldy (20.2% of attendees) and Dunfermline (18.7%) are linked with the largest number of attendees. Per population size, Cowdenbeath has a disproportionately large number of attendees.
31. The primary age groups linked with unintentional injury A+E attendance within Fife are 0-4 and 75+. Attendees aged 75+ accounted for 18.8% of Fife attendances in 2014/15. Dunfermline and South West Fife are the only two areas where the number of children (0-4) attending A+E is greater than the number of older pensioners (75+).
32. Accidents and Falls account for almost 98% of Fife Unintentional injury attendances.
33. Fall attendances are heavily linked with Fife's older population, accounting for 63% of A+E attendance from the 60-74 age group, and 89% from the 75+ age group in 2014-15FY.
34. Dunfermline and South West Fife are the areas with the highest proportion of falls linked to the 0-4 age group.
35. Of the 307 incidents linked to Care Homes in 2014/15, 84 (27.4%) were in Kirkcaldy. Dunfermline was linked with 21.2% of Garden incidents. The 0-4 and 75+ age groups are most likely to be linked to accidents in the home, reflecting the fact that they are most likely to spend a greater proportion of their time there.



e. Accidental dwelling fires<sup>8</sup>

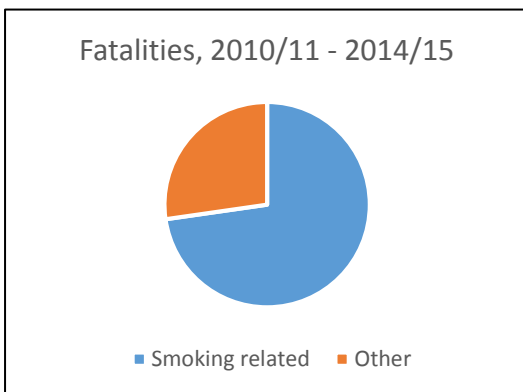
Scotland has shown a continued downward trend for Accidental Dwelling Fires (ADFs) over the last ten years. However, this should not detract from their seriousness: the consequences of this activity can be significant, with 24 of the total 29 dwelling fire fatalities in 2013/14 being started accidentally.

Per 100,000 dwellings Fife continues to show lower levels of ADFs (126.7) compared to the Scottish average (185.7). As figure 5.22 demonstrates, the proportion of ADF fires resulting in casualties has decreased between 2010-11 and 2014-15, with the 2014-15 figure a five year low of 19.5%.



5.22 – ADF (total and casualties) 2010-11 – 2014-15

|                             | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|-----------------------------|---------|---------|---------|---------|---------|
| <b>Fife fire Fatalities</b> | 2       | 3       | 2       | 2       | 2       |



Over the five year period there were 11 fatalities as a result of an ADF in Fife, 8 of which were categorised as smoking related.

<sup>8</sup> An accidental dwelling fire (ADF) is defined in the electronic Information Recording System (IRS) as fires which were ignited by accident, or where the cause of the fire was not known or unspecified.

| Committee Area  | Ward   | 2010-11    | 2011-12    | 2012-13    | 2013-14    | 2014-15    | Total       |
|-----------------|--|------------|------------|------------|------------|------------|-------------|
| Cowdenbeath     | The Lochs Ward                                   | 15         | 12         | 17         | 4          | 15         | 63          |
|                 | Cowdenbeath Ward                                 | 8          | 12         | 13         | 11         | 9          | 53          |
|                 | Lochgelly and Cardenden Ward                     | 8          | 12         | 9          | 10         | 8          | 47          |
| Dunfermline     | Dunfermline North Ward                           | 10         | 7          | 14         | 14         | 11         | 56          |
|                 | Dunfermline Central Ward                         | 9          | 6          | 11         | 14         | 15         | 55          |
|                 | Dunfermline South Ward                           | 14         | 7          | 12         | 10         | 8          | 51          |
| Glenrothes      | Glenrothes West and Kinglassie Ward              | 17         | 21         | 17         | 5          | 11         | 71          |
|                 | Glenrothes Central and Thornton Ward             | 11         | 11         | 10         | 10         | 13         | 55          |
|                 | Glenrothes North, Leslie and Markinch Ward       | 7          | 10         | 12         | 13         | 10         | 52          |
| Kirkcaldy       | Kirkcaldy East Ward                              | 18         | 17         | 10         | 12         | 17         | 74          |
|                 | Kirkcaldy Central Ward                           | 17         | 17         | 17         | 9          | 9          | 69          |
|                 | Kirkcaldy North Ward                             | 5          | 17         | 18         | 7          | 10         | 57          |
|                 | Burntisland, Kinghorn and Western Kirkcaldy Ward | 11         | 14         | 13         | 7          | 8          | 53          |
| Levenmouth      | Buckhaven, Methil and Wemyss Villages Ward       | 18         | 23         | 14         | 15         | 15         | 85          |
|                 | Leven, Kennoway and Largo Ward                   | 19         | 5          | 13         | 8          | 15         | 60          |
| North East Fife | East Neuk and Landward Ward                      | 9          | 6          | 8          | 13         | 5          | 41          |
|                 | Tay Bridgehead Ward                              | 13         | 6          | 7          | 10         | 5          | 41          |
|                 | Howe of Fife and Tay Coast Ward                  | 7          | 5          | 9          | 8          | 11         | 40          |
|                 | St Andrews Ward                                  | 8          | 4          | 5          | 9          | 8          | 34          |
|                 | Cupar Ward                                       | 5          | 8          | 7          | 7          | 3          | 30          |
| South West Fife | Inverkeithing and Dalgety Bay Ward               | 11         | 10         | 12         | 6          | 13         | 52          |
|                 | West Fife and Coastal Villages Ward              | 10         | 7          | 4          | 9          | 10         | 40          |
|                 | Rosyth Ward                                      | 7          | 10         | 10         | 6          | 7          | 40          |
| <b>Total</b>    |  | <b>257</b> | <b>247</b> | <b>262</b> | <b>217</b> | <b>236</b> | <b>1219</b> |

**Table 5.23 – Accidental dwelling fires ward breakdown, 2010-11 – 2014-15**

When a comparison is made between 2010-11 and 2014-15, there are three committee areas that show a reduction in ADFs. These are Kirkcaldy (51 to 44), Levenmouth (37 to 30) and North East Fife (42 to 32). In the 2014-15 fiscal year Levenmouth and Cowdenbeath display the highest level of activity per 10,000 population, at 8.0 and 7.9 respectively.

The Buckhaven, Methil and Wemyss Villages ward recorded the highest area total, with its 85 ADFs over the five year period accounting for 7% of the Fife total.

The Levenmouth area was also linked with the highest number of casualties stemming from Accidental Dwelling Fires. The Buckhaven, Methil and Wemyss Villages & Leven, Kennoway and Largo Ward accounted for 49 of 258 casualties (19.0%). These wards also reflected the highest number of fatalities (4 of 11).

There is evidence of a strong link between ADFs and deprivation. 141 casualties (54.7%) were recorded within the 20% most deprived datazones in Fife, and 7 fatalities. Comparatively, only 15 casualties (5.8%) were recorded in the 20% least deprived datazones in Fife (1 fatality).

### Property type

'Dwelling house - single occupancy' followed by 'purpose built flat/maisonette - multiple occupancy, up to 3 storeys' have consistently been the prominent property type for ADFs within Fife, reflecting common property types within the local authority area. Due to the increased number of fires the number of casualties in these property types, as expected, are also enhanced with 17.6% and 23.7% respectively.

| Property Categories   | 2010-11  | 2011-12  | 2012-13  | 2013-14  | 2014-15  | Total            |
|---|----------|----------|----------|----------|----------|------------------|
| Dwelling, Bungalow - single occupancy                               | 17 (6)   | 14 (4)   | 22 (5)   | 18 (7)   | 14 (6)   | <b>85 (28)</b>   |
| Dwelling, House - single occupancy                                  | 117 (28) | 107 (20) | 125 (21) | 110 (14) | 115 (18) | <b>574 (101)</b> |
| Dwelling, Self-contained Sheltered Housing                          | 11 (2)   | 10 (4)   | 9 (2)    | 9 (2)    | 8 (2)    | <b>47 (12)</b>   |
| Purpose Built Flat/Maisonette - multiple occupancy, 4-9 storeys     | 19 (1)   | 10 (3)   | 13 (2)   | 12 (4)   | 13 (4)   | <b>67 (14)</b>   |
| Purpose Built Flat/Maisonette - multiple occupancy, Up to 3 storeys | 84 (13)  | 97 (20)  | 76 (27)  | 56 (16)  | 75 (16)  | <b>388 (92)</b>  |

#### **5.24 – Property Type Linked to Increased Casualty**

Table 5.24 details the other property types that indicate higher risk, with a higher proportion of casualty resulting from ADF's. The larger number in each box is the total number of Accidental Dwelling Fires, with casualty figures presented in brackets beside them.

Of the 258 casualties over the five year period, 101 or 39.1% of casualties were recorded within a 'dwelling house - single occupancy' suggesting persons living alone or without dependents are more likely to be involved.

The property types typically linked to elderly accommodation - including dwelling, bungalow – single occupancy and self-contained sheltered housing - have a higher proportion of casualty with 32.9% and 25.5% respectively. This may be due to persons being vulnerable and at a higher risk of an ADF.

## Victims of ADFs

| Age Range    | 2010-11   |           | 2011-12   |           | 2012-13   |           | 2013-14   |           | 2014-15   |           | Total      |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
|              | Female    | Male      | Female    | Male      | Female    | Male      | Female    | Male      | Female    | Male      |            |
| 0 - 9        | 1         | 3         | 2         | 1         | 2         | 2         | 2         |           | 1         | 1         | 17         |
| 10 - 19      |           |           | 1         | 1         |           |           | 1         | 5         |           | 1         | 9          |
| 20 - 29      | 4         | 8         | 5         | 5         | 7         | 1         | 3         | 2         | 4         | 8         | 47         |
| 30 - 39      | 2         | 2         | 3         | 7         | 5         | 4         |           | 2         | 2         | 1         | 28         |
| 40 - 49      | 1         | 4         | 3         | 3         |           | 2         | 2         | 2         | 1         | 3         | 21         |
| 50 - 59      | 3         | 4         | 5         |           | 1         | 6         | 2         | 4         | 3         | 2         | 30         |
| 60 - 69      | 3         | 3         | 4         | 4         |           | 6         | 2         | 2         | 4         | 4         | 32         |
| 70 - 79      | 6         | 5         | 2         |           | 2         | 3         | 3         | 1         | 3         | 1         | 26         |
| 80 - 89      |           | 2         | 4         | 1         | 6         |           | 3         | 1         | 2         | 2         | 21         |
| 90 - 99      |           | 1         | 1         | 1         | 3         | 1         |           |           | 1         | 1         | 9          |
| Unknown      |           |           |           |           | 8         | 2         | 2         | 4         |           | 1         | 18         |
| <b>Total</b> | <b>20</b> | <b>32</b> | <b>30</b> | <b>23</b> | <b>34</b> | <b>27</b> | <b>20</b> | <b>23</b> | <b>21</b> | <b>25</b> | <b>258</b> |

Table 5.25 – Casualty Age Breakdown by gender \*peak gender age group for each fiscal year shaded yellow

Table 5.25 provides a breakdown of gender and age for all casualties over the 5 year period, highlighting a near even gender split. Both men and women are more likely to become a casualty between the ages of 20 and 29 years (47 or 18.2%), with men also vulnerable between 60 and 69 years (19 or 7.4%). 8 of the total 11 fatalities in the five year period were male. In addition, eight of the eleven fatalities were aged over 50, suggesting that older age groups may be more at risk from ADFs.

### Key points

36. Per 100,000 dwellings Fife continues to show lower levels of Accidental Dwelling Fires (ADFs) (126.7) compared to the Scottish average (185.7). The proportion of ADF fires resulting in casualties decreased between 2010-11 & 2014-15, with the 2014-15 figure a five-year low of 19.5%.
37. In the 2014-15 fiscal year Levenmouth and Cowdenbeath display the highest level of activity per 10,000 population, at 8.0 and 7.9 respectively. The Buckhaven, Methil and Wemyss Villages ward recorded the highest area total, with its 85 ADFs accounting for 7% of the Fife total.
38. 'Dwelling house - single occupancy' followed by 'purpose built flat/maisonette - multiple occupancy, up to 3 storeys' have consistently been the prominent property type for ADFs within Fife, reflecting the main property type within the local authority area.
39. Over the 5 year period analysed, there were 258 casualties resulting from ADFs in Fife. Of the total, 11 were categorised as fatalities. 101 or 39.1% of casualties were recorded within a 'dwelling house - single occupancy' suggesting persons living alone or without dependents are more likely involved.
40. Both men and women are more likely to become a casualty between the ages of 20 and 29 years (47 of 258, or 18.2%), increasing again in men between 60 and 69 years (19 or 7.4%). 8 of the total 11 fatalities in the five year period were male. Increased risk appears to be associated with older age bands – eight of the eleven fatalities being aged 50+.

## f. Water safety

### *National picture*

Research by the National Water Safety Forum shows that the number of drownings within Scotland has remained generally constant in recent years. When the four-year period 2010-2013 is examined on a UK basis to show the rates of fatalities per 100,000 capita, Scotland ranks higher than England, Wales and Northern Ireland, and also above the UK average.

While the direct economic costs of drowning incidents are unknown, recent studies have estimated that a single drowning can cost between £1 and £1.6 million. Drowning is primarily a male dominated phenomenon, with males accounting for over 80% of accidental drowning fatalities over this period.

Of the seven harbours in Fife, five (Pittenweem, St Monans, Wormit, Tayport and St Andrews) are in the North East Fife committee area, one in the Kirkcaldy area (Pettycur) and one in Levenmouth (West Wemyss). They are all owned by the council except for Tayport and West Wemyss (both private) and St Andrews (owned by a trust).<sup>9</sup>

In 2013 there were 381 drownings and water-related deaths from accidents or natural causes across the UK, with Scotland (56 deaths) being the region of the UK linked with the largest number. This amounted to 14.7% of such deaths in the UK, above Scotland's UK population share of 8.3%.<sup>10</sup>

While the 2013 figures do not break down incidents by location, some observations at a UK level can be made:

**Location of accident** – More than half of the 2013 deaths (227) were in inland waters, including rivers, lake and reservoirs. Fatalities at the sea, beach or shoreline accounted for 115 deaths. 22 deaths occurred at harbours, docks, marinas, and inland or coastal ports. 8 deaths occurred in the bath, 6 in swimming pools, and three in areas that were not normally watercourses (e.g. flooded land).

**Age of victim** – Males in the 20-24 age group accounted for the highest number of fatalities (31). Youths aged 0-19 accounted for 46 deaths, of which the largest percentage was teenagers aged 15 to 19 (27). 10 children aged 4 or under drowned.

**Time of year** – The summer months of July and August were linked with the most deaths, with 106 over the two months. Leading activities linked with deaths in this period suggest a link with people being near water in good weather, including people walking alongside water and falling in, swimming (predominantly in open water), and jumping into open water). Previous research by ROSPA has identified this summer peak, while also highlighting that incident patterns often reflect the life stage of the victim – children drowning early in the morning, teens after school, and older people in the evening.<sup>11</sup>

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<sup>9</sup> 'Water safety policy in Scotland – a guide' (ROSPA, 2014)

<sup>10</sup> 'UK water related fatalities report 2013' (Internet site: [www.nationalwatersafety.org.uk/waid/info/waid\\_fatalincidentreport\\_2013.xls](http://www.nationalwatersafety.org.uk/waid/info/waid_fatalincidentreport_2013.xls)). [Accessed on 29/06/2016]

<sup>11</sup> 'Delivering accident prevention at local level in the new public health system – Part 2: Accident prevention in practice' (ROSPA factsheet, 2013)

### *Fife picture*

In the last two years, two Fife youths have drowned at the Prestonhill quarry in Inverkeithing, a common location for local youths to congregate. In the aftermath of these incidents the Royal Life Saving Society UK, RNLI, Police Scotland and Scottish Fire and Rescue have been working together to increase awareness of water safety and drowning prevention across Fife. Among the activities undertaken by the group have been the delivery of water safety inputs to secondary schools across Fife.

#### **Key points**

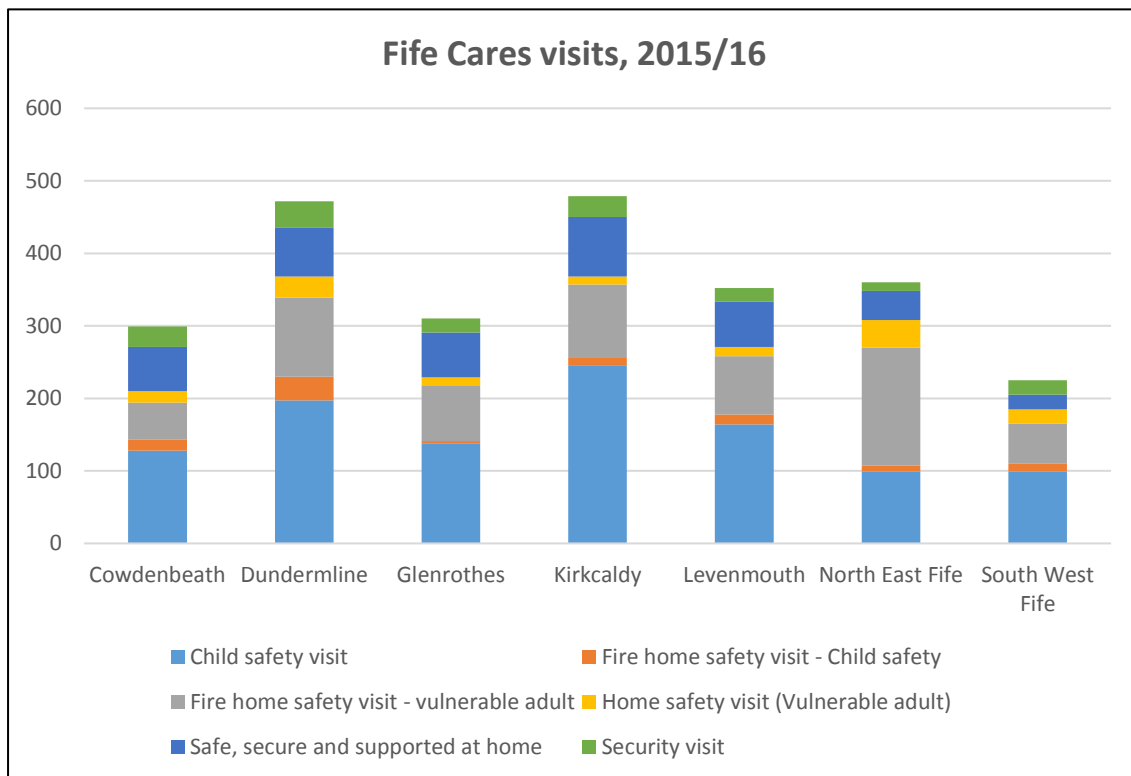
41. In 2013 there were 381 drownings and water-related deaths from accidents or natural causes across the UK, with Scotland (56 deaths) being the region of the UK linked with the largest number. This amounted to 14.7% of such deaths in the UK, above Scotland's UK population share of 8.3%.
42. Of the seven harbours in Fife, five (Pittenweem, St Monans, Wormit, Tayport and St Andrews) are in the North East Fife committee area, one in the Kirkcaldy area (Pettycur) and one in Levenmouth (West Wemyss). They are all owned by the council except for Tayport and West Wemyss (both private) and St Andrews (owned by a trust).
43. At UK level, males in the 20-24 age group accounted for the highest number of fatalities (31) in 2013. Youths aged 0-19 accounted for 46 deaths, of which the largest portion was teenagers aged 15 to 19 (27). Ten children aged 4 or under drowned.

## 6. Existing initiatives

### 1. Fife Cares

In the 2015/16 fiscal year, the Fife Cares service carried out 2497 visits across the seven Fife committee areas. Kirkcaldy and Dunfermline were linked with the largest total number of visits, but the types of visits in greatest demand differed over the seven areas. By visit type, the peak areas were as follows:

- **Child safety visit** – Kirkcaldy, 245 visits, 23% of child safety visit total.
- **Fire home safety visit: child safety** – Dunfermline, 33 visits, 34% of visit total.
- **Fire home safety visit: vulnerable adult** – North East Fife, 163 visits, 26% of visit total.
- **Home safety visit: vulnerable adult** – North East Fife, 38 visits, 27% of visit total.
- **Safe, secure and supported at home** – Kirkcaldy, 82 visits, 21% of visit total.
- **Security visit** – Dunfermline, 37 visits, 23% of visit total.



**Table 6.1, Fife Cares visits by Fife committee area, 2015/16**

There is some evidence of correlation between the Fife Cares visits carried out and the unintentional injury trends evident for Fife hospital admissions. Over 50% of Fife cares visits in Kirkcaldy concern child safety – the highest proportion of any area – reflecting the area’s strong link with child unintentional injury admissions. Similarly, North East Fife is the area linked with the largest proportion of visits for vulnerable adults, both for fire safety and home safety, perhaps linked to the significant elderly population resident in this committee area.