

# The Trend: High Risk Incidents

Total High Risk Incidents 2008/9 - 2010/11

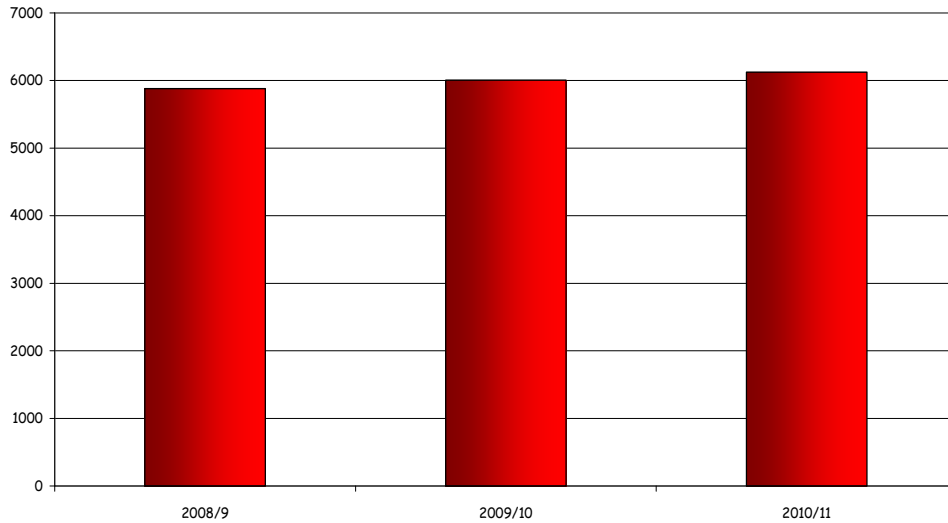


Figure 1: Number of High Risk Incidents Reported to and Recorded by WMFS (Including Over The Border Calls) 2008/9 - 2010/11

Breakdown of High Risk Category by Incident Type 2010/11

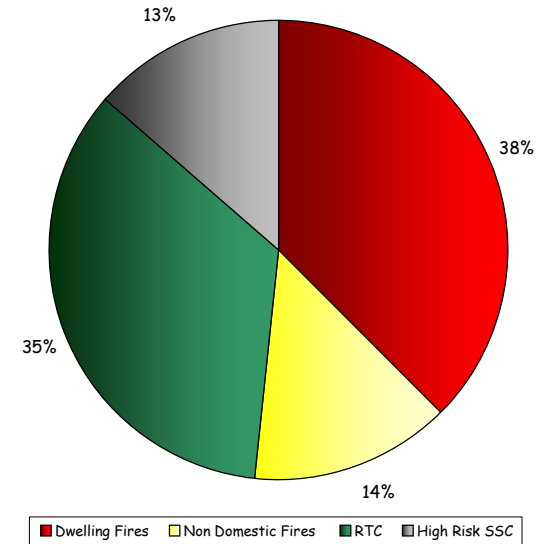


Figure 2: Total High Risk Incidents Reported to and Recorded by WMFS (Including Over The Border Calls) 2010/11 Breakdown by Risk Category

- High risk incidents have accounted for approximately 16% of total incidents and this has remained stable over the period analysed. Such incidents have increased however, (by 4.15%) at the end of 2010/11 when compared to financial year 2008/9. This is an increase that has been sustained since 2008/9 at a rate of 2% year on year.
- The majority of incident types within the high risk category have displayed a decrease when 2010/11 is compared to 2008/9, the most significant being high risk special service calls<sup>1</sup> (-6% reduction over 3 years), followed by total dwelling fires (-3% reduction in 2010/11 after a 1% increase in 2009/10) and non domestic fires (a -1.6% reduction in 2010/11 after a 10% increase in 2009/10). The only high risk incident sub category to have increased over the three years and thus responsible for pushing overall levels of high risk incidents up, is that of Road Traffic Collisions (RTCs). By the end of 2010/11 RTCs had experienced a 21% increase and accounted for 35% of all high risk incidents as opposed to 30% when compared to 2008/9. This is trend that has been maintained since 2008/9, the rate of which appears to be increasing (from a 9% rise 2009/10 compared to 2008/9 to 11% in 2010/11 compared to 2009/10).

<sup>1</sup> Special Service Call - Non fire related emergency for example rescue from entrapment

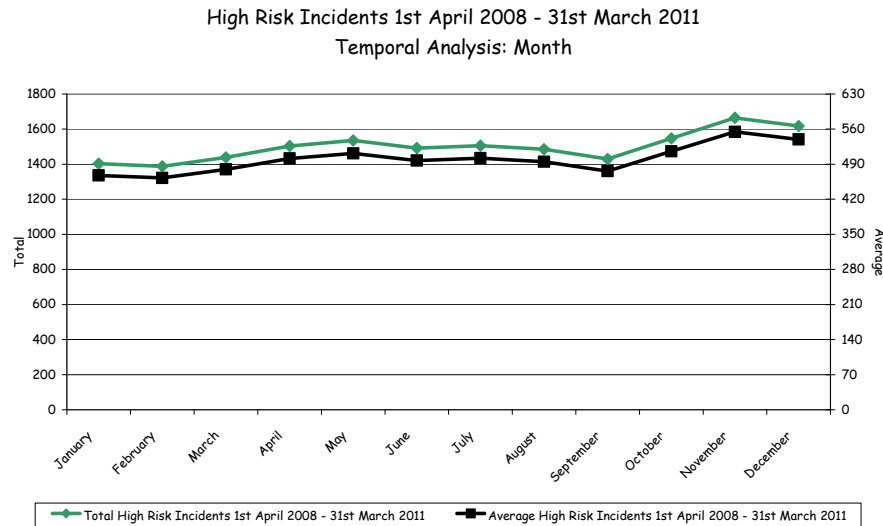


Figure 3: Total High Risk Incidents Reported to and Recorded by WMFS (Including Over The Border Calls) 2008/9 - 2010/11 Temporal Analysis by Month

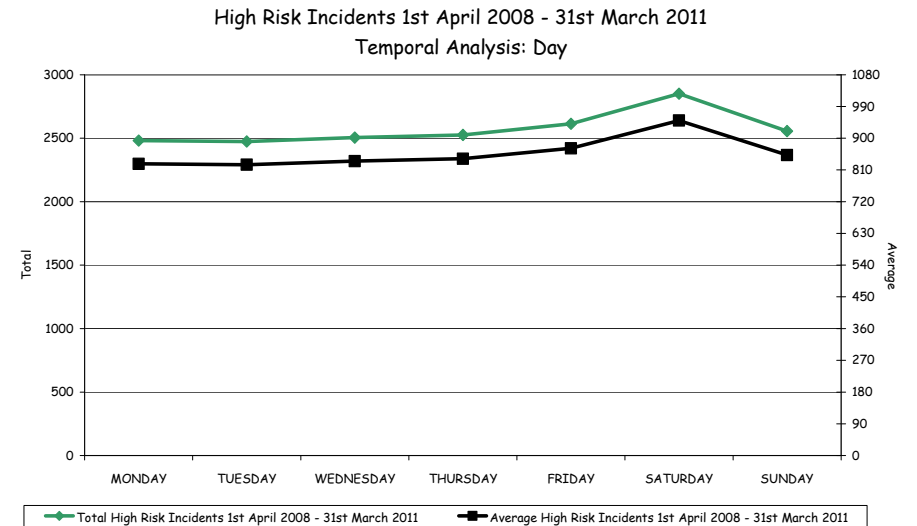


Figure 4: Total High Risk Incidents Reported to and Recorded by WMFS (Including Over The Border Calls) 2008/9 - 2010/11 Temporal Analysis by Day

➤ Total high risk incidents reported to WMFS remain stable January-August and then peak to their highest levels September - November. As with total incidents, levels of high risk incidents are consistent throughout the week experiencing a slight increment over the weekend periods. Reported high risk incidents rise steadily from 05:00 hours, plateauing between 09:00- 10.00hrs. From this point levels begin to rise again, plateauing for a second time between 12.00 - 14.00hrs and then increasing for a final time, reaching their highest point between 17.00 - 18.00 hours.

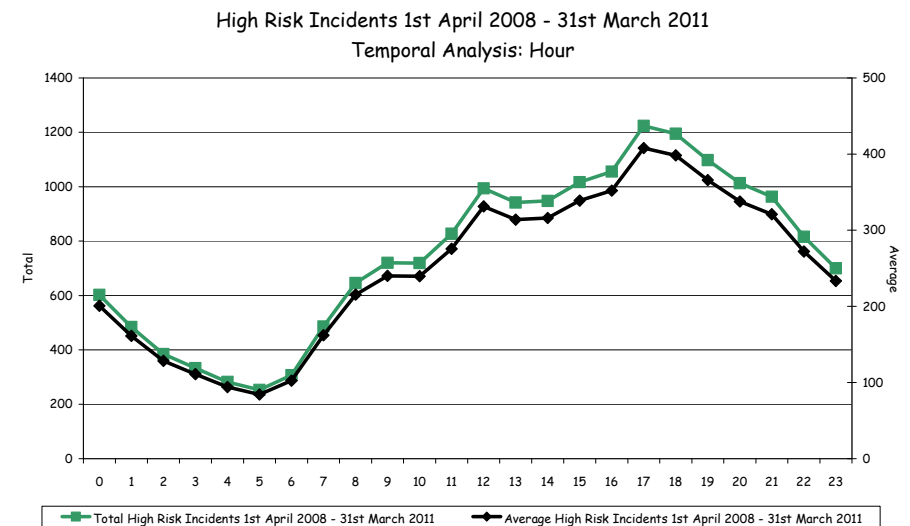
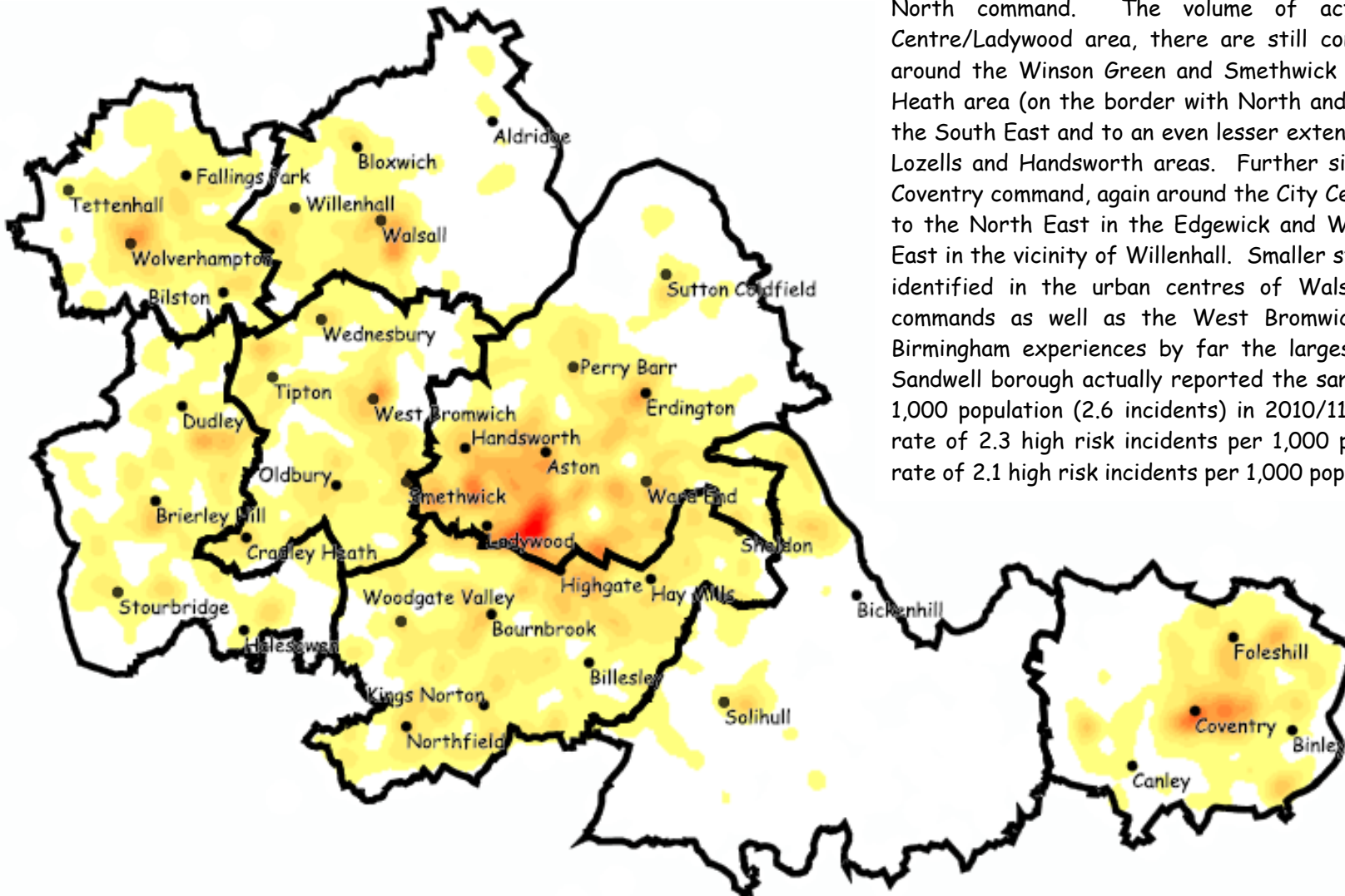


Figure 5: Total High Risk Incidents Reported to and Recorded by WMFS (Including Over The Border Calls) 2008/9 - 2010/11 Temporal Analysis by Hour

## Strategic Hotspot Areas 2008/9 - 2010/11: High Risk Incidents

A geographical analysis of high risk incident data between 2008/9 - 2010/11 indicates that the prime strategic high risk areas are located in Birmingham North command. The volume of activity is located in the City Centre/Ladywood area, there are still concentrations of activity however around the Winson Green and Smethwick areas to the West, in the Small Heath area (on the border with North and South Birmingham commands) to the South East and to an even lesser extent to the North into the Newtown, Lozells and Handsworth areas. Further significant hotspots are located in Coventry command, again around the City Centre and Hillfields area as well as to the North East in the Edgewick and Wood End areas and to the South East in the vicinity of Willenhall. Smaller strategic high risk hotspots can be identified in the urban centres of Walsall, Wolverhampton, and Dudley commands as well as the West Bromwich area of Sandwell. Although Birmingham experiences by far the largest volume of high risk incidents, Sandwell borough actually reported the same rate of high risk incidents per 1,000 population (2.6 incidents) in 2010/11, closely followed by Coventry (a rate of 2.3 high risk incidents per 1,000 population) and Wolverhampton (a rate of 2.1 high risk incidents per 1,000 population).



## Commentary: High Risk Incidents

- RTCs are the only sub category of high risk incidents to have experienced consistent increments since 2008/9. The analysis of RTCs contained here relates to those incidents reported to Fire Control and thus recorded by WMFS. Although this paints a picture of demand on WMFS resources, it should be viewed with caution as it does not account for those RTC incidents where WMFS have not been notified or requested to attend. RTC hotspots are better identified through the use of West Midlands Police data as they record every RTC in the West Midlands metropolitan area where there is an injury.
- The majority of RTCs that WMFS have been called to respond to in 2010/11 (75%) have necessitated a 'services only' response. These are incidents where WMFS have attended the scene of an RTC, but have not been required to carry out an emergency rescue function and have instead performed tasks such as rendering the RTC site safe, mopping up any fuel spillages or washing down roads. Although numbers of such incidents have increased (by over 100 reports), the proportion of total RTCs 'services only' requests account for has remained relatively stable over the three year period analysed, averaging approximately 75%.
- 19% of RTCs attended by WMFS in 2010/11 involved the extrication of individuals trapped in vehicles and have therefore represented a potential risk to life. Although this is broadly consistent with the three year proportional average (18%), numbers of recorded extrications using specialist equipment are gradually increasing (from 338 in 2008/9 to 418 in 2010/11). This equates to 80 RTCs reported to WMFS that have necessitated extrications, a rise of 24%
- A geographical analysis of extrications indicates that the most significant concentration is focussed around the main arterial routes into central Birmingham, although a further hotspot can also be identified in the Hillfields vicinity in Coventry command. All command areas with the exception of Dudley and Wolverhampton reported higher levels of RTCs necessitating extrications in 2010/11 compared to 2008/9. The greatest increment was experienced in Birmingham North command (a 61% rise), followed by Birmingham South (53%), Coventry (52%), Sandwell (21%), Solihull (15%) and Walsall (5%). The number of people killed or seriously injured in RTC's in the West Midlands is historically reducing.
- The remainder of the RTC incident category can be classified as a 'no services required' response. This is where WMFS resources turn out to an incident, but our services are not required after a full assessment of the collision site. Numbers and proportions of these occasions are dropping from 197 (10.71% of all RTCs) in 2008/9 to 125 in 2010/11 (5.7%)

- Accidental dwelling fires have displayed a small increase (approximately 1%) when 2010/11 is compared to 2008/9. Analysis conducted by WMFS comparing 2010/11 to 2009/10 indicates that accidental dwelling fires increased by 0.6% in the last year, largely as a result of a peak in December 2010 attributable to ".....an increase in heating fires due to the cold weather." Furthermore, the report states that the causes of accidental dwelling fires in 2010/11 has changed little. The prime cause remains cooking fires (52%), followed by electrical supply and wiring, 12% and smoking materials, 10%. The number of fatalities directly attributable to accidental dwelling fires has reduced by approximately -31% in 2010/11 compared to the previous year (from 16 to 11) as have the number of injuries sustained in accidental house fires (by -4% from 99 to 95). Again, as with RTCs, WMFS/partnership prevention based activity as well as lifestyle changes will more than likely have contributed to these reductions. A lack of associated qualitative intelligence however, means that it is very difficult to quantify the impact of these interventions effectively.
- Arson fires in dwellings have, by comparison, reduced by -18% over the three years analysed in this report despite a slight increase over the past year (1.5% or 6 incidents). Levels in 2010/11 were pushed up, by a high number in November 2010 seen around bonfire night. The same analysis revealed that almost a fifth of these incidents were in unused / unoccupied properties. This has remained consistent over the last two years.
- Accidental fires in non domestic premises have also shown a slight increase when 2010/11 is compared to 2008/9 (approximately 1%,) although such incidents have undergone a decrease of -6.5% in 2010/11 compared to the previous financial year. Non domestic fires caused by arson have reduced by -8% over the three year period analysed in this report with a -20.4% being experienced in 2010/11 alone.
- Despite reducing numbers of fires in non domestic premises, a re-emerging trend in 2010/11 that is continuing into 2011/12 is that of fires involving the waste management and recycling industry<sup>2</sup>. It is not possible to obtain a wholly accurate view of the total number of incidents occurring at such sites (due to inconsistencies in incident descriptions/terminology as well as the range of property types affected<sup>3</sup>), it is estimated however, that there were approximately 32 incidents of this nature in 2010/11 compared to 22 in 2009/10 (an increase of 45%). Although these fires do not account for a significant volume of incidents, fires are often significant in scale, requiring the commitment of large numbers of firefighting personnel, vehicles and equipment. This involves a direct cost to the organisation and an indirect risk to local communities, as fire cover for high risk incidents may not be immediately available. Further to this, water supplies are often poor or water may be needed in large volumes, requiring water relay or the use of the High Volume Pumping equipment and the commitment of resources that these entail. A steering group, composed of key stakeholders across the brigade has been created in order to identify solutions to some of the problems described and deliver appropriate interventions.
- The largest proportion of high risk special service calls in 2010/11 were composed of attendances at gas leaks (31%, this is consistent with the previous year), followed by incidents involving the rescue/release of persons, (21% compared to 27% in 2009/10) and the administering of first aid 15% in 2010/11 compared to 17% the previous year.

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<sup>2</sup> This was originally identified as a cause for concern in 2009. It should be noted that incidents at these types of premises have the potential to impact on both the high and medium risk incident categories.

<sup>3</sup> There is no marker included within the current incident recording system that allows such incidents to be accurately extracted; incidents of this nature can only be identified on a record by record basis, necessitating the reading of individual incident logs.