

**To: All Members of the Community Safety and
Protection Committee
(and any other Members who may wish to attend)**



The Protocol and Procedure for visitors attending meetings of Merseyside Fire and Rescue Authority can be found by clicking [here](#) or on the Authority's website:

<http://www.merseyfire.gov.uk> - About Us > Fire Authority.

**J. Henshaw
LLB (Hons)
Clerk to the Authority**

Tel: 0151 296 4000
Extn: 4113 Kelly Kellaway

Your ref:

Our ref HP/NP

Date: 22 July 2015

Dear Sir/Madam,

You are invited to attend a meeting of the **COMMUNITY SAFETY AND PROTECTION COMMITTEE** to be held at **1.00 pm** on **THURSDAY, 30TH JULY, 2015** in the Liverpool Suite at Merseyside Fire and Rescue Service Headquarters, Bridle Road, Bootle.

Yours faithfully,

Clerk to the Authority

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MERSEYSIDE FIRE AND RESCUE AUTHORITY
COMMUNITY SAFETY AND PROTECTION COMMITTEE

30 JULY 2015

AGENDA

Members

Linda Maloney (Chair)
Jimmy Mahon
Barbara Murray
Steve Niblock
Mike Kearns
James Roberts
Paul Tweed
Marianne Welsh

1. Preliminary matters

Members are requested to consider the identification of:

- a) declarations of interest by individual Members in relation to any item of business on the Agenda
- b) any additional items of business which the Chair has determined should be considered as matters of urgency; and
- c) items of business which may require the exclusion of the press and public during consideration thereof because of the possibility of the disclosure of exempt information.

2. Minutes of the Previous Meeting (Pages 7 - 10)

The Minutes of the Previous Meeting, held on 16th April 2015, are submitted for approval as a correct record and for signature by the Chair.

3. Performance Against New AFA Protocol (Pages 11 - 44)

(CFO/064/15)

To consider report CFO/064/15 of the Deputy Chief Fire Officer concerning the performance of the new Automatic Fire Alarm (AFA) Policy since its introduction in October 2012.

This report is also to be considered by the Performance and Scrutiny Committee on 23rd July 2015.

4. **ANALYSIS OF FATALITIES IN ACCIDENTAL DWELLING FIRES BETWEEN 1ST APRIL 2014 AND 31ST MARCH 2015** (Pages 45 - 66)

(CFO/068/15)

To consider Report CFO/068/15 of the Deputy Chief Fire Officer, concerning scrutiny of performance and detailed analysis relating to the Accidental Dwelling Fire Fatalities that occurred during 2014/15.

5. **10 YEAR ACCIDENTAL DWELLING FIRE FATALITY REPORT** (Pages 67 - 92)

(CFO/069/15)

To consider Report CFO/069/15 of the Deputy Chief Fire Officer, concerning performance and analysis regarding Accidental Dwelling Fire Fatalities between 2005/06 and 2014/15.

6. **Primary Authority Scheme 2015** (Pages 93 - 96)

(CFO/067/15)

To consider Report CFO/067/15 of the Deputy Chief Fire Officer, concerning formalisation of partnership arrangements enacted under the Primary Authority Scheme (PAS) with two retail organisations; A.S.Watson (Superdrug PLC, Savers Health & Beauty, The Perfume Shop), and Ladbrokes Gaming PLC.

7. **Sprinklers Initiative Update** (Pages 97 - 102)

(CFO/072/15)

To consider Report CFO/072/15 of the Deputy Chief Fire Officer concerning the progress of the initiative to fit sprinklers in purpose built blocks of flats, and to seek approval from Members to extend the scope of this scheme to other types of premises in Merseyside that house vulnerable residents.

If any Members have queries, comments or require additional information relating to any item on the agenda please contact Committee Services and we will endeavour to provide the information you require for the meeting. Of course this does not affect the right of any Member to raise questions in the meeting itself but it may assist Members in their consideration of an item if additional information is available.

Refreshments

Any Members attending on Authority business straight from work or for long periods of time, and require a sandwich, please contact Democratic Services, prior to your arrival, for arrangements to be made.

MERSEYSIDE FIRE AND RESCUE AUTHORITY

COMMUNITY SAFETY AND PROTECTION COMMITTEE

16 APRIL 2015

MINUTES

Present: Cllr Linda Maloney (Chair) Councillors Robbie Ayres, Roy Gladden, Barbara Murray, Steve Niblock and Tony Robertson

Also Present:

Apologies of absence were received from: Cllr John Kelly and Cllr Jimmy Mahon

1. Preliminary matters

Members considered the identification of declarations of interest, any urgent additional items, and any business that may require the exclusion of the press and public.

Resolved that:

- a) no declarations of interest were made by individual Members in relation to any item of business on the Agenda
- b) no additional items of business to be considered as matters of urgency were determined by the Chair; and
- c) no items of business required the exclusion of the press and public during consideration thereof because of the possibility of the disclosure of exempt information.

2. Minutes of the Previous Meeting

The minutes of the previous meeting, held on 23rd October 2014, were approved as a correct record and signed accordingly by the chair.

3. Update on Estates Projects

(CFO/028/15)

Members considered report CFO/028/15 of the Deputy Chief Executive concerning progress on the Prescot merger and to request delegated authority.

The committee were informed of the progress of the merger to date and in particular of emergency service partners desirous to co-locate at the new site.

The project has been subject to delay for a variety of reasons and it was owing to the need for the project to move forward, without further delays, that Members were asked to grant delegated authority to the Chief Fire Officer.

Resolved that:

1. the contents of this report be noted; and,
2. delegated authority be granted to the Chief Fire Officer (CFO) in consultation with the Chair, to negotiate the purchase of additional land with Knowsley MBC; and,
3. delegated authority be granted to the CFO to undertake all actions necessary to minimise the delay to the project; and,
4. the CFO be directed to bring back a 'go/no go' report as soon as practical with an agreed cost plan, including partner contributions.

4. FIRE FIT UPDATE REPORT 2014/15

(CFO/027/15)

Members considered report CFO/027/15 of the Deputy Chief Fire Officer concerning the continued development of Fire Fit activity across Merseyside for the financial year 2014/15 in keeping with the Delivery Plan for 2013/16.

Members considered the positive impact of the Fire Fit brand in young people's lives and were congratulatory of the recognition the scheme has received nationally; and also internationally from the International Olympics Committee.

Resolved that:

1. The content of the report be noted; and,
2. Thanks be recorded for all Officers involved in the delivery of Fire Fit programmes and initiatives in Merseyside.

5. Road Safety Report 2014

(CFO/029/15)

Members considered Report CFO/029/15 of the Deputy Chief Fire Officer concerning performance in relation to road safety engagement and education during 2014/15.

Members highlighted and queried the difference showing in the numbers of people engaged with across the districts. St Helens was showing a higher number of people engaged with than in other districts.

It was explained that MFRA has a range of Road Safety packages that are offered to all districts. Some packages, such as Drive to Arrive, reach more people but also have a stronger message which some Councils may consider too hard hitting for the target audience. In the case of St Helens, their Council were keen that the Drive to Arrive package be delivered, and consequently more people were engaged with in that district.

The Committee expressed a wish to compare the numbers of people engaged with against the ages of people involved in Road Traffic Collisions (RTCs) in order to determine whether the delivery of these programmes are having an effect on the targeted demographic. Members were advised that MFRA only record data on RTCs they attend, and do not record demographical data, however negotiations are ongoing to gain access to Police held Stats 19 data.

Resolved that:

1. the content of the report be noted; and,
2. the contribution made by the Road Safety Team and Operational crews to improve road safety across Merseyside, be noted.

Close

Date of next meeting Thursday, 30 July 2015

Signed: _____

Date: _____

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MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	PERFORMANCE & SCRUTINY COMMITTEE		
DATE:	23 JULY 2015	REPORT NO:	CFO/064/15
PRESENTING OFFICER	DCFO GARRIGAN		
RESPONSIBLE OFFICER:	PHIL GARRIGAN	REPORT AUTHOR:	GM GUY KEEN
OFFICERS CONSULTED:	SM CHRIS HEAD, WM DAVE MARTIN,		
TITLE OF REPORT:	PERFORMANCE AGAINST NEW AFA PROTOCOL		

APPENDICES:	APPENDIX A:	UWFS DATA 2010 - 2015
	APPENDIX B:	IMPACT ASSESSMENT
	APPENDIX C:	EQUALITY IMPACT ASSESSMENT
	APPENDIX D:	DRAFT SERVICE INSTRUCTION 0039

Purpose of Report

1. To update Members on the performance of the new Automatic Fire Alarm (AFA) Policy since its introduction in October 2012.
2. This report will be considered by the Performance and Scrutiny Committee on 23rd July 2015 and Members will be updated on any comments or recommendations arising from that Committee's scrutiny of this item.

Recommendation

3. That Members;
 - a. Note the progress of the new AFA Policy in improving the Services performance in reducing Unwanted Fire Signals (UwFS);
 - b. Note the rationale and approve the risk assessment that underpins the protocol;
 - c. Note the targeted approach to be adopted in relation to prolific offenders which it is envisaged will contribute to further improvements in performance.
 - d. Consider whether it would be appropriate to undertake a review, to explore the experience of other Fire and Rescue Authorities who have adopted a charging policy in respect of the potential for such to positively influence repeat offenders of UwFS and the financial impact to those Authorities.
 - e. Consider any additional recommendations arising from the Performance and Scrutiny Committee's consideration of this report.

Introduction and Background

4. In the 12 months leading up to 1st November 2012 Merseyside Fire and Rescue Authority (MFRA) attended 5394 Unwanted Fire Signals (UwFS) (Appendix A.).
5. To reduce this burden and thereby enable MFRA to maintain appliance availability for operational response, operational training, prevention and protection activity and preparedness work, the Authority adopted a risk based response to UwFS.
6. Prior to implementation MFRA ran a comprehensive consultation and communication exercise. As a result of stakeholder feedback MFRA implemented the new protocol in 2 stages in order to allow responsible persons sufficient time to adjust their arrangements.
7. **Stage 1: 1st November 2012:** Appliances no longer attended non domestic premises on activation of an Automatic Fire Alarm (AFA) system during daytime hours unless a backup call had been received. Attendance to incidents at night time remained unchanged.
8. **Stage 2: 1st November 2013:** Stage 1 of the day time policy was extended to night time so that Appliances did not attend non domestic premises during night time unless a backup call was received. Sleeping risk premises such as hospitals, hotels and hostels were exempted from Stage 2.
9. The consultation and communication exercise was repeated prior to the implementation of Stage 2 and Protection officers continue to take opportunities to refresh stakeholders awareness of the current AFA protocol and the rationale that supports it, for example through a presentation by the Head of Protection at the NHS Estates and Advisory Group on 24th April 2015.
10. Performance at both stages of the Protocol was very positive (Appendix A.).
 - a. **Stage 1** Reduction of 50.43% to 2674 Incidents in the 12 month period up to 1st November 2013 compared to the same period in the previous year.
 - b. **Stage 2** Reduction of 21.05 % to 2111 Incidents in the 12 month period up to 1st November 2014 compared to the same period in the previous year.
11. Current performance has seen an expected marginal increase in UwFS from 1st November 2014 to 31st March 2015 of 7.35% compared to the same period the previous year. This was to be expected given the increase in Careline systems over the period and still represents a reduction of 60.1% compared to the same period before the Policy was introduced.
12. Protection officers have reviewed the dip in performance and can confirm that the marginal increase is a result of external factors (see paragraph 18) and are not as a result of any relaxation or complacency by MFRA.

13. Actions taken to date to resolve these increases are described later in this report.

National and Regional Influences

14. Our UwFS Protocol has received significant interest from Tyne and Wear, West Midlands and the Isle of Man Fire and Rescue Services, resulting in a number of visits to Merseyside.
15. Chief Fire Officers Association (CFOA), North West Region Protection Task Group recognises the unprecedented success of the MFRA protocol within the region and is actively exploring a common regional response to AFA actuations based on the Merseyside model.
16. The 2014 CFOA Guidance for the Reduction of False Alarms and UwFS's is the latest publication issued by CFOA to support the reduction of the significant number of UwFS across England and Wales.
17. The MFRA Protocol is generally consistent with the CFOA Guidance, in all but 3 areas:
 - c. Call filtering process
 - d. Investigation of an alarm during an emergency call
 - e. Providing Feedback to Fire Alarm Monitoring Organisations (FAMOs)
18. An Impact Assessment Report detailing a full breakdown of the consistency of the revised MFRA protocol (SI 0039) against the new CFOA Guidance is provided at Appendix B.
19. Full compliance with the CFOA guidance would significantly compromise the effectiveness of the current AFA response protocol and would have a substantial negative effect on UwFS performance.

Performance Issues

20. As cheaper Fire Alarm Systems become available and the number of premises with AFA systems increases due to requirements to comply with current legislation and the increase in the use of Careline systems as local authorities' encourage more independent living, then the number of calls from these systems will also increase. Combined with older systems becoming less reliable the number of AFA calls received by MFRS and the number of UWFS we attend will also increase.
21. Analysis of top offenders since 1st November 2014 shows that the largest premises type is sheltered accommodation. Of the top 10 Offenders in this period 6 were Sheltered Accommodation accounting for 48% of UWFS.
22. Due to complex nature of underlying reasons for high level of AFA Actuations in top offender premises, progress has proved to be slow. Liverpool Protection Department are currently working with one of the top offender's; Concert

Square 34 Wood Street Liverpool to reconfigure their alarm system to reduce UWFS.

23. District Protection Departments currently target repeat offenders and look to provide advice in reducing UWFS.

Improving Performance

24. It is proposed to standardise the process of targeting repeat offenders across Merseyside with a three step approach:

- Step 1. Informal letter and meeting to discuss issues and suggest improvements. If no improvement is made move to:
- Step 2. Audit of premises under Fire Safety Order, issue of Action Plan. If no improvement is made move to:
- Step 3. Consider, where appropriate Enforcement Action under the Regulatory Reform (Fire Safety) Order 2005.

25. At a point in the future the Authority may wish to consider extending the current protocol of not responding to additional types of sleeping accommodation between the day time hours 07:30 – 19:30 (currently Hotels; Hospitals and Hostel's) to include Sheltered Housing Schemes where the Fire Safety Order 2005 applies and the Responsible Person has overall control of the premises and a legal responsibility to comply with the Order. This option has been reviewed by Protection Officers during the preparation of this report and consequently is not recommended at this point as fire safety risks clearly outweigh the perceived benefits.

26. Alternatively the Authority may choose to consider reviewing it's position to charging premises for attendance at UWFS under the Fire and Rescue services Act 2004 (FRSA) as amended by the Localism Act 2011. A review could consider the experience of other Fire and Rescue Authorities who have adopted a charging policy and the potential for such to positively influence repeat offenders of UwFS. Any review could also explore the evidence from those Authorities that have adopted a charging model, to consider whether aspects of the Authorities perceived rationale for not charging are borne out in experience. That is, the cost associated with setting up a charging system and the time taken to recover the debt would pose a financial risk to the Authority.

Equality and Diversity Implications

27. An Equality Impact Assessment has been completed and is at Appendix C to this report.

Staff Implications

28. Targeting of repeat offenders through the use of Protection Officers does not create any staff implications as this would not extend beyond the normal expectations of their role.

29. Reducing time spent on attending UWFS releases operational personnel to complete risk critical training and Prevention / Protection roles

Legal Implications

30. After consideration of QC reports commissioned by other FRS in respect of AFA protocols, it can be confirmed that there are not likely to be any legal liabilities placed on MFRA as a consequence of the AFA Protocol (although there can be no absolute guarantee that a challenge will not be made – as everyone has a right to do so) provided that MFRA ensure a risk assessment and rationale behind its own decisions are published.
31. A detailed rational and risk assessment are detailed in Appendix D to this report.

Financial Implications & Value for Money

32. Research shows that from mobilisation to an appliance booking available again, takes on average 22 minutes per UwFS. Assuming four persons per appliance this equates to 1.4 'staff' hours of lost productivity per appliance per UwFS. From 1st November 2014 to 31st March 2015 MFRS have responded to 876 UwFS, 60 more incidents compared to the same period the previous year when the Service attended 816 incidents. These 60 incidents result in a total of $1.4\text{hrs} \times 60 = 84$ hours of lost productivity per Appliance.

Risk Management, Health & Safety, and Environmental Implications

33. Service Instruction 0039 Risk Based Response to Automatic Fire Alarm Actuations including updated Risk Assessment is added as Appendix D.

Contribution to Our Mission: *Safer Stronger Communities – Safe Effective Firefighters*

34. Based on the risk assessment attached to this report at Appendix D, the existing protocol provides a better allocation of resources to protect against risks to the community and to firefighters than could be obtained if the Authority was to comply fully with the new CFOA guidance.
35. Targeting of repeat offenders through a formal process would look to achieve further reductions in UWFS and reduce the impact on business continuity through disruption caused by false alarms. This in turn would reduce risk to firefighters and the public by reducing the number of appliance movements on the roads of Merseyside and providing greater Appliance availability to emergency incidents.

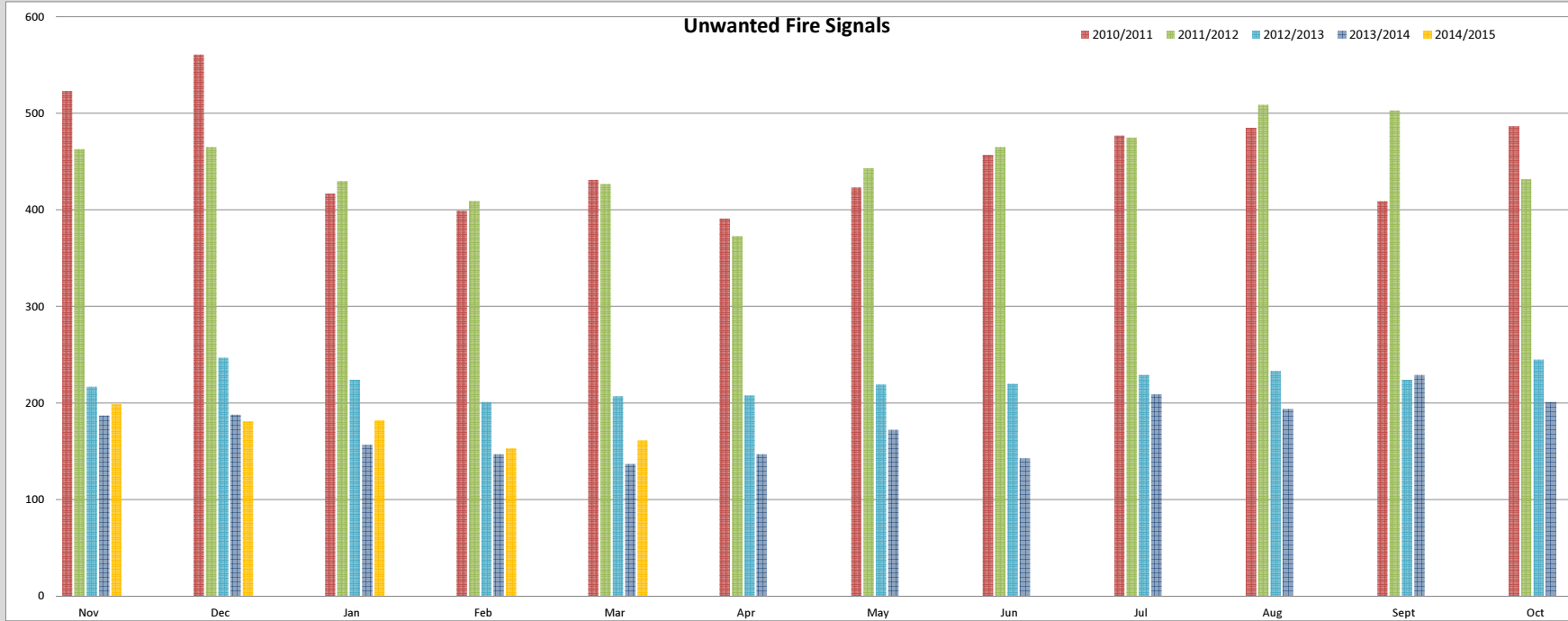
BACKGROUND PAPERS

CFO/015/12 Unwanted Fire Signals

GLOSSARY OF TERMS

AFA	Automatic Fire Alarm
UWFS	Unwanted Fire Signal.
MFRA	Merseyside Fire and Rescue Authority
MFRS	Merseyside Fire and Rescue Service
CFOA	Chief Fire Officers Association

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Total	Reduction
2010/2011	523	561	417	399	431	391	423	457	477	485	409	487	5460	
2011/2012	463	465	430	409	427	373	443	465	475	509	503	432	5394	-2.25%
2012/2013	217	247	224	201	207	208	219	220	229	233	224	245	2674	-50.43%
2013/2014	187	188	157	147	137	147	172	143	209	194	229	201	2111	-21.05%
2014/2015	199	181	182	153	161								876	7.35%



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IMPACT ASSESSMENT REPORT: Merseyside Fire and Rescue Authority Response to the Chief Fire Officers Association Guidance for the Reduction of False Alarms and Unwanted Fire Signals

1. Purpose

The purpose of this document to highlight and rationalise inconsistency between the 2014 Chief Fire Officers Association (**CFOA**) **Guidance for the Reduction of False Alarms and Unwanted Fire Signals** (UwFS)¹ and the Protocol adopted by Merseyside Fire and Rescue Authority (MFRA). Where inconsistency cannot be rationalised this document will set actions to address the issue.

Objectives

- To identify and summarise the key aspects of the CFOA guidance;
- To identify where MFRA protocol is consistent with the key aspects of this guidance;
- To identify where MFRA protocol is not consistent with the guidance tool kit;
- To consider any legal risks to MFRA arising from inconsistency with the guidance;
- To identify the rationale behind aspects of the MFRA protocol that are not consistent with the guidance tool-kit; and
- To make recommendations on actions required to address risk concerns.

These objectives will be considered in relation to the Service Instruction SI 0039 “Risk Based Response to Automatic Fire Alarm (AFA) Actuations” which details the MFRA Protocol for responding to AFA actuations [Appendix A] and advice obtained from Queen’s Counsel and shared by other Fire and Rescue Authorities.

¹ For the purposes of brevity the ‘CFOA Guidance for the Reduction of False Alarms and Unwanted Fire Signals’ will be referred to as ‘the 2014 CFOA Guidance’ within this report.

2. Background

The 2014 CFOA Guidance for the Reduction of False Alarms and UwFS's is the latest publication issued by CFOA to support the reduction of the significant number of UwFS across England and Wales. Industry and partners including representatives from Business and Alarm Receiving Centres have been involved in the development of this guidance.

Previous national publications on this issue include:

1. "A guide to reducing the number of false alarms from fire-detection and fire-alarm systems" published by the Office of the Deputy Prime Minister in 2004.
2. "CFOA Protocol for the Reduction of False Alarms & Unwanted Fire Signals" 2010.

The main challenges that these publications sought to tackle include:

- Reducing the burden and cost of UwFS on the FRS;
- Reducing the burden and cost of UwFS on Businesses and Organisations;
- Providing (as far as reasonably practical) consistency in approach between FRA's across England and Wales.

The 2014 CFOA Guidance recognises that local priorities of individual FRS's will impact upon the ability of the FRS sector as a whole to deliver a consistent approach and therefore *"the guidance provides a "Tool Kit" approach for FRS to formulate their local strategies and policies and provides options for dealing with poor performance"*[p. 5].

3. 2014 Guidance Tool Kit



The Tool Kit has 6 stages [p. 10-13]:















- A. Highlighting the problem of UwFS and False Alarms from AFA Systems
- B. Prevention of false alarms
- C. Confirmation of the cause of alarm before calling the FRS
- D. Call handling by the FRS
- E. Investigation and follow up of false alarm calls
- F. Stakeholder Engagement

The following section will now identify the level of consistency between the MFRA protocol and the guidance detailed in the 6 stages above.

Level of Consistency

The following table identifies the level of consistency via means of a traffic light system where:

-  Consistent
-  Not consistent

A. Generic & specific campaigns to highlight the duties for and impact of UwFS	
B.1. Design, installation & commissioning of AFA systems in line with the relevant code of practice	
B.2. Providing advice and guidance on the maintenance & management of fire alarm systems	
C. (i). A fire alarm actuation should be investigated before the FRS is called	
C. (ii). Calls from high reliability systems (co-incidence detection & sprinklers) should receive an immediate response	
C. (iii). FAMO's should instigate a call back procedure.	
C. (iv). Care homes should be excluded from call filtering.	
D. (i). Call filtering process – mobilise PDA for fire to a confirmed fire.	
D.(ii). Call filtering process – mobilise PDA for AFA (reduced attendance) where cause of AFA is unknown.	
D. (iii). Call filtering process – non-response to a confirmed false alarm.	
D. (iv). FRS must not recommend the investigation of an alarm during an emergency call.	
E. (i). FRS consider providing feedback to FAMO's on the causes of alarm signals and the outcome of incidents.	
E. (ii). FRS to advise Responsible Persons on measures to prevent false alarms.	
F. FRS engage with key stakeholders to influence attitudes on AFA systems and repeat false alarms	

4. Liability Considerations²

Other Fire and Rescue Authorities have obtained Counsel's advice with reference to Fire and Rescue Service response to calls for assistance (2009) and CFA Guidance (2011) in relation to Automatic Fire Alarms and kindly shared this advice with MFRA.

This advice confirms that:

- Under the Fire and Rescue Services Act, 2004, there is no duty on a F&RA to answer a call for assistance nor take care to do so (court of appeals decision in Capital and Counties PLC v Hampshire CC (1997)).
- CFA Guidance and Protocols pertaining to this subject are not of statutory status. However it is advised that if this Guidance is not to be followed then there must be good reasons put forward as to why not. In addition a risk assessment should also be undertaken.

There are not likely to be legal liabilities to the way that MFRA approach this issues and its own Protocol (although this cannot be an absolute guarantee that no one will make a challenge – as everyone has a right to do) if MFRA ensure a risk assessment and reasons behind its own decisions are published.


² This section has been provided by Janet Henshaw, Solicitor to MFRA.

5. Comparison of MFRA Protocol and the CFA 2014 Guidance

Areas Not Consistent

The aim of this section is to highlight the areas of the 2014 CFA where the MFRA AFA Response Protocol is not compliant and then explain the justification for the non-compliance.

D.(ii). Call filtering

D.(ii). Call filtering process – mobilise PDA for AFA (reduced attendance) where cause of AFA is unknown. 

The MFRA protocol does not mobilise an attendance to an AFA where the cause is unknown. MFRA mobilise the full risk based attendance where there is a confirmed fire or signs of fire, however the 2014 CFA Guidance recommends that *“no emergency response... should only be applied if there is experience of persistent false alarms from specific premises”* [p14].

Justification:

Greater risk to the Community of Merseyside and to operational response personnel and resources (see risk assessment at section 6).

Where the responsible person has cause to believe that the MFRA AFA Response Protocol (of not mobilising an attendance to an AFA where the cause is unknown) may create a situation outside of the control of their fire risk assessment and hence put persons at risk from fire, then the responsible person is eligible to apply for an exemption from this aspect of the protocol.

D.(iv). Investigation of Alarm

D. (iv). FRS must not recommend the investigation of an alarm during an emergency call. 

The MFRA call-challenge protocol requires the caller to investigate the cause of the alarm and only to call back in the event that a fire or signs of fire are confirmed.


Justification:

To follow this guidance would undermine the effectiveness of the MFRA AFA Protocol which would have a direct impact upon performance and therefore increase risk to the Community and to operation response personnel. The investigation does not require the caller or any other person to put themselves at risk by entering any room affected by fire or products of fire, the MFRA protocol only requires them to confirm that there is a fire or signs of fire (see risk assessment at section 6).

The MFRA requirement for investigation is no different to the process detailed in the 2014 CFA Guidance: *'Dependent on the findings of a premises fire risk assessment, the fire safety arrangements in a building should include having a system in place to check the area where the alarm has been initiated. This will confirm at an early stage if there is a fire or the cause of the false alarm..... The arrangements should be included in the fire risk assessment, fire safety policy and emergency plan for the building and will be dependent on the building, its occupancy and use... If a call is placed via the services of a FAMO and no on-site filtering is employed, consideration should be made to establishing a call-back confirmation by the FAMO before alerting FRS'* (Page 11).

Where the responsible person has cause to believe that the MFRA AFA Response Protocol (of requiring an investigation to confirm a fire or signs of fire) may create a situation outside of the control of their fire risk assessment and hence put persons at risk from fire, then the responsible person is eligible to apply for an exemption from this aspect of the protocol.

E.(i). Feedback to FAMOs

E. (i). FRS consider providing feedback to FAMO's on the causes of alarm signals and the outcome of incidents. 

MFRA have attempted to engage with FAMO's however to date it has not proved possible to provide feedback to FAMO's.

Justification:

MFRA have made numerous attempts to engage with the FAMO's however they have failed to respond to our requests and invitations.

6. Risk Assessment

Risks, Mitigation and Control Measures

SIGNIFICANT RISKS	MITIGATING FACTORS	CONTROL MEASURES
<p>Delay in responding to a fire as a result of MFRA not responding to an AFA where at the time of the call no fire or signs of fire were confirmed.</p> <p>(i) Therefore increased risks to:</p> <ul style="list-style-type: none"> > Persons affected by fire; > Fire crews due to fire growth. > Property > Business Continuity. 	<p>a. A review of previous incidents of fire in Merseyside over the 5 year period immediately prior to the current AFA Protocol confirmed that in the event of any significant fires at premises with AFA systems, the Service received numerous calls confirming a fire within the same time period as the actuation of the alarm;</p> <p>b. The greatest likelihood of a fire not being confirmed would be during night-time hours when less people are likely to be present in an alert state and therefore able to make an emergency call.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol Communication Strategy 2. MFRA AFA Protocol Automatic Exemption protocol 3. MFRA AFA Protocol Exceptional Exemption protocol 4. Risk critical training of Operational Personnel.
<p>Delay in responding to a fire as a result of MFRA operational response resources being committed to incidents that later prove to be UwFS.</p> <p>(ii) Therefore increased risks to:</p> <ul style="list-style-type: none"> > Persons affected by fire; > Fire crews due to fire growth. > Property > Business Continuity. 	<p>a. Prior to the introduction of the new AFA Protocol in November 2012 MFRA were experiencing a growing trend in UwFS. During 2010, 1st January 2010 – 31 December 2010 there were 5801 UwFS (4064 to Non Residential premises, 1737 to Residential premises) therefore having 9,069 appliance mobilisations to false alarms at premises which had a ‘Responsible Person’. This has a direct affect upon the availability of nearest appliances to attend a real incident and therefore delays response times thus endangering lives of persons and property.</p> <p>b. Government financial reforms have resulted in MFRA reducing it’s operational fleet from 42 to 28 pumping appliances, further cuts in 2015-17 will result in a number of station closures and mergers which will decrease this further and by 2020 it is anticipated that MFRA will only have 20 fire appliances and 18 fire stations. This will significantly increase the likelihood and risk of appliance availability being lost due to attendance at UwFS</p> <p>c. Feedback from 2 periods of consultation, (May 2011 & Nov. 2011) conducted by Opinion Research Services “The forum unanimously rejected the policy of treating all AFA’s as emergencies. There was a general feeling that this pattern of response is wasteful and diverts emergency resources from more important incidents as well as fire prevention work and training”.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy. 3. Risk critical training of Operational Personnel.

<p>(iii) Road risk from emergency response mobilisations to responding fire crews and other road users</p>	<p>MF&RS attendance at 5801 UwFS is equivalent to: - 12,779 'blue light' mobilisations - 12,779 return journeys = 25,558 occasions other road users, pedestrians and fire crews are unnecessarily exposed to potential dangers in RTC's.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy
<p>(iv) Increased risk to residents in Merseyside due to reduced Prevention and Protection activities.</p>	<p>The average attendance to an UwFS = 2.23 Fire appliances (2/3 appliances per call); Average time taken to respond, manage and return = 22.34 minutes; From 5802 UwFS, the hours of productivity which can be better utilised for training, community safety activity etc. totals over 20,000 hours.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy
<p>(v) Risks to persons investigating the actuation of a fire alarm</p>	<p>The new AFA response protocol requires callers at non-exempted premises to investigate the actuation of their fire alarm and confirm the existence of a fire or signs of fire.</p>	<ol style="list-style-type: none"> 1. Responsible Persons are required to have in place a suitable and sufficient fire risk assessment that covers all 'relevant persons', including employee's. This must include the management of their fire alarm system and therefore they are required to ensure that their personnel have sufficient supervision, information and training to ensure their safety from fire. 2. MFRA AFA Protocol Communication Strategy 3. Training made available (at cost) for the safe investigation of AFA 4. Advice contained within section C of the 2014 CFA Guidance.
<p>(vi) Increased risk to operational fire crews due to reduction in risk critical training.</p>	<p>The average attendance to an UwFS = 2.23 Fire appliances (2/3 appliances per call); Average time taken to respond, manage and return = 22minutes 34seconds; From 5801 UwFS, the hours of productivity which can be better utilised for training, community safety activity etc. totals over 20,000 hours.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy

Risk Conclusion

In respect of a decision to respond or not to unconfirmed AFA's, either way the Authority has to accept risks to the community and to firefighters.

If MFRA continue to apply the current protocol of non-response to unconfirmed AFA actuations there are risks that could arise from delayed response in the event of a fire, albeit the experience in Merseyside demonstrates that only a small proportion (as low as 5%) of AFA actuations occur as a result of an actual fire and where this occurs the Service has quickly received back-up calls.

Alternatively, if MFRA reintroduce a response to unconfirmed AFA's there are still risks that could arise from delayed response in the event of a fire, however in these circumstances the risks would arise as a result of the Authority's shrinking operational response resources being unavailable to attend real emergencies due to being committed to response to AFA actuations. In addition to this risk would also be increased to both the Community of Merseyside and to Firefighters as the consequential resource drain from commitment to prevention, protection and safety critical operational training.

Therefore, when the risks are considered in aggregate, the response to unconfirmed AFA actuations (where a fire or signs of fire remain unconfirmed) significantly outweighs the risks from non-attendance.

Recommendations

The comparison of the MFRA AFA Response Protocol to the latest CFOA guidance (see sections 3 and 5) demonstrates that we remain compliant with all but 3 areas (D(ii), D(iv) and D(v)).

However, the justifications for compliance with D(ii), D(iv) and D(v) (see section 5) demonstrate that compliance would significantly compromise the effectiveness of the current AFA response protocol and based upon the evidence, would have a substantial negative effect on UwFS performance.

Therefore as a consequence of the risk conclusion and the justifications for variance from the CFOA guidance, this report recommends that **MFRA should continue to pursue the current AFA protocol including the aspects of the protocol that are not consistent with the 2014 CFOA Guidance.**

As part of the control measures MFRA should continue to review this protocol and the risk assessment on an annual basis.

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Merseyside Fire and Rescue Service
Equality Impact Assessment Form

Title of policy:	Unwanted Fire Signal Reduction Policy
Department:	Community Fire Protection
Date:	06.05.2015
1: What is the aim or purpose of the policy	
<i>This should identify "the legitimate aim" of the policy (there may be more than one)</i>	
<p>To further reduce the number of Unwanted Fire Signals (UwFS) received and responded to by Merseyside Fire and Rescue Service by advice to premises and Formal Action under the Regulatory Reform (Fire Safety) Order 2005</p> <p>To ensure the most vulnerable people within our community are not disadvantaged by the further development of this strategy</p>	
2: Who will be affected by the policy?	
<i>This should identify the persons/organisations who may need to be consulted about the policy or procedure and its outcomes (There may be more than one)</i>	
<p>Strategic Management Group Fire Authority Business Community Regional UwFS Group</p>	
3. Monitoring	
<i>Summarise the findings of any monitoring data you have considered regarding this policy. This could include data which shows whether the policy is having the desired outcomes and also its impact on members of different equality groups.</i>	
What monitoring data have you considered?	What did it show?
Data compiled from incidents recorded on Vision Boss are collated to provide UWFS Performance figures	<p>Stage 1 UWFS Protocol Reduction of 50.43% to 2674 Incidents in the 12 month period up to 1st November 2013 compared to the same period in the previous year</p> <p>Stage 2 Reduction of 21.05 % to 2111 Incidents in the 12 month</p>

	<p>period up to 1st November 2014 compared to the same period in the previous year.</p> <p>Current performance has seen a marginal increase in UWFS from 1st November 2014 to 31st March 2015 of 7.35% compared to the same period the previous year. This is a very modest increase and still a reduction of 60.1% compared to the same period before the protocol was introduced.</p>
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<p>4: Research</p> <p><i>Summarise the findings of any research you have considered regarding this policy. This could include quantitative data and qualitative information; anything you have obtained from other sources e.g. CFOA/CLG guidance, other FRSs, etc</i></p>	
<p>What research have you considered?</p> <p>2014 Chief Fire Officers Association (CFOA) Guidance for the Reduction of False Alarms and Unwanted Fire Signals (UwFS)</p>	<p>What did it show?</p> <p>. MFRA Protocol is generally consistent with the CFOA Guidance in all but 3 areas:</p> <ul style="list-style-type: none"> • . Call filtering process • Investigation of an alarm during an emergency call • Providing Feedback to Fire Alarm Monitoring Organisations (FAMOs)
<p>5. Consultation</p> <p><i>Summarise the opinions of any consultation. Who was consulted and how? (This should include reference to people and organisations identified in section 2 above) Outline any plans to inform consultees of the results of the consultation</i></p>	
<p>What Consultation have you undertaken?</p> <p>Merseyside Fire and Rescue Service hosted 2 Consultation events in September 2013 to consult with Stakeholders and Alarm Receiving Centres as to implementation of Stage 2 of the protocol</p>	<p>What did it say?</p> <p>In summary, affected organisations recognised the reality faced by MFRs and its need to reduce UWFs, concern was raised over sleeping risk at night time and the short time scale afforded to implementation of Stage 2.</p>

6. Conclusions

Taking into account the results of the monitoring, research and consultation, set out how the policy impacts or could impact on people from the following protected groups? (Include positive and/or negative impacts)

(a) Age

Proposed action is against the Responsible Person for premises, even where the premises is involved in the care or accommodation of particular age groups, children's homes or sheltered accommodation for example, this should not have a disproportionate impact. Formal action is aimed at ensuring that premises are safer from the risk of fire and comply with legislation; this would be a positive impact

(b) Disability including mental, physical and sensory conditions)

Persons with disability will not face any negative impact, as in (a) Formal action is aimed at ensuring that premises are safer from the risk of fire and comply with legislation; this would be a positive impact

(c) Race (include: nationality, national or ethnic origin and/or colour.

No perceived negative or positive impact, Protection Department is in the process of collecting Equality and Diversity Data to assess whether Fire Safety activity is affecting any protected groups disproportionately.

(d) Religion or Belief

No perceived negative or positive impact, Protection Department is in the process of collecting Equality and Diversity Data to assess whether Fire Safety activity is affecting any protected groups disproportionately

(e) Sex (include gender reassignment, marriage or civil partnership and pregnancy or maternity

No perceived negative or positive impact, Protection Department is in the process of collecting Equality and Diversity Data to assess whether Fire Safety activity is affecting any protected groups disproportionately

(f) Sexual Orientation

No perceived negative or positive impact, Protection Department is in the process of collecting Equality and Diversity Data to assess whether Fire Safety activity is affecting any protected groups disproportionately.

(g) Socio-economic disadvantage

It is possible that less economically successful and premises run on a non profit making basis (hospices for example) may face costs in improving their automatic

fire alarm systems and fire procedures.

7. Decisions

If the policy will have a negative impact on members of one or more of the protected groups, explain how the policy will change or why it is to continue in the same way. If no changes are proposed, the policy needs to be objectively justified as being an appropriate and necessary means of achieving the legitimate aim set out in 1 above.

Community Fire Protection will act consistently and proportionally in accordance with the Regulators Code to see that any protected group are supported and assisted as much as possible .

Fire Safety activity is aimed at supporting premises to operate safely and reduce the risk of fire. Advice given to premises will approach reduction of UWFS in this way, only considering enforcement action when other approaches have not been successful.

8. Equality Improvement Plan

List any changes to our policies or procedures that need to be included in the Equality Action Plan/Service Plan.

Action Planned	Responsibility of	Completed by

For any advice, support or guidance about completing this form please contact the DiversityTeam@merseyfire.gov.uk or on 0151 296 4237

The completed form should be emailed to the Diversity Team at the above address for inclusion on the Diversity Action Group Agenda



Service Instruction 0039

Risk Based Response to Automatic Fire Alarm Actuations

Document Control

Description and Purpose

This document is intended to give guidance to all personnel on the Services response to Automatic Fire Alarms (AFA) and Unwanted Fire Signals (UwFS).

Active date	Review date	Author	Editor	Publisher
		SM Chris Head	GM Guy Keen	
Permanent	x	Temporary	If temporary, review date must be 3 months or less.	

Amendment History

Version	Date	Reasons for Change	Amended by
1.1	10.07.10	Changes to procedure	SMD 2960 Taylor
2.0	28.09.12	Edited and amended by AM Myles Platt (pre-consultation)	WM Martin
	14.11.12	Feedback from draft consultation	GM Keen
2.1	22.11.12	Error correction in Appendix A	GM Keen
2.2	30.04.13	Amends to procedure for fire crews to Educate & Inform	GM Keen
2.3	26.02.15	Annual Review / Issue of revised national guidance	GM Keen

Risk Assessment (if applicable)

Date Completed	Review Date	Assessed by	Document location	Verified by(H&S)
November 2010	30.04.2013	SM Longshaw		

Equalities Impact Assessment

Initial	Full	Date	Reviewed by	Document location
	xxx	10/01/2012	Ustar Miah	

Civil Contingencies Impact Assessment (if applicable)

Date	Assessed by	Document location

Related Documents

Doc. Type	Ref. No.	Title	Document location

Contact

Department	Email	Telephone ext.
Community Fire Protection		

Target audience

All MFS	X	Ops Crews	Fire safety	Community FS
Principal officers		Senior officers	Non uniformed	

Relevant legislation (if any)

Fire and Rescue Services Act 2004
Regulatory Reform (Fire Safety) Order 2005

Definition

When an Automatic Fire Alarm (AFA) actuates for any reason other than a fire condition, this is referred to as a false alarm. The point at which the Fire and Rescue Service is requested and responds to a false alarm, is referred to as an Unwanted Fire Signal (UwFS).

Introduction

UwFS have an adverse impact on the economy and business continuity due to disruption caused in the public and private sectors, the effect on the commercial sector alone in lost time, business disruption and productivity is estimated, nationally, to be in excess of £1 billion each year.

Historically, MF&RS have responded to all AFA actuations with the full risk assessed Pre-Determined Attendance (PDA) to the premises. Emergency response to UwFS adds to the disruption by delaying the investigation process and therefore increasing the time to confirming any false alarm and then repopulating the premises.

There is no legal responsibility on MF&RS to respond to calls originating from an AFA system to establish if there is a fire. The Regulatory Reform (Fire Safety) Order 2005 (the Fire Safety Order) states that the '*Responsible Person*'¹ at the premises is legally responsible and must have in place a Fire Risk Assessment (FRA) that details, amongst other measures, what actions are to be taken upon actuation of the AFA system. It is not sufficient that the FRA relies upon the FRS to investigate the reason for the actuation of the AFA system but the FRA should include action to notify the FRS via the 999 system as soon as a fire, or physical signs of fire, are confirmed.

Despite the best endeavours of the Service, the percentage of AFA actuations which are confirmed as UwFS had continued to rise under the previous protocol (pre-November 2012). This trend is unsustainable given the increasing financial challenges and consequential risks placed upon MF&RS, its stakeholders and the community of Merseyside.

Risk Based Approach

In respect of a decision to respond or not to unconfirmed AFA's, either way the Authority has to accept risks to the community and to firefighters.

Non-response to unconfirmed AFA actuations presents some risks that could arise from delayed response in the event that a fire has occurred, albeit the experience in Merseyside demonstrates that only a small proportion (as low as 5%) of AFA actuations occur as a result of an actual fire and where this occurs the Service has quickly received back-up calls.

Alternatively, if MF&RS reintroduce a response to unconfirmed AFA's there are still risks that could arise from delayed response in the event of a fire, however in these circumstances the risks would arise as a result of the Authority's shrinking operational response resources being unavailable to attend real emergencies due to being committed to response to AFA actuations. This risk would also be increased to both the Community of Merseyside and to Firefighters as the consequential drain from prevention, protection and safety critical operational training.

Therefore, when the risks are considered in aggregate, the response to unconfirmed AFA actuations (where a fire or signs of fire remain unconfirmed) significantly outweighs the risks from non-attendance.

A full risk assessment complete with mitigation and control measures is detailed at [Appendix C](#).

¹ The 'Responsible Person' is defined position within the Fire Safety Order

Protocol:

- MF&RS will no longer provide an emergency response to fire calls generated by AFA systems unless a call is received via the 999 system, confirming a fire, or physical signs of fire, at the premises in question. This protocol will apply 24 hours a day unless an exemption is granted.
- Premises with AFA systems configured to 'double-knock' principles as defined in the MF&RS definition of double knock alarm systems (see [Appendix A](#)) will receive a full emergency response on activation of the second 'knock'.

Exemptions

Automatic Exemptions

- **All single private domestic dwellings and all dwellings where the responsibility for the safety of the occupier rests with the individuals who reside there, will automatically BE EXEMPTED from this policy.**
- **Sleeping risk premises are automatically exempt between night time hours from 19:30 to 07:30.**
- All premises that have a reliable AFA system meeting the MF&RS definition of 'double knock' (see [Appendix A](#)). Where a 'double knock' system develops a trend of UwFS the automatic exemption status of the concerned premises may be reviewed and in the absence of a satisfactory resolution, may be revoked.

Exceptional Exemptions

This protocol allows a further exemption process for premises that do not fit the automatic exemptions criteria: Any Responsible Person that deems that their premises have exceptional circumstances, due to a fire risk assessment which relies on MF&RS responding to investigate fire alarm actuations in order to ensure the safety of occupants, may apply for an exceptional exemption. The aim of an exceptional exemption is to allow Responsible Persons a reasonable window of opportunity to address the failings in their fire risk assessment.

Each case is considered on its own merits and must meet the following conditions:

- The onus is on the Responsible Person to submit their case to MF&RS.
- The case must be based upon high risk to persons resulting from the new MF&RS UwFS protocol.
- Exemptions will not be granted where MF&RS believe that the Responsible Person can take reasonable action to mitigate the risk.
- Exemptions will only be a temporary measure, they will be reviewed within 12 months and MF&RS expect the Responsible Person to work towards achieving a permanent satisfactory solution, e.g. upgrading alarm systems to a 'double knock' system, employing staff to manage the risk etc.

Procedure

In order to reduce the burden of UwFS on all organisations MF&RS will adopt a risk based approach to the response to and the management of all AFA actuations. This approach will include a robust Call Challenge procedure by Mobilising and Communications Centre (MACC) personnel, Call Back protocols by Fire Alarm Monitoring Organisations and no response to certain actuations – unless a fire or physical signs of fire are confirmed.

Call Challenge

Call challenging involves a MACC operator questioning any caller to determine whether an emergency response is required following the actuation of an AFA. Where the caller has no reasonable grounds to believe that there is a fire, or physical signs of fire, at the premises (i.e. the call is made prior to any investigation) then the caller will be informed that no emergency response will be mobilised until an investigation is completed, and they should call back immediately upon any confirmation of fire, or physical signs of fire.

As a result of call challenge MACC will mobilise appliances as an emergency response to a confirmation of fire, or physical signs of fire.

In the event that a fire, or physical signs of fire, cannot be confirmed then there will be no emergency response.

Procedure for Call Handling (MACC) 07.30-19.30 hours.

Upon receipt of a call the MACC operator will determine the call source and property type.

Calls from Exempted Premises

For all calls received, regardless of call source, involving any premises that have been formally exempted under this protocol, MACC will mobilise the full emergency **response** PDA.

All Other Premises

All other premises will be call challenged whether the call is direct from the premises or via a Fire Alarm Monitoring Organisation.

If a fire, or physical signs of fire, is confirmed then MACC will mobilise the full emergency **response** as determined by the PDA.

If a fire, or physical signs of fire, is **not** confirmed the caller will be told:

“MF&RS will not make an emergency response at this time. Please investigate and if you confirm a fire, or physical signs of fire, then please call back immediately on the 999 system”.

‘Double Knock’ Actuations (Red Bar on Vision BOSS)

All premises that have an Automatic Fire Alarm system meeting the MF&RS definition of ‘double knock’ (see [Appendix A](#)) will receive a full emergency response upon actuation of the ‘second knock’, this will be indicated on the Red Bar system. This will only apply when the call is received from a Fire Alarm

Monitoring Organisation (FAMO). If the call is received from the premises directly then normal call challenge procedures and responses apply.

Fire Alarm Monitoring Organisations (FAMO)

On receipt of a call from a FAMO, with the exception of 'second knock' actuations identified on the red bar system (see 'Double Knock criteria above), MACC will request confirmation that the caller has instigated their 'Call Back' protocol prior to forwarding the alarm call to MF&RS (as recommended in the 'Best practice for summoning a Fire Response via Fire Alarm Monitoring Organisations'²). If the FAMO has not utilised this facility they will be asked to do so and informed that 'MF&RS will not make an emergency response at this time. If you re-contact the premises and confirm a fire situation please contact the Service again and we will respond'.

If the FAMO has attempted 'call back' but failed to re-contact the premises they will be told 'MF&RS will not make an emergency response at this time'.

If the FAMO has used 'call back' and confirms a fire exists or there are physical signs of fire, a full emergency response will be mobilised.

If a fire or physical signs of a fire cannot be confirmed, then only one appliance will be mobilised to the address, at normal road speed, to assist the Responsible Person by offering advice and guidance.

Monitoring and Review

All AFA calls to MF&RS will be monitored by Community Fire Protection officers and in the event that premises continue to generate UwFS, MF&RS will assist those premises by working with the Responsible Person, offering advice on how to manage and maintain their AFA systems. This does not prejudice MF&RS fulfilling its responsibility as an Enforcing Authority under the Fire Safety Order. The impact of the new protocol will be continually monitored and reviewed during and beyond the implementation phase.

Guidance for Fire Crews attending premises with AFA Systems

Where Fire Crews attend premises with AFA systems in the course of their duties, it is important that any advice given is consistent with current procedures and protocols and that the level of advice given is appropriate to the level of expertise of the firefighter / fire officer providing the advice.

Further guidance for Fire Crews on giving such advice is given at [Appendix B](#).

² Chief Fire Officers Association Code of Practice

Summary of Mobilisations

Alarm received to an exempted premises	24 hours	Full Emergency Response
Confirmed fire or physical signs of fire at any premises	24 hours	Full Emergency Response
Alarm Activation – No confirmation of fire or physical signs of fire	24 hours	No response - Caller asked to call back following an investigation that confirms a fire or physical signs of fire
Alarm Activation at a premises with a sleeping risk – No confirmation of fire or physical signs of fire	19.30 - 07.30 hours	Full Emergency response
Alarm Activation at a premises with a sleeping risk – No confirmation of fire or physical signs of fire	07.30 - 19.30 hours	No response - Caller asked to call back following an investigation that confirms a fire or physical signs of fire
Alarm Activation – No FAMO 'call back' procedure	24 hours	No response. FAMO asked to instigate 'call back' procedure
Alarm Activation – FAMO cannot re-contact Premises	24 hours	No response

Appendix A: MF&RS Definition of Double Knock Alarm System

Double Knock System Definition

There are many varied interpretations for 'Double Knock' systems across the fire safety industry, for the purposes of exemption under the new protocol for responding to AFAs, MF&RS will only recognise 'Double Knock' systems that it have been inspected by a Fire Protection Officer and confirmed as meeting the criterion in this document.

MF&RS considers a 'double-knock' fire alarm system as one where a signal is not sent to the fire service from the AFA until there have been two notifications received by the system, for example:

- One detector activating sounds a local alarm only; followed by,
- A second device (for example a detector / fixed installation / call point) activating which then routes a fire signal through to the Fire Alarm Monitoring Organisation (FAMO) or generates an immediate 999 call.

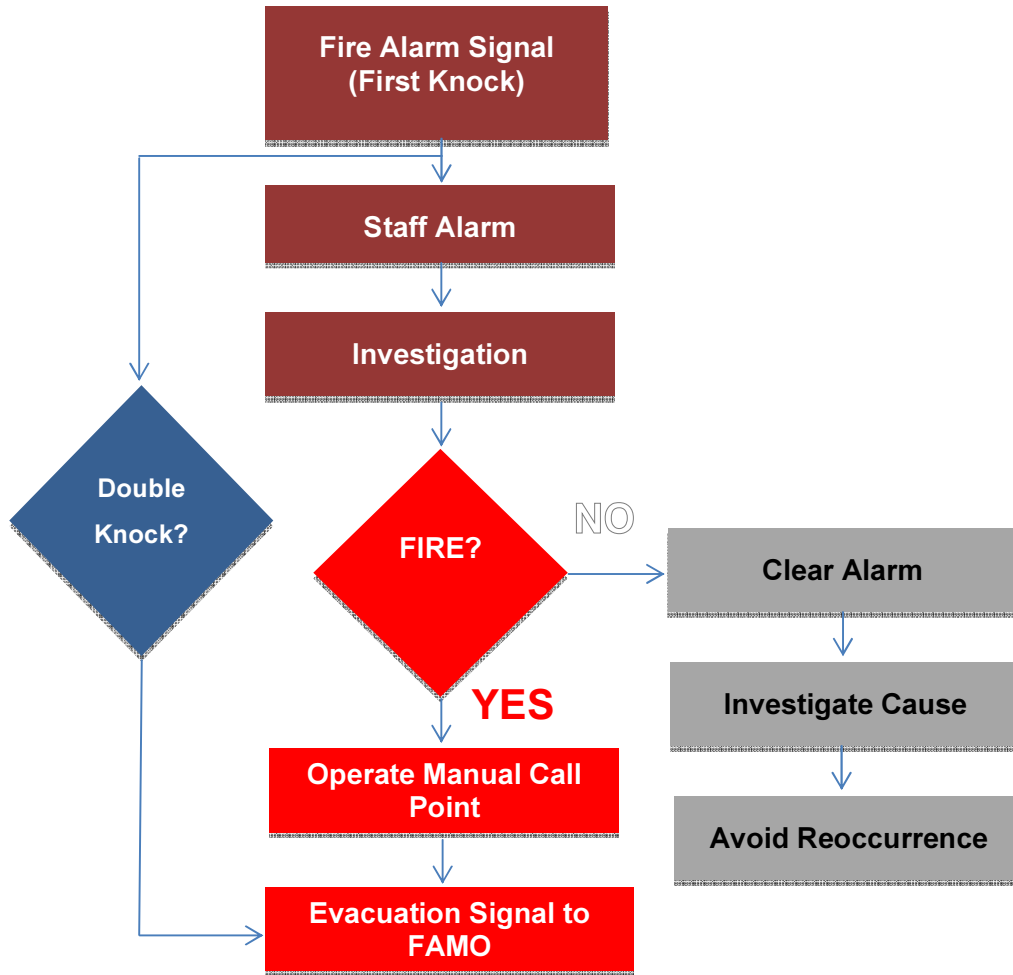
In setting these criteria MFRS make reference to the following sections of BS 5839 pt 1:

Where speed of response is important in an environment in which false alarms might result from the type of fire detection that is desirable, multi-sensor fire detectors or a system incorporating coincidence detection can enable early detection of fire without an unacceptable rate of false alarms.

In some systems there may be significant potential for reduction of false alarms by the use of coincidence detection.

A form of filtering involves the use of a staff alarm arrangement (see 5839 Clause 19). This permits an investigation period following activation of an automatic fire detector, prior to operation of fire alarm sounders. Staff alarms that incorporate such an investigation period are now quite common in large, complex and well-managed buildings that are protected by a high number of smoke detectors. The staff alarm arrangement may apply at all times or only at certain times of the day, such as normal working hours; in this case, the system is also a time-related system.

Double Knock System Flow Chart



Appendix B: Guidance for Fire Crews

The purpose of this appendix is to provide MF&RS fire crews with guidance on the advice and further guidance that they give to occupiers when attending a fire alarm actuation that results in an UwFS.

It is not intended as document for members of the public therefore must not be handed out to occupiers.

This guidance should be printed off, encapsulated and stowed on an appliance to assist fire crews.

Key Points:

- MF&RS fire crews will:
 - **NOT** provide technical fire protection advice;
 - **ONLY** provide advice and guidance that falls within their operational area of expertise;
 - Direct technical queries to the **MF&RS website** (the home page has a direct link to the UwFS page) and / or **Fire Service Direct 0800 731 5958**;
 - **NOT** direct technical queries to the Protection Department offices or officers;
 - **MUST** request the attendance of an Article 31 officer where the risks within the premises are so serious that the use of the premises ought to be restricted or prohibited.

Examples of Advice and Guidance

DO NOT advise on:

- Any matters relating to the Occupiers fire risk assessment;
- Any matters relating to altering the construction or use of the building;
- Any technical matters relating to any fire protection systems, (e.g. alarms, fire suppression, emergency lighting, etc).

DO advise:

- That the occupier is responsible for managing the fire risk within the premises and that failure to do so may put them in breach of the Regulatory Reform (Fire Safety) Order 2005 (the Order);
- That until a fire or physical signs of fire is confirmed then it is the Occupiers responsibility to investigate the actuation of their fire alarm system;
- That as soon as a fire or physical signs of fire are confirmed by any person, then the investigation ceases immediately and a fire call must be passed via the '999' emergency telephone system;
- On examples of physical signs of fire (e.g. signs of heat &/or smoke);

- How to safely investigate the actuation of a fire alarm;
- On how to prevent false alarm actuations, e.g. Regular maintenance by a competent fire alarm engineer, control; housekeeping to prevent fumes from cooking, aerosol sprays, steam from affecting detector heads (not to include any advice on altering the alarm system).

In the Event of Serious Fire Safety Concerns

Where an OiC considers the fire risk to persons in the premises is **so serious it is may cause a threat to life**, then MACC must be informed and an Article 31 Officer requested. The Fire Crew must remain in attendance and await the Article 31 Officer.

There are four main areas of failure that may cause such a risk:

- Means of escape;
- Means of giving warning;
- Fire loading / Combustibles / Ignition Sources ;
- Risk to a 'relevant persons' (persons legally entitled to use the building).

Where the implications are **less serious**, then the OIC must email a completed UwFS **Exception Report (Form FSO SL019)** to Protection Policy Support mailbox. This form is available on the MF&RS portal under the Protection Dept. Shared Documents/Library/UwFS. Hard copies should be kept on the appliance for completion at the premises.

Appendix C: Risk Assessment

Risks, Mitigation and Control Measures

SIGNIFICANT RISKS	MITIGATING FACTORS	CONTROL MEASURES
<p>Delay in responding to a fire as a result of MFRA not responding to an AFA where at the time of the call no fire or signs of fire were confirmed.</p> <p>(i) Therefore increased risks to:</p> <ul style="list-style-type: none"> > Persons affected by fire; > Fire crews due to fire growth. > Property > Business Continuity. 	<p>a. A review of previous incidents of fire in Merseyside over the 5 year period immediately prior to the current AFA Protocol confirmed that in the event of any significant fires at premises with AFA systems, the Service received numerous calls confirming a fire within the same time period as the actuation of the alarm;</p> <p>b. The greatest likelihood of a fire not being confirmed would be during night-time hours when less people are likely to be present in an alert state and therefore able to make an emergency call.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol Communication Strategy 2. MFRA AFA Protocol Automatic Exemption protocol 3. MFRA AFA Protocol Exceptional Exemption protocol 4. Risk critical training of Operational Personnel.
<p>Delay in responding to a fire as a result of MFRA operational response resources being committed to incidents that later prove to be UwFS.</p> <p>(ii) Therefore increased risks to:</p> <ul style="list-style-type: none"> > Persons affected by fire; > Fire crews due to fire growth. > Property > Business Continuity. 	<p>a. Prior to the introduction of the new AFA Protocol in November 2012 MFRA were experiencing a growing trend in UwFS. During 2010, 1st January – 31 December 2010, there were 5801 UwFS (4064 to Non Residential premises, 1737 to Residential premises) therefore having 9069 appliance mobilisations to false alarms at premises which had a 'Responsible Person'. This has a direct affect upon the availability of nearest appliances to attend a real incident and therefore delays response times thus endangering lives of persons and property.</p> <p>b. Government financial reforms have resulted in MFRA reducing it's operational fleet from 42 to 28 pumping appliances, further cuts in 2015-17 will result in a number of station closures and mergers which will decrease this further and by 2020 it is anticipated that MFRA will only have 20 fire appliances and 18 fire stations. This will significantly increase the likelihood and risk of appliance availability being lost due to attendance at UwFS</p> <p>c. Feedback from 2 periods of consultation, (May 2011 & Nov. 2011) conducted by Opinion Research Services "The forum unanimously rejected the policy of treating all AFA's as emergencies. There was a general feeling that this pattern of response is wasteful and diverts emergency resources from more important incidents as well as fire prevention work and training".</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy. 3. Risk critical training of Operational Personnel.
<p>Road risk from emergency response mobilisations to responding fire crews and other road users</p> <p>(iii)</p>	<p>MF&RS attendance at 5801 UwFS is equivalent to:</p> <ul style="list-style-type: none"> - 12779 'blue light' mobilisations - 12779 return journeys <p>= 25558 occasions other road users, pedestrians and fire crews are unnecessarily exposed to potential dangers in RTC's.</p>	<ol style="list-style-type: none"> 1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy

SIGNIFICANT RISKS	MITIGATING FACTORS	CONTROL MEASURES
(iv) Increased risk to residents in Merseyside due to reduced Prevention and Protection activities.	The average attendance to an UwFS = 2.23 Fire appliances (2/3 appliances per call); Average time taken to respond, manage and return = 22.34 minutes; From 5801 UwFS, the hours of productivity which can be better utilised for training, community safety activity etc. totals over 20,000 hours .	1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy
(v) Risks to persons investigating the actuation of a fire alarm	The new AFA response protocol requires callers at non-exempted premises to investigate the actuation of their fire alarm and confirm the existence of a fire or signs of fire.	1. Responsible Persons are required to have in place a suitable and sufficient fire risk assessment that covers all 'relevant persons', including employee's. This must include the management of their fire alarm system and therefore they are required to ensure that their personnel have sufficient supervision, information and training to ensure their safety from fire. 2. MFRA AFA Protocol Communication Strategy 3. Training made available (at cost) for the safe investigation of AFA actuations made available by MFRA 4. Advice contained within section C of the 2014 CFOA Guidance.
(vi) Increased risk to operational fire crews due to reduction in risk critical training.	The average attendance to an UwFS = 2.23 Fire appliances (2/3 appliances per call); Average time taken to respond, manage and return = 22 minutes 34 seconds; From 5801 UwFS, the hours of productivity which can be better utilised for training, community safety activity etc. totals over 20,000 hours .	1. MFRA AFA Protocol call challenge procedure. 2. MFRA AFA Protocol Communication Strategy

MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	COMMUNITY SAFETY AND PROTECTION COMMITTEE		
DATE:	30 JULY 2015	REPORT NO:	CFO/068/15
PRESENTING OFFICER	DEPUTY CHIEF FIRE OFFICER		
RESPONSIBLE OFFICER:	DEPUTY CHIEF FIRE OFFICER	REPORT AUTHOR:	GM GARY OAKFORD
OFFICERS CONSULTED:	DEB APPLETON & JOHN FIELDING – STRATEGY AND PERFORMANCE		
TITLE OF REPORT:	ANALYSIS OF FATALITIES IN ACCIDENTAL DWELLING FIRES BETWEEN 1ST APRIL 2014 AND 31ST MARCH 2015		

APPENDICES:	APPENDIX A: ANALYSIS OF FATALITIES IN ACCIDENTAL DWELLING FIRES BETWEEN 1ST APRIL 2014 AND 31ST MARCH 2015
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Purpose of Report

1. To request that Members scrutinise the performance and detailed analysis relating to the Accidental Dwelling Fire Fatalities that occurred during 2014/15.

Recommendation

2. That Members note performance in relation to this report concerning deaths in accidental dwelling fires.

Introduction and Background

3. The purpose of this report is to analyse fatalities from accidental dwelling fires (ADF) during the year 2014/15; analysing the circumstances and socio demographic background of such occurrences in a way that can then be used to target risk and carry out prevention work.
4. This report sits alongside the 10 year report (also on this agenda) which analyses fire fatalities as a result of accidental dwelling fires between 2005/06 and 2014/15.
5. Compared to other incident types attended by the Service, fire fatalities are thankfully relatively rare, although they have a devastating impact on the family of the victims and in the community where they live.
6. Fatalities in accidental dwelling fires are reported in Merseyside Fire and Rescue Authority's Service Delivery Plan as Key Performance Indicator 45.
7. The Service Delivery Plan is reported on a quarterly and annual basis.

In summary

8. During 2014/15 there were 10 fatalities in Accidental Dwelling Fires in Merseyside, 2 more than in 2013/14 and 5 more than during 2011/12.
9. Of the Accidental Dwelling Fire Fatalities that occurred; there have been no incidents in Knowsley, 4 in Liverpool, 2 in Sefton, 1 in St Helens and 3 in Wirral.
10. Of the 10 fire deaths; 7 of the victims were over 65 years of age.
11. The investigations into the causes of the fires identified that 3 were linked to smoking materials, 2 were due to an electrical fault, 2 were related to careless use of heating appliances, 2 related to cooking practices; and 1 related to the use of candles.
12. With regards to deprivation, 6 of the 10 fatalities occurred within the 50% most deprived deciles of Merseyside – this suggests a possible link between deprivation and fire death. The use of Customer Insight Community Profiles supports this finding, with more deaths occurring in profiles associated with deprivation than affluence.
13. Of the 10 fatalities; 5 occurred on a Friday.
14. Of the 10 fatalities; 9 victims lived alone and were alone at the time of the incident.
15. With regards to smoke detection systems, 8 of the properties had received a Home Fire Safety Check. On 5 occasions the smoke alarm actuated, whilst on 1 occasion the fitted smoke alarm had been disabled. On a further occasion a smoke alarm was fitted and did not operate and finally there was 1 occurrence where a HFSC was conducted though the victim had earlier refused to have a smoke alarm fitted.
16. The analysis contained within this report will be used to inform the refresh of The Home Safety Strategy which is an action within the 2015/16 Community Fire Prevention Functional Plan. The new Home Safety Strategy will be brought to a future meeting of this Committee for consideration, before being submitted to the Full Authority.

Equality and Diversity Implications

17. The report uses Gender, Lifestyle and Age Group data in order to identify risk groups across Merseyside.

Staff Implications

18. There are no staff implications arising from this report.

Legal Implications

19. The Fire and Rescue Services Act 2004, Section 6 provides that (1) a Fire and Rescue Authority must make provision for the purpose of promoting fire safety in its area. This includes making arrangements where reasonable to provide information, publicity and advice.

Financial Implications & Value for Money

20. There are no financial implications arising from this report.

Risk Management, Health & Safety, and Environmental Implications

21. The analysis of data and information relating to deaths in accidental dwelling fires is a key factor in the development of MFRA's prevention strategies.

Contribution to Our Mission: *Safer Stronger Communities – Safe Effective Firefighters*

22. This report provides analysis of accidental dwelling fire fatality data held by MFRA. The report contributes to the Mission of "Safer Stronger Communities" by identifying at risk individuals (and their characteristics) across Merseyside and this report could be shared with partners as a means of encouraging greater data sharing between MFRA and external organisations.

BACKGROUND PAPERS

GLOSSARY OF TERMS

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Analysis of Fatalities in Accidental Dwelling Fires between 1st April 2014 and 31st March 2015

**AS PREVIOUSLY PRESENTED TO:
Authority
Strategic Management Group**

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**STRATEGY & PERFORMANCE
PREVENTION & PROTECTION**

Document Control Amendment History

Version / Issue No.	Date	Author	Remarks / Reason for Change
1.0	21/05/2015	J Fielding	Following Comments as per D Appleton
1.1	15/06/2015	J Fielding	

Sign-Off List

Name	Position
Deb Appleton	Director of Strategy & Performance
GM Gary Oakford	Group Manager of Prevention and Protection
WM Tony Harland	Fire Investigation Officer (IIT)

Distribution List

Name	Position	I / R
Strategic Management Group		
Incident Investigation Team		
Fire Authority		

Related Documents

Reference No.	Title	Author	Version & Date
1	Analysis of Fatalities in Accidental Dwelling Fires between 1 st April 2013 and 31st March 2014	L Coles	V1.2 06/05/2014
2	Historical Analysis of Fatalities in Accidental Dwelling Fires between 2005/06 and 2014/15	L Coles	V1. ???

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Has it been agreed with the client that this is a publicly owned document?

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(once agreed by authority)

If No please state reason why:

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1. Agreement

For the purpose of this report the following agreement was made between the client and the Strategy and Performance Directorate.

This work was requested by Group Manager Gary Oakford and received on 01/04/2015.

The Manager¹ has approved this report/ piece of work can be undertaken by the Strategy and Performance Directorate.

If the scope of the work changes, authorisation must be again obtained and would be noted within the version control document sheet.

It was agreed that this report would be produced in draft format by May 2015, and would be sent electronically to the Director of Strategy and Performance Directorate and Client for comment.

The Manager / Client agreed that their comments would be received back by May 2015.

The final report, which will always be in PDF format, would be produced by June 2015, subject to receiving comments.

¹ Deb Appleton

2. Summary

The purpose of this report is to provide an analysis regarding the circumstances of fatalities in Accidental Dwelling Fires across Merseyside during the fiscal year 2014/15.

In summary the findings within this report are as follows:

- During 2014/15 there were 10 fatalities in Accidental Dwelling Fires in Merseyside, 2 more than in 2013/14 and 5 more than during 2011/12.
- Concerning locations of Accidental Dwelling Fire Fatalities; there have been: 0 incidents in Knowsley, 4 in Liverpool, 2 in Sefton, 1 in St Helens and 3 in Wirral.
- Of the 10 fatalities; 3 were linked to smoking materials, 2 due to electrical fault, 2 were related to careless use of heating appliances, 2 fatalities were related to cooking practices, with the final fatality being related to candles.
- Concerning deprivation, 6 of the 10 fatalities took place within the 50% most deprived deciles of Merseyside – this suggests a possible link between deprivation and fire death. The use of Customer Insight Community Profiles backs this finding up with more deaths occurring in profiles associated with deprivation rather than affluence.
- During 2014/15, 5 of the fatalities occurred on a Friday.
- Of the 10 fatalities; 9 victims lived alone and were alone at the time of the incident.
- Of the 10 fire deaths; 7 occurred where the occupier was over 65 years of age.
- Regarding home smoke detection systems, 8 of the properties had received a Home Fire Safety Check, on 5 occasions the smoke alarm actuated, on 1 occasion the fitted smoke alarm had been disabled, on a further occasion a smoke alarm was fitted and did not operate and finally there was 1 occurrence where a HFSC was conducted though the victim had earlier refused to have a smoke alarm fitted.

3. Introduction

This report analyses fire related fatalities across Merseyside during the fiscal year 2014/15 (April 1st – March 31st). The primary focus of this report reviews fatalities that occurred as a result of an Accidental Dwelling Fire (ADF).

This report which contains information relating to lifestyles of individuals who have regrettably died in a fire, as well as other information, including Equality & Diversity protected characteristics, ignition source and temporal analysis which will support the on-going and proactive actions of the staff involved in Prevention and Protection and their actions to reduce the risk of fire.

4. Case Studies

The following section outlines case studies where people have died as a result of an Accidental Dwelling Fire. Merseyside Fire & Rescue Service has continued to play a significant role in reducing the number of fatalities caused by fire and works closely with partner agencies to ensure that measures have been put in place to reduce the risks associated with fire.

Case 1: Inquest Complete - Liverpool - 07/04/2014

The deceased was a 48 year old female, who lived alone in a semi-detached property. At 14:31 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past four years and though there were smoke alarms fitted - they failed to actuate. Evidence was found that alcohol had been consumed preceding the incident. The fire occurred within the living room with the deceased found within the same room. The suspected cause of the fire was candles. The victim was alone at the time of the incident.

Case 2: Inquest Complete - Wirral - 05/08/2014

The deceased was a 62 year old male, who lived alone in a flat. At 11:43 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past two years with smoke alarms actuating within the property at the time of the incident. The fire occurred within the bedroom, with the deceased found in the living room. The suspected cause of the fire was an E-Cigarette on charge, where the appliance overheated - rupturing the Lithium battery inside. This caused deposits from the device to drop onto an oxygen tube that the deceased was using to assist breathing, this cut off the oxygen supply leading to hypoxia. The victim was alone at the time of the incident.

Case 3: Inquest Complete - Sefton - 08/08/2014

The deceased was a 43 year old male, who lived alone in a caravan. For the purposes of context the caravan was being stored within a commercial unit, as a caravan is a dwelling and the seat of fire; this incident is classified as an accidental dwelling fire. At 15:42 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. As the incident took place within a caravan stored within a commercial unit there would not have been a Home Fire Safety Check and therefore no smoke alarms. The fire occurred on the caravan's hob with the deceased found in the commercial unit. The suspected cause of the fire was as a result of food being left unattended. The victim was alone at the time of the incident

Case 4: Inquest Complete - Liverpool - 04/10/2014

The deceased was an 82 year old female, who lived alone in a flat. At 20:44 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past year with smoke alarms actuating within the property at the time of the incident. The fire occurred within the bedroom with the deceased being found in the same room. The suspected cause of the fire was as a result of smoking materials, where a match was dropped onto bedding. The victim was alone at the time of the incident.

Case 5: Inquest Complete - Liverpool - 31/10/2014

The deceased was an 87 year old male, who lived alone in a flat. At 15:40 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past year and a half; with smoke alarms actuating within the property at the time of the incident. The fire occurred within the living room with the deceased found in the kitchen of the property. The suspected cause of the fire was as a result of smoking materials igniting clothing which had been used to support a sofa which had partially collapsed through years of use. The victim was alone at the time of the incident.

Case 6: Inquest Complete - Wirral - 12/11/2014

The deceased was an 82 year old male, who cohabited within the semi-detached property where he lived. At 03:59 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past year with smoke alarms actuating within the property at the time of the incident. The fire occurred within the living room with the deceased found in the bedroom on the floor above. The suspected cause of the fire was radiated heat; where heat from a lamp's bulb ignited the lamp's shade. The victim was accompanied by his partner at the time of the incident.

Case 7: Inquest Complete - St Helens - 21/11/2014

The deceased was an 88 year old male, who lived alone in an end terraced dwelling. At 23:26 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property did not previously have a Home Fire Safety Check and there were no smoke alarms within the property. The fire occurred within the bedroom with the deceased being found in the same room. The suspected cause of the fire was as a result of a radiated heat where bedding had been placed too close to a gas fire, which then ignited. The victim was alone at the time of the incident.

Case 8: Inquest Pending - Wirral - 13/02/2015

The deceased was a 78 year old male, who lived alone in a bungalow. At 10:18 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past year, however the occupier had refused to have smoke alarms installed. Evidence was found that alcohol had been consumed preceding the incident. The fire occurred within the living room with the deceased found in a wheelchair in situ. The suspected cause of the fire was smoking materials, where lighting fluid vapours ignited whilst the victim was filling his lighter. The victim was alone at the time of the incident.

Case 9: Inquest Complete - Liverpool - 25/02/2015

The deceased was an 87 year old male, who lived alone in a mid-terraced dwelling. At 00:21 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past five years and though there were smoke alarms fitted - they had been disabled. The fire occurred within the kitchen with the deceased found partially within the kitchen and outside. The suspected cause of the fire was cooking, where the victim's clothing caught fire whilst cooking. The victim was alone at the time of the incident.

Case 10: Inquest Pending - Sefton - 10/03/2015

The deceased was an 89 year old male, who lived alone in a semi-detached property. At 11:28 hrs, Merseyside Fire and Rescue Service received the call to attend the incident. The property had previously received a Home Fire Safety Check within the past six years with smoke alarms actuating within the property at the time of the incident. The fire occurred within the living room with the deceased found in the same room. The suspected cause of the fire was as a result of bedding falling onto an electrical bar heater. The victim was alone at the time of the incident.

5. Methodology

This research was undertaken initially by analysing the data derived from the databases held and managed by the MFRA Incident Investigation Team (IIT).

Fatalities in Accidental Dwelling Fires were originally reported under the Best Value Performance Indicator 143(ii). Since 2008 this performance indicator has become defunct at a national level; however Merseyside Fire and Authority still measure this level of performance as Key Performance Indicator 45. Qualification for this performance indicator is decided by members of Merseyside Fire and Rescue Authority Incident Investigation Team (IIT) and the coroner. Some data within this report is still awaiting coroner agreement and as such some figures are subject to change.

Population totals used in this report were obtained from the Office of National Statistics (ONS). The software used to complete the analysis, was Microsoft Office Excel 2013 and MapInfo Professional 11.0 for filtering and mapping the data.

Customer Insight Community Profile² (developed in conjunction with Liverpool John Moores University) data and IMD 2010 (CLG) were also used for Socio Demographic Analysis.

Population figures are based on Mid-2013 population estimates as provided by Office for National Statistics.

Microsoft Excel 2013 was used to interpret and graphically represent figures.

² The Customer Insight Community Profiles have been developed for the whole of the Merseyside area. The community profiles uses 130 local datasets aggregated to the 'Output Area' geography. These datasets are analysed and the results are a series of 10 profiles describing the characteristics and lifestyles of communities.

6. Results

6.1 Accidental Dwelling Fires

6.1.1 Retrospective

Chart 1: Fatalities in Accidental Dwelling Fires between 2010/11 and 2014/15

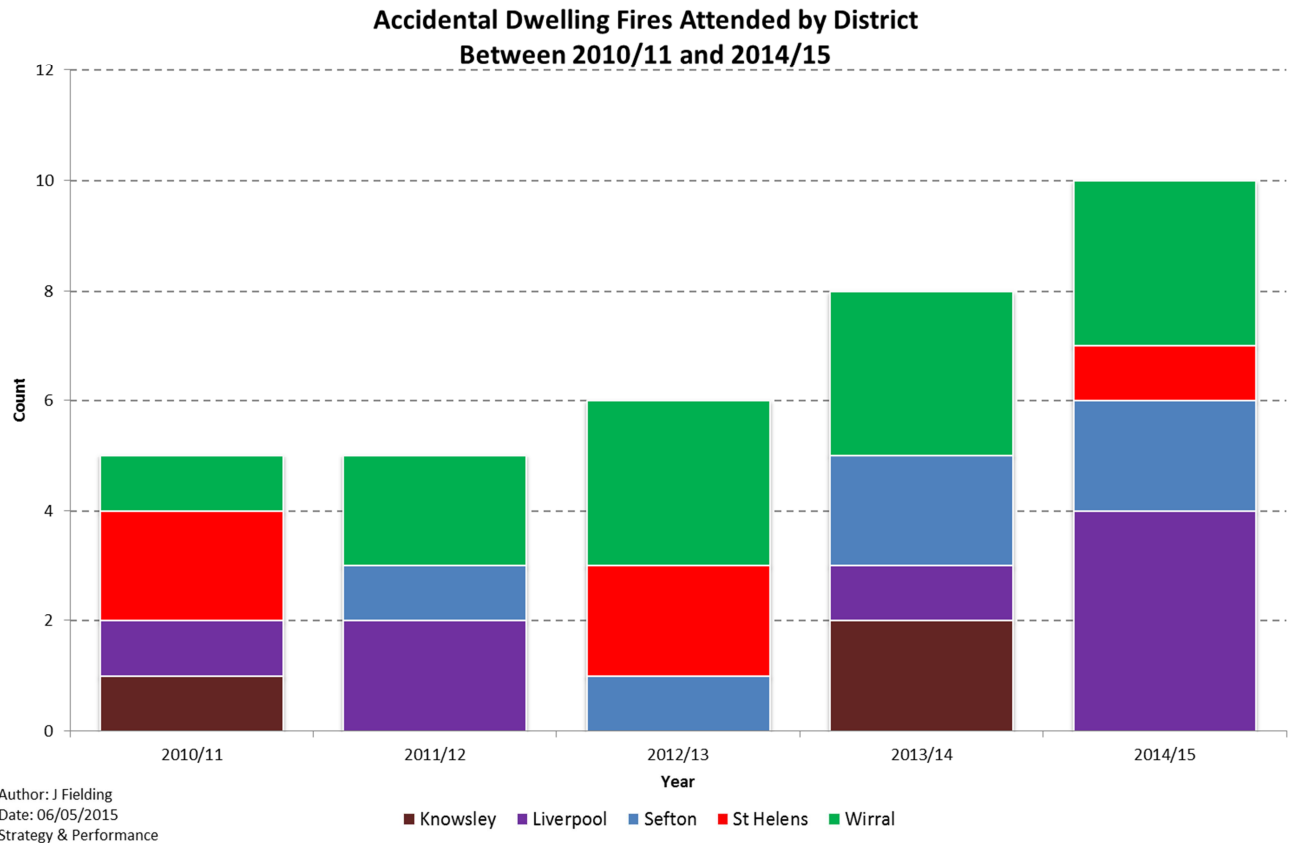


Chart 1 identifies fatalities in accidental dwelling fires have been increasing year on year since 2011/12. The chart identifies that during 2014/15 there was a total of 10 fatalities, double that of the years of 2010/11 and 2011/12.

When analysed by District; Liverpool saw 4 deaths during 2014/15, the greatest amongst the districts of Merseyside, this was then followed by Wirral with 3, Sefton with 2 and St Helens with 1. When analysed over five years, the counts for each district varies, though Wirral does have relatively consistent counts of fire deaths since 2012/13, with 3 in each year.

Between 2010/11 and 2014/15 there have been cumulatively:

- 3 deaths in Knowsley
- 8 deaths in Liverpool
- 6 deaths in Sefton
- 5 deaths in St Helens
- 12 deaths in Wirral

6.1.2 Spatial Analysis of Accidental Dwelling Fire Fatalities

Table 1: Accidental Dwelling Fire Fatalities in 2014/15, by District, Ward & Population

District	Ward	Fatalities	District Population	Deaths per 100,000 population
Knowsley	(None)	0	146,086	0.00
Liverpool	Anfield	1	470,780	0.85
	Kirkdale	1		
	Picton	1		
	Princes Park	1		
Sefton	Dukes	1	273,207	1.10
	Norwood	1		
St Helens	Thatto Heath	1	176,221	0.57
Wirral	Eastham	1	320,295	0.94
	New Brighton	1		
	West Kirby & Thurstaston	1		
Grand Total		10	1,386,589	0.72

Table 1 provides a breakdown of fatalities by district and ward. Liverpool had the greatest quantity of deaths with 4 (equating to 0.85 deaths per 100,000 population), followed by Wirral which had 3 deaths (though with a slightly higher ratio of 0.94 deaths per 100,000 population). Solely taking “Deaths per 100,000 population” into account, Sefton (which had 2 fatalities) has proportionally the highest number of fire deaths in Accidental Dwelling Fires with a ratio of 1.10. St Helens saw 1 fire death equating to 0.57 deaths per 100,000 population and Knowsley - due to not having any fire deaths was lowest with 0.

There were no repeat wards for fire death injuries.

6.1.3 Analysis of fatalities by Deprivation

Chart 2: Fatalities from Accidental Dwelling Fires in 2014/15 in relation to Indices of Multiple Deprivation (IMD) 2010

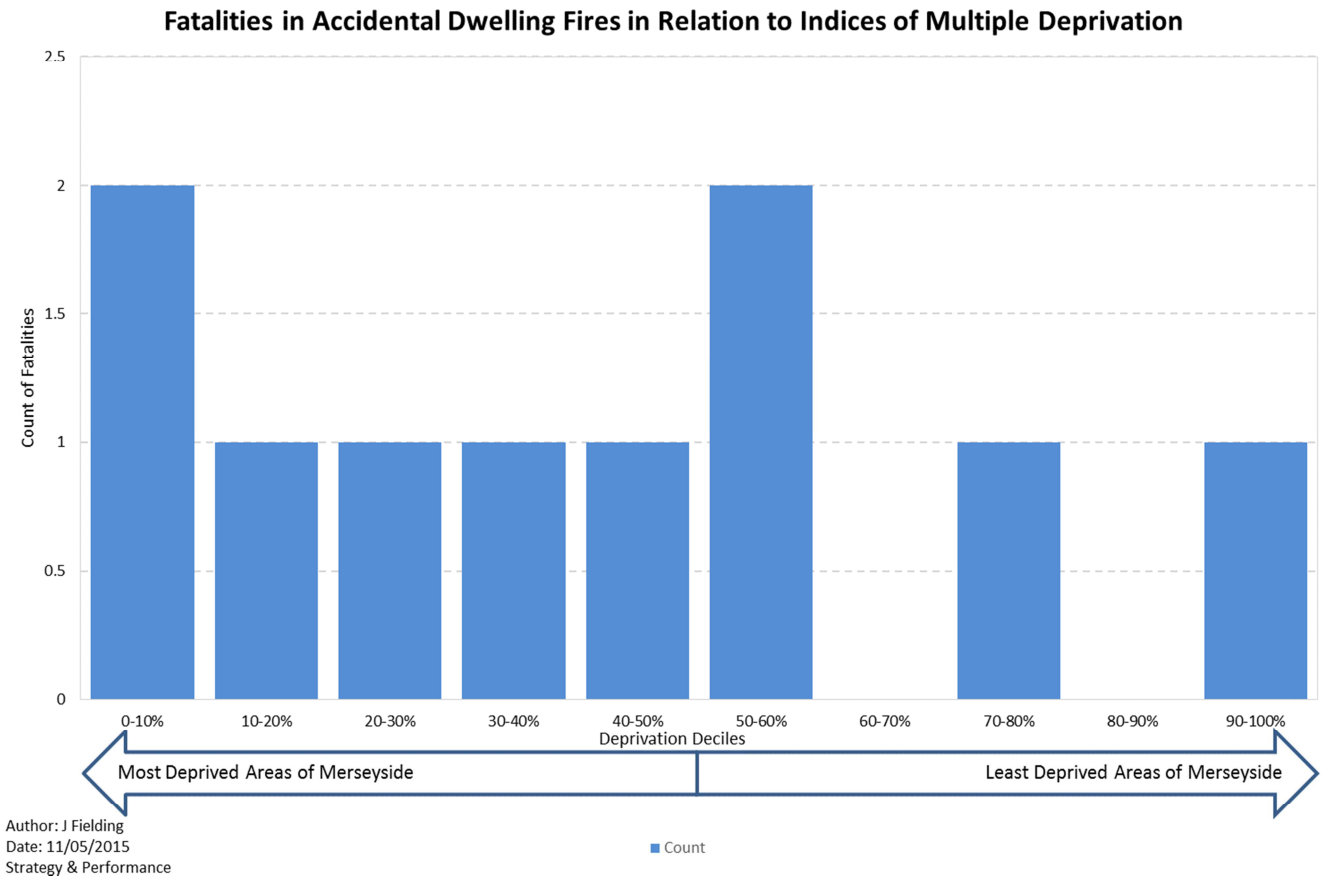


Chart 2 compares the locations of where fatalities took place in accordance with Deprivation. The chart identifies that there is a general trend where the majority of fire deaths have occurred within areas of deprivation, with 6 of the 10 fatalities occurring in the 50% most deprived areas of Merseyside.

6.1.4 Analysis using Customer Insight Community Profiles

Table 2: Customer Insight Community Profiles of Accidental Dwelling Fire Fatalities³ (with age bands)

Customer Insight Profile	Total	IMD 2010 Deprivation Decile	Age Group	Property Type
1 - Wealthy over 50 population living in semi-rural locations	2	50-60%	85+	Semi Detached
		90-100%	75-79	Bungalow
3 - Middle income residents living in privately owned properties	1	30-40%	60-64	Flat
6 - Young families living in privately owned semi-detached homes	1	70-80%	85+	Semi Detached
7 - Young families with high benefit need	1	50-60%	85+	Terraced
10 - Younger, urban population living in high levels of deprivation	5	20-30%	45-49	Semi Detached
		40-50%	40-44	Commercial Property (Caravan)
		10-20%	80-84	Flat
		0-10%	85+	Flat
		0-10%	85+	Terraced
Grand Total	10			

Table 2 provides an indication as to what type of: lifestyle; environment, background and local community the deceased represent. Using the Customer Insight Community Profiles the above table approximately matches the findings from the deprivation analysis identified within the previous section, with the majority of fatalities occurring within deprived profiles (profiles 7 and 10).

The breakdown is as follows:

- 2 Fatalities within profile “1 - Wealthy over 50 population living in semi-rural locations”.
- 1 Fatality within profile “3 - Middle income residents living in privately owned properties”
- 1 Fatality within profile “6 - Young families living in privately owned semi-detached homes”
- 1 Fatality within profile “7 - Young families with high benefit need”
- 5 Fatalities within profile “10 - Younger, urban population living in high levels of deprivation”

When comparing the Customer Insight Community Profiles to the Indices of Multiple Deprivation there are some inconsistencies. For example within the Customer Insight Community Profile “1 - Wealthy over 50 population living in semi-rural locations” there is one incident to have occurred within the very affluent 90-100% decile and one within the middle of the road 50-60% decile. Reasons for as to why include:

- IMD is based on a geography known as “*Lower Layer Super Output Area*” which is an area made up of 400 dwellings or 1,600 head of population.

³ Customer Profiles within this table are based on the Customer Insight Community Profile. Refer to the report in related documents for further information.

- The Customer Insight Community Profile uses a smaller geography called “Output Area” which is 125 properties or 300 head of population. Therefore the Customer Insight Community Profiles are able to identify pockets of this segmentation type in and amongst areas of deprivation and affluence as identified using Indices of Multiple Deprivation.

6.2 Further Analysis

Table 3: Accidental Dwelling Fire Fatalities by month, day, whether the occupant was alone and suspected alcohol influence

Month	Day	Grand Total	Alcohol?	Lived Alone
April	Monday	1	1	1
May				
June				
July				
August	Tuesday	1		1
	Friday	1		1
September				
October	Friday	2		2
November	Wednesday	1		
	Friday	1		1
December				
January				
February	Wednesday	1		1
	Friday	1	1	1
March	Tuesday	1		1
Total		10	2	9

Table 3 provides a temporal analysis of when fatalities took place and whether alcohol or living alone was a factor. The table identifies that the months of: August, October, November and February each had 2 fatalities, of note there were no fatalities during January which historically is the month when the greatest number of fire deaths occur.

Concerning the day of week where fire deaths have taken place, 5 took place on a Friday, with 2 occurring on a Tuesday and a Wednesday and 1 occurring on a Monday. Though 5 fatalities took place on a Friday, there is little evidence to point to any meaningful pattern, only 1 incident involved alcohol, and analysis of the time of call⁴ to the Fire Control does not suggest any pattern with calls occurring throughout the day.

Concerning the influence of alcohol; 2 fatalities occurred where the victim was suspected of consuming alcohol prior to the fire. Additionally 9 of the 10 victims lived alone and were alone at the time of the incident.

⁴ Please note this report and other Fire Death related reports produced by MFRA do not include analysis by hour of call to Fire Control. This is due to that in many cases the call is received well after the incident has taken place, this is known as a late fire call and therefore it is not possible to analyse the time the fire actually took place. As there can be several late fire calls each reporting period, to analyse incidents by hour is not a realistic gauge with which to measure anything meaningful.

Table 4: Room of Fire Origin by Property Type and Ignition Source for Fatalities in Accidental Dwelling Fires 2014/15

Property Type	Room of Fire Origin	Smokers Materials	Careless Use Of Heating Appliance	Cooking	Electrical Fault	Candles	Total
Semi Detached	Living Room		1		1	1	3
Flat	Bedroom	1			1		2
	Living Room	1					1
Terraced	Kitchen			1			1
	Bedroom		1				1
Bungalow	Living Room	1					1
Commercial Unit (Caravan)	Caravan			1			1
Total		3	2	2	2	1	10

Table 4 provides a breakdown of the property type and room where fire fatalities took place as well as the cause. The table identifies that the most common ignition source was in relation to Smoking Materials with 3 deaths, followed by: Careless Use of Heating Appliance, Cooking and Electrical Faults with 2 each. There was a single fatality related to candles.

The property types to have the greatest count of fire deaths were semi-detached and flats with 3 deaths each. The room to have the highest number of fire deaths was the living room with 5 deaths, followed by the bedroom with 3 deaths.

Table 5: Fatalities by Room of Fire Origin against Location of Where Victim was Found

Room of Fire	Location of Victim				Grand Total
	Living Room	Bedroom	Kitchen	Garage Floor	
Living Room	3	1	1		5
Bedroom	1	2			3
Kitchen			1		1
Caravan				1	1
Grand Total	4	3	2	1	10

Table 5 compares the room of fire origin against where the victim was located by emergency services⁵. The table identifies that in the majority of cases the victim was found in the fire's room of origin (highlighted by the light blue cells), on 3 occasions victims were located beyond the room of origin.

⁵ Please note: "Emergency Services" refers to Fire & Rescue Service, North West Ambulance and Police personnel. In the case of incidents of this nature the Fire & Rescue Service may not always be the first to attend and could be contacted later (i.e. a late fire call) by another branch of the emergency services.

Table 6: Fire Safety (HFSC & Smoke Alarm status) in Accidental Dwelling Fire Fatalities

HFSC Received	Fitted & Operated	Fitted - Disabled	Fitted - Did Not Operate	None Fitted	Total
Yes	5	1	1	1	8
No				2	2
Total	5	1	1	3	10

Table 6 identifies that the majority of properties (8 out of 10) did have a Home Fire Safety Check (HFSC). Concerning the properties that received a HFSC; in 5 cases the fitted smoke alarm did actuate, on a single occasion a smoke alarm was fitted and was disabled by the owner / occupier, on a further occasion a smoke alarm was fitted and did not operate – possibly due to a lack of smoke given the circumstances of the incident and finally there was an incident where there was no smoke alarm fitted due to it being refused at the time of the HFSC.

Though there were 2 fatalities where a HFSC was not conducted one of the fatalities took place within a caravan which in turn was stored within a commercial unit. As such neither the caravan nor the commercial unit had a smoke alarm fitted.

Table 7: Age and Gender of Fatalities in Accidental Dwelling Fires in 2014/15

Age Group	Male	Female	Total	Deaths per 100,000 population
Less than 40				0.00
40-44	1		1	1.09
45-49		1	1	1.01
60-64	1		1	1.25
75-79	1		1	2.00
80-84		1	1	2.70
85+	5		5	16.03
Grand Total	8	2	10	0.72

Table 7 provides the counts of accidental dwelling fire victims against age and gender. The table identifies that the majority of deaths took place in the 85+ age group with 5 overall - all of which were Male. Generally the majority of fire deaths affected people above the age of 65 with 7 overall. There were no (zero) fire deaths affecting people below the age of 40.

When taking the fatalities per 100,000 population into account, there is a disproportionately large increase in the number of fire deaths as age increases, particularly within the 85+ age group where there is a 16.03 fire deaths per 100,000 population ratio. As mentioned earlier in this document; 9 of the 10 deaths occurred where the victim lived alone and were alone at the time of the incident, a likelihood that increases with age.

Concerning racial origin of the deceased; 8 were reported as being White British with 2 being BME. Regarding gender; 8 were male with 2 being female.

6.3 “Other” Fatalities in Dwellings

Apart from Accidental Dwelling Fire Fatalities, there were 2 “other” fire related deaths that occurred in a dwelling during 2014/15. These deaths occurred in a single incident during May 2014. The incident involved a 40 year old mother who committed suicide using a flammable liquid, this act led to the unlawful killing of her 4 year son.

<http://www.liverpoolecho.co.uk/news/jai-joshi-unlawfully-killed-tuebrook-7800686>

<http://www.bbc.co.uk/news/uk-england-33002980>

7. *Information Sharing & Identification of those at fire risk*

Merseyside Fire and Rescue Authority continue to work closely with key partners to ensure that the risk of fire is reduced within the community.

To identify those at risk of fire, a key area of work has been through establishing and agreeing information sharing protocols. These have been with a number of key partners. These protocols have ensured that there is a formal legal framework to share information securely.

By establishing these protocols and receiving this data, staff within MFRA can make contact with vulnerable people who are already known by other professionals. This has greatly assisted in identifying those who are most vulnerable to the risks associated to fire.

Advocates and other staff that deal directly with the most vulnerable groups within the community have outlined that without the secure sharing of social services data, MFRA would more than likely not have known about that person at high risk of fire.

Protocols have been put in place with the following organisations and data is shared with MFRS on a regular basis: Liverpool, Sefton, St Helens and Wirral Adult Social Services, Wirral Revenues and Benefits, NHS England Exeter data (age 65 plus), three Registered Social Landlords and Cheshire and Wirral Partnership NHS Foundation Trust. Secure technology (AVCO) enables MFRA to securely electronically receive newly recorded known people that partner organisations have had contact with.

Customer Insight Project:

Research previously conducted in partnership with Liverpool John Moore’s University identified a number of causal factors that are significant for determining risk of vulnerable persons. This research identified that: elderly residents, residents who lived alone, residents that smoked and residents with a disability were particularly at risks for Accidental Dwelling Fires, especially in cases where more than one of these causal factors were present.

It was also identified that there was a need to associate risk with a person rather than an area. The customer insight project was started to address this. The key aim of this project was to improve the sharing of information about vulnerable individuals and a more efficient use of this data. This should enable improved identification of individuals who are high risk but living in low risk areas; this allowed MFRA to create a vulnerable persons index for each station area.

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MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	COMMUNITY SAFETY AND PROTECTION COMMITTEE		
DATE:	30 JULY 2015	REPORT NO:	CFO/069/15
PRESENTING OFFICER	DEPUTY CHIEF FIRE OFFICER		
RESPONSIBLE OFFICER:	DEPUTY CHIEF FIRE OFFICER	REPORT AUTHOR:	GM GARY OAKFORD
OFFICERS CONSULTED:	DEB APPLETON AND JOHN FIELDING – STRATEGY & PERFORMANCE.		
TITLE OF REPORT:	10 YEAR ACCIDENTAL DWELLING FIRE FATALITY REPORT		

APPENDICES:	APPENDIX A: HISTORICAL ANALYSIS OF FATALITIES IN ACCIDENTAL DWELLING FIRES BETWEEN 2005/06 AND 2014/15
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Purpose of Report

1. To request that Members consider performance and analysis concerning Accidental Dwelling Fire Fatalities between 2005/06 and 2014/15.

Recommendation

2. That Members note performance in relation to this report concerning deaths in accidental dwelling fires during the period 2005/6 to 2014/15..

Introduction and Background

3. The purpose of this report is to analyse fatalities from accidental dwelling fires (ADF) between 2005/06 and 2014/15; analysing the circumstances and socio demographic background of such occurrences in a way that can then be used to target risk and carry out prevention work.
4. Compared to other incident types that Merseyside Fire & Rescue Service (MF&RS) attends, fire fatalities are relatively rare, though their impact is most significant to family members, friends and neighbours of the deceased.
5. Fatalities in accidental dwelling fires are reported in Merseyside Fire and Rescue Authority's Service Delivery Plan as Key Performance Indicator 45 on a quarterly and annual basis.
6. In 2005/06 there were 11 fatalities in accidental dwelling fires. Since then there were gradual reductions in fire deaths, with a low of 5 deaths for the years 2010/11 and 2011/12. However this figure increased to 10 during 2014/15.

7. Concerning the demographic of fire fatalities, there is little bias towards gender with 37 female fatalities and 42 male fatalities. When age is analysed the risk of death in accidental dwelling fires increases with age. The two age groups at greatest risk are the: 80-84 and 85+ groups.
8. When analysed by district, Liverpool had the greatest overall number of fire deaths with 26, closely followed by Wirral with 24. When compared proportionally to incidents per 100,000 population, Wirral has the greatest number of deaths with 7.49 deaths per 100,000 population, compared to Liverpool's 5.52 per 100,000 population.
9. Concerning Deprivation and the use of Community and Local Government's (CLG) Indices of Multiple Deprivation (IMD) 2010, the general trend is that fatalities tend to occur more often in deprived areas, with fewer fire deaths affecting affluent areas. When the average age of victims is added to the equation it has been found that victims die younger in deprived areas with victims being older in affluent areas.
10. In 45 cases a smoke alarm was fitted and actuated, however there were 20 occurrences where a smoke alarm was not fitted within the property therefore meaning that the resident had no means of early warning.
11. In recent years there has been a general trend where in the majority of incidents where a fatality has occurred the smoke alarm was fitted and actuated.
12. When analysing ignition sources it has been found that of the 79 fire fatalities, 40 were as a result of smokers materials. However since a peak in fatalities in 2009/10 where 7 deaths were a result of smokers' materials, there has been a gradual reduction with only 1 death attributable to this ignition source during 2011/12 and 2012/13. However during 2013/14 and 2014/15 there were 3 deaths attributable to smokers materials
13. When analysing the fire room of origin and the ignition source it has been found that smokers' materials were responsible for the majority of fire fatalities in both the living room and the bedroom. When the influence of alcohol consumption is taken into account it is apparent that the majority of deaths involving smoker's materials in the bedroom also involved the consumption of alcohol (8 out of 14). Concerning the living room the same principle does not apply.
14. The majority of victims to have perished in accidental dwelling fires were the sole occupants of the dwellings in which they resided in 52 out of 79 cases. In combination 63 victims out of 79 were alone at the time of the fire.
15. When analysing incidents by month, the winter months of November and January have seen the greatest number of fire deaths.
15. Concerning fire deaths and day of week, the Service is most likely to attend such an incident on Saturday and especially Monday.

16. 16. The analysis contained within this report will be used to inform the Home Safety Strategy for 2015 onwards included in the Community Fire Prevention Functional Plan 2015/16, the introduction of which is the subject of a separate report for this committee.

Equality and Diversity Implications

17. The report identifies risk groups using data relating to equality and diversity. The report uses Gender, Lifestyle and Age Group data in order to identify risk groups across Merseyside.

Staff Implications

18. There are no staff implications arising from this report.

Legal Implications

19. The Fire and Rescue Services Act 2004, Section 6 provides that ...*“A fire and rescue authority must make provision for the purpose of promoting fire safety in its area. This includes making arrangements where reasonable to provide information, publicity and advice.”*

Financial Implications & Value for Money

20. There are no financial implications arising from this report.

Risk Management, Health & Safety, and Environmental Implications

21. The analysis of data and information relating to deaths in accidental dwelling fires is very important in the development of MFRA's prevention strategies. Contribution to Our Mission: Safer Stronger Communities – Safe Effective Firefighters

Contribution to Our Mission: *Safer Stronger Communities – Safe Effective Firefighters*

22. This report provides analysis of accidental dwelling fire fatality data held by MFRA. The report contributes to the Vision of “Safer Stronger Communities” by identifying at risk individuals (and their characteristics) across Merseyside. This report could be shared with partners as a means of encouraging greater data sharing between MFRA and external organisations.

BACKGROUND PAPERS

CFO/111/11 If this report follows on from another, list the previous report(s)

GLOSSARY OF TERMS

MFRA Merseyside Fire and Rescue Authority is the physical and legal entity. When writing reports MFRA is the “object”.

MFRS Merseyside Fire and Rescue Service is the service provided by MFRA.
When writing reports MFRS is the “action”

E.G. You are employed by the Authority (MFRA). The job you do forms part
of the Service (MFRS) provided by the Authority (MFRA).
If in doubt use MFRA.



Historical Analysis of Fatalities in Accidental Dwelling Fires between 2005/06 and 2014/15

AUDIENCE

**TO BE PRESENTED TO:
Authority
Strategic Management Group**

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**STRATEGY & PERFORMANCE DIRECTORATE
PREVENTION & PROTECTION**

Document Control

Amendment History

Version / Issue No.	Date	Author	Remarks / Reason for Change
1.0	22/05/2015	L Coles	First Draft

Sign-Off List

Name	Position
DCFO P Garrigan	Deputy Chief Fire Officer
D Appleton	Director of Strategy & Performance
G Oakford	Group Manager Prevention & Protection
J Fielding	Business Intelligence Manager

Distribution List

Name	Position	I / R
Strategic Management Group		
Performance and Scrutiny Committee		

Related Documents

Reference No.	Title	Author	Version & Date
1.0	Analysis of Fatalities in Accidental Dwelling Fires between 1 st April 2014 and 31 st March 2015	J Fielding	Pending

Ownership

Has it been agreed with the client that this is a publicly owned document?
Yes/No

If Yes please state URL: <http://www.merseyfire.gov.uk>

If No please state reason why:

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1. Agreement

For the purpose of this report the following agreement was made between the client and the Strategy & Performance Directorate.

This work was requested by Deputy Chief Fire Officer Garrigan and received on 01/04/2015.

The Manager¹ has approved this report/ piece of work can be undertaken by the Strategy & Performance Directorate.

If the scope of the work changes, authorisation must be again obtained and would be noted within the version control document sheet.

It was agreed that this report would be produced in draft format by May 2015, and would be sent electronically to the Director of Strategy & Performance and Client for comment.

The Manager / Client agreed that their comments would be received back by June 2015.

The final report, which will always be in PDF format, would be produced by June 2015, subject to receiving comments.

¹ Deb Appleton

2. Summary

The purpose of this report is to analyse the circumstances and contributing factors concerning deaths in Accidental Dwelling Fires attended between 2005/06 and 2014/15. Fatalities in Accidental Dwelling Fires are relatively rare compared to other incidents that Merseyside Fire and Rescue attend, though their impact is most severe to friends and families of the deceased.

In summary this report presents the following findings:

- Since 2005/06 where 11 fire fatalities took place there have been gradual reductions in fire deaths, with a low of 5 deaths for the years 2010/11 and 2011/12. In recent years there have been increases in Accidental Dwelling Fire deaths with 10 occurring during 2014/15.
- Concerning the demographic of fire fatalities, there is little bias towards gender with 37 female fatalities and 42 male fatalities. When age is analysed the risk of death in Accidental Dwelling Fires increases with age. The two age groups at greatest risk are the: 80-84 and 85+ groups.
- When analysed by district, Liverpool had the greatest overall number of fire deaths with 26, closely followed by Wirral with 24. When compared proportionally to incidents per 100,000 population, Wirral has the greatest number of deaths with 7.49 deaths per 100,000 population, compared to Liverpool's 5.52 per 100,000 population.
- Concerning Deprivation and the use of Community and Local Government's (CLG) Indices of Multiple Deprivation (IMD) 2010, the general trend is that fatalities tend to occur more often in deprived areas, with fewer fire deaths affecting affluent areas. When the average age of victims is added to the equation it has been found that victims die younger in deprived areas with victims being older in affluent areas.
- A further analysis was conducted into the lifestyles of victims using Customer Insight Community Profiles developed in partnership with Liverpool John Moores University. The Profiles use over 130 different locally derived datasets to create ten lifestyle based groups or segmentations. Though this analysis produced similar results to the IMD analysis, it did identify one disparate segmentation being "3 - *Middle income residents living in privately owned properties*" where 20 of the 79 fatalities took place.
- Overall the Customer Insight Community Profiles identified three segmentations at greatest risk of having a fire fatality:
 - Segmentation 3 - *Middle income residents living in privately owned properties*
 - Segmentation 7 - *Young families with high benefit need*
 - Segmentation 10 - *Younger, urban population living in high levels of deprivation*
- Concerning Smoke Alarm actuation in 45 cases a smoke alarm was fitted and actuated, however there were 20 occurrences where a smoke alarm was not fitted within the property therefore meaning that the resident had no means of early warning.
- In recent years there has been a general trend where in the majority of incidents where a fatality has occurred the smoke alarm was fitted and actuated.

- When analysing Ignition Sources it has been found that of the 79 fire fatalities, 40 were as a result of *Smokers Materials*. However since a peak in fatalities in 2009/10 where 7 deaths were a result of Smokers materials, there has been a gradual reduction with only 1 death attributable to this ignition source during 2011/12 and 2012/13. However during 2013/14 and 2014/15 there were 3 deaths attributable to *Smokers Materials*.
- When analysing the fire room of origin and the ignition source it has been found that *Smokers Materials* were responsible for the majority of fire fatalities in both the *Living Room* and the *Bedroom*. When the influence of alcohol consumption is taken into account it is apparent that the majority of deaths involving *Smokers Materials* in the *Bedroom* also involved the consumption of alcohol (8 out of 14). Concerning the *Living Room* the same principle does not apply.
- The majority of victims to have perished in Accidental Dwelling Fires were the sole occupants of the dwellings they resided in 52 out of 79 fire fatalities. In combination 63 victims out of 79 were alone at the time of the fire.
- When analysing incidents by month the winter months of November and January have seen the greatest number of fire deaths.
- Concerning fire deaths and day of week, Merseyside Fire & Rescue Authority are most likely to attend such an incident on a Friday and especially Monday.

3. Introduction

The purpose of this report is to analyse fatalities from Accidental Dwelling Fires (ADF) between 2005/06 and 2014/15; analysing the circumstances and socio demographic background of such occurrences; identifying business intelligence to target risk and prevention work.

Compared to other incident types that Merseyside Fire & Rescue Authority (MF&RA) attends, fire fatalities are relatively rare, though their impact is most significant to family members, friends and the community of the deceased.

Fatalities in Accidental Dwelling Fires are reported in Merseyside Fire and Rescue Service's Service Delivery Plan as Key Performance Indicator 45 which is reported to Authority on a quarterly and annual basis.

4. Methodology

The software used in this report includes:

- Microsoft Excel 2013 to interpret and graphically represent figures.
- MapInfo Professional 11 was used to tag incidents with geographical information, including the tagging of incidents with Customer Insight Community Profile² data. (Customer Insight Community Profiles has been developed by MF&RA in conjunction with Liverpool John Moores University to identify groups most at risk).
- The calculation for fatalities per 100,000 population is:
(Count of Fatalities / Population) * 100,000
- Population figures are based on Mid 2013 estimates published by the Office for National Statistics.
- Indices of Multiple Deprivation (IMD) 2010 was utilised to analyse levels of deprivation in the areas where fire deaths took place.³

Data used in this report has been supplied by the Merseyside Fire & Rescue Authority Incident Investigation Team; with the coroner ultimately determining the cause of death.

Data used within this report is based on fatal incidents occurring in the home where the motive for the incident is judged to have been accidental. Merseyside Fire & Rescue Authority measure this as Key Performance Indicator 45⁴ - *Number of fatalities from Accidental Dwelling Fires.*

Data Limitations:

The findings within this report are based on available data. As fire fatalities are a relatively rare occurrence the volume of data is small. Therefore some conclusions based on the data should be approached with due diligence.

²The Customer Insight Community Profiles have been developed for the whole of the Merseyside area. The community profiles uses 130 local datasets aggregated to the 'Output Area' geography. These datasets are analysed and the results are a series of 10 profiles describing the characteristics and lifestyles of communities.

³ Uses IMD 2010 to create a localised deprivation index, in essence grouping deprivation by 10% bands

⁴ The data contained within this report contains data which is still awaiting coroner agreement and as such the figures contained are subject to change.

5. Results

5.1 Location and Lifestyle Analysis

5.1.1 Comparison of Fatalities by District

Chart 1: Breakdown of fatalities in Accidental Dwelling Fires between 2005/06 and 2014/15 by District

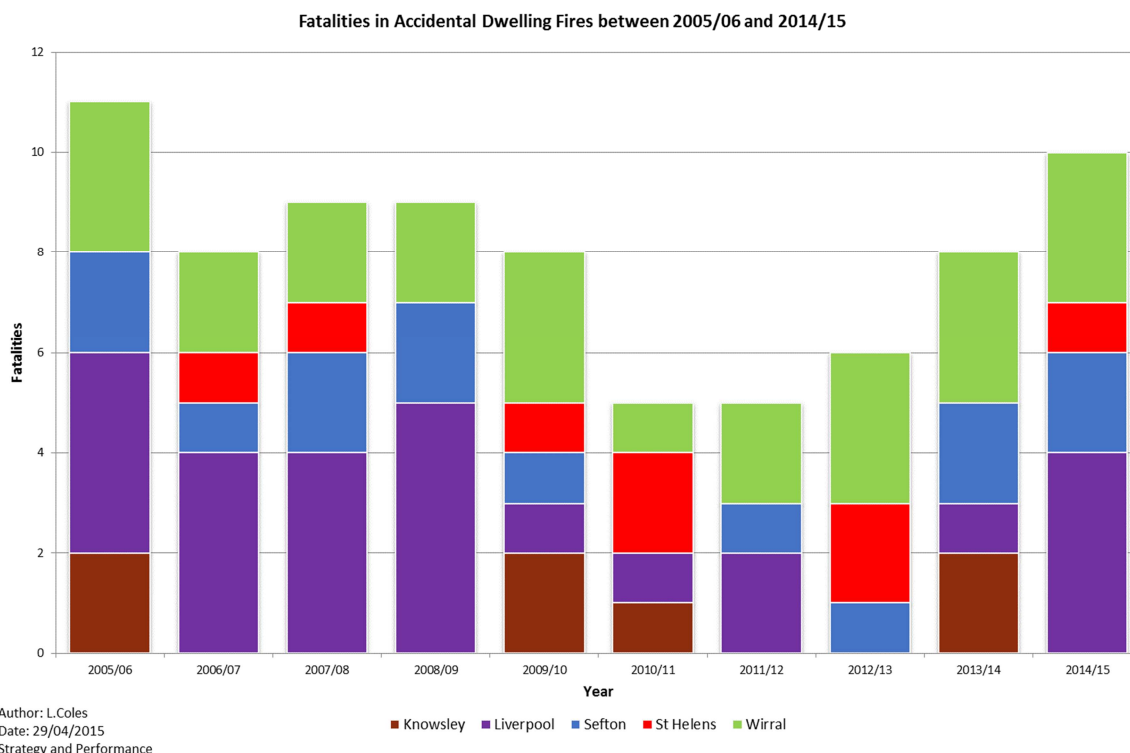


Chart 1 identifies that the number of fatalities in Accidental Dwelling Fires attended by Merseyside Fire and Rescue Service has fallen from a high of 11 for 2005/06 to a low of 5 during 2010/11 and 2011/12. In the past year (2014/15) there were 10 fatalities⁵.

Table 1: Comparison of total fatalities by district and populations

Counts	Knowsley	Liverpool	Sefton	St Helens	Wirral	Total
Overall Fatalities	7	26	14	8	24	79
Rate Per 100,000 population	4.79	5.52	5.12	4.54	7.49	5.70
Population	146,086	470,780	273,207	176,221	320,295	1,386,589

Table 1 allows a direct comparison of fatality counts between the five Merseyside districts by aggregating the data to incidents per 100,000 head of population. The table shows that Liverpool has seen 26 fatal fire victims, closely followed by Wirral with 24. When overall population counts are taken into consideration – Wirral proportionally has had the greatest number of

⁵Though the above chart would suggest an upward trend in fatalities since 2012/13; this could be merely coincidental. As fire fatalities are a relatively rare event to base firm conclusions on this data is fraught with difficulty due to that there is not enough data to measure statistical significance.

fatalities with 7.49 per 100,000 population; with Liverpool having a much lower ratio of 5.52 fatalities per 100,000 population.

5.1.2 Comparison of Fatalities and Deprivation

Chart 2: Fatalities in Accidental Dwelling Fires between 2005/06 and 2014/15 linked to deprivation⁶

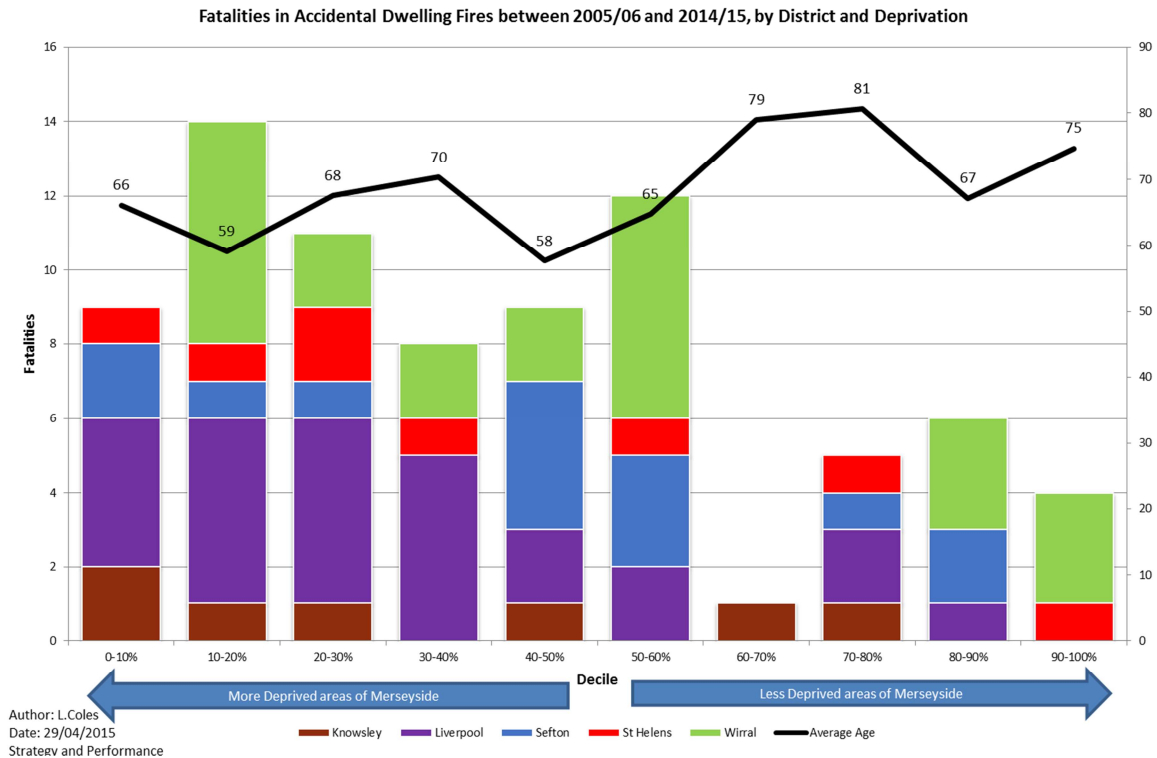


Chart 2 ranks the location of fire fatalities to the level of deprivation in the area the incident took place in, using Indices of Multiple Deprivation 2010 (IMD). The chart demonstrates that as a general rule - fire fatalities tend to occur within deprived areas with fewer fire deaths occurring within affluent areas. Applying a regression analysis to the available data a R² value of 0.48 is achieved indicating a moderate statistical link between deprivation and fire fatality.

When analysed at a district level;

- Liverpool on the whole has seen fire deaths in the relatively deprived areas.
- Wirral has a more sporadic pattern with the district having the greatest number of fatalities in the deprived 10-20% decile as well as the moderate 50-60% decile. Wirral also has the greatest number of fire fatalities in the most affluent 80-90% and 90-100% deciles.
- St Helens and Knowsley both tend to match the general Merseyside pattern with fire fatalities occurring in deprived areas.
- Sefton has a different pattern with the majority of their fatalities occurring in the intermediate 40-50% decile and the moderate 50-60% and the affluent 80-90% decile.

⁶ As per the CLG document Indices of Multiple Deprivation 2010

The chart also identifies the average ages of the victims by each deprivation decile group. In generic terms the chart identifies that fatal fire victims in deprived areas tend to be younger; particularly in the 40-50% decile where the average age is 58. By contrast in the more affluent areas victims tend to be older with an average age of 81 in the 70-80% decile.

5.1.3 Analysis of Fatalities using Customer Insight Profiling

Table 2: Breakdown of fatalities according to Customer Insight⁷ Community Profiles (segmentations) between 2005/06 and 2014/15

Customer Insight Profile Group	Average Age	Knowsley	Liverpool	Sefton	St Helens	Wirral	Total
1 - Wealthy over 50 population living in semi-rural locations (12.5% of Merseyside)	74					4	4
2 - Wealthy retirees (4.8% of Merseyside)	53	1		2			3
3 - Middle income residents living in privately owned properties (17.3% of Merseyside)	68	1	5	1	3	10	20
4 - Average income older residents (11.9% of Merseyside)	71	1	1	2		2	6
5 - Students Living in City Centre Locations (1.8% of Merseyside)	0						
6 - Young families living in privately owned semi-detached homes (11.5% of Merseyside)	78		1	1	1	2	5
7 - Young families with high benefit need (16.7% of Merseyside)	63	2	6	2	3	1	14
8 - Residents living in social housing with high need for benefits (6.3% of Merseyside)	64	2	1	2			5
9 - Transient population living in poor quality housing (3.6% of Merseyside)	55			1		2	3
10 - Younger, urban population living in high levels of deprivation (13.7% of Merseyside)	64		12	3	1	3	19
Total	66	7	26	14	8	24	79

Table 2 uses the Customer Insight Community Profiles; co-developed in partnership with Liverpool John Moores University. The Community Profiles use locally derived data sources to create a series of customer segmentations - as above.

The table identifies that people living in *deprived* – risk areas (segmentations 7-10) have the greatest number of fire fatalities - in combination. The most affluent segmentations (1 and 2) had the fewest fatalities.

The segmentation at highest risk according to the Customer Insight Community Profiles is 3 – *Middle income residents living in privately owned properties* with

⁷ The Customer Insight Community Profiles classifies Merseyside into 10 groups in terms of their socio-demographics, lifestyles, culture and behaviour. The titles devised for each segmentation are merely descriptive not prescriptive. These are used by MF&RA in a similar way that customer segmentation such as MOSAIC or ACORN is used by other organisations.

20 fatalities; 10 of which occurred in Wirral alone. It is this segmentation where the Customer Insight Community Profiles and Indices of Multiple Deprivation diverge significantly. This is potentially associated with the geography⁸ types that the two tools use, described as follows:

- IMD is based on a geography known as “*Lower Layer Super Output Area*” which is an area made up of 400 dwellings or 1600 head of population.
- The Customer Insight Community Profile uses a smaller geography called “*Output Area*” which is 125 properties or 300 head of population. Therefore the Customer Insight Community Profiles are able to identify pockets of this segmentation type in and amongst the larger areas of deprivation and affluence as identified using Indices of Multiple Deprivation.

When the average age of the deceased is analysed, the table identifies that within the more deprived segmentations (7 to 10) the age of victims is generally younger than that of other segmentations, roughly matching the previous Indices of Multiple Deprivation based analysis. Of the most populous segmentation (3 - *Middle income residents living in privately owned properties*) the average age of victims is 68, 2 more than the Merseyside Average of 66.⁹

In conclusion the segmentations with the greatest occurrence of fatalities are:

- 3 - Middle income residents living in privately owned properties
- 7 - Young families with high benefit need
- 10 - Younger, urban population living in high levels of deprivation

⁸ There are a variety of Geography types, more common types include: district, ward and postcode. Lower Layer Super Output Area and Output Area are in essence smaller constitutional parts of larger geographies

⁹ A further breakdown of this information is located in the Appendices of this report

5.1.4 Smoke Alarm Analysis

Smoke alarms provide an important early warning to residents should a fire occur within a property. It must be emphasised that in the vast majority of incidents the actuation of a smoke alarm can and do save lives; however this is not always the case as personal mitigating circumstances like: mobility, prescription medicines and alcohol consumption can prevent a victim finding safety regardless of the actuation of a smoke alarm.

The following section analyses the performance of smoke alarms.

Table 3: Smoke Alarm Functionality & HFSC Status

Smoke Alarm Status	HFSC			Total	%
	Yes	No	Unknown		
Fitted & Operated	37	5	3	45	57.0%
Fitted Did Not Operate	5	4	1	10	12.7%
Fitted No Batteries		3		3	3.8%
Fitted Unknown if operated		1		1	1.3%
None Fitted	1	16	3	20	25.3%
Total	43	29	7	79	100%

Table 3 identifies that in the majority of occurrences (45 or 57%) a smoke alarm was fitted and operational. In 10 cases the smoke alarm was fitted and yet did not operate, this is possibly due to the nature of the fire itself or the positioning of the smoke detector.

In 3 (3.8%) cases there were smoke alarms fitted, but with no batteries therefore not providing the early warning system a smoke alarm provides. Also of note is that in 20 cases (25.3%) there was no smoke alarm fitted meaning no early warning system being available in the property.

When analysing smoke alarm functionality against HFSC status, 54.4% (43/79) of properties had previously had a HFSC. Of these properties 37 (86%) had a smoke alarm which was fitted and operated. This is compared with 29 (36.7%) properties that had not had a HFSC prior to the incident. Only 17.2% of the properties which had not had a HFSC had a smoke alarm fitted and operated. 55.2% of properties did not have a HFSC or any smoke alarms fitted.

Chart 3: Status of Smoke Alarm Functionality by Proportion and Year

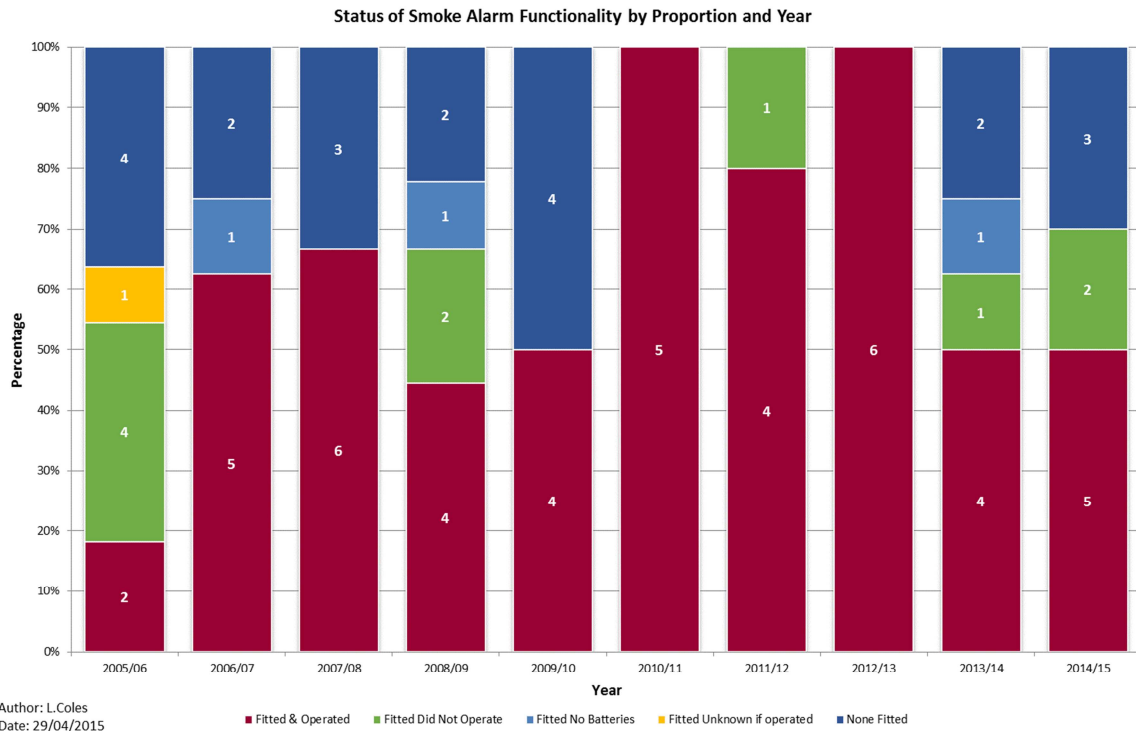


Chart 3 graphically identifies that between 2010/11 and 2012/13 there has been a general trend where in the majority of incidents where a fatality has occurred - the smoke alarm was fitted and actuated. Though recently there has been an increase of fire alarms being fitted - but did not operate or occurrences where a smoke alarm not being fitted at all, yet there is too little data available to indicate this a growing trend.

5.2 Causal Factor Analysis

5.2.1 Ignition Source

Chart 4: Breakdown of Ignition Source by Year

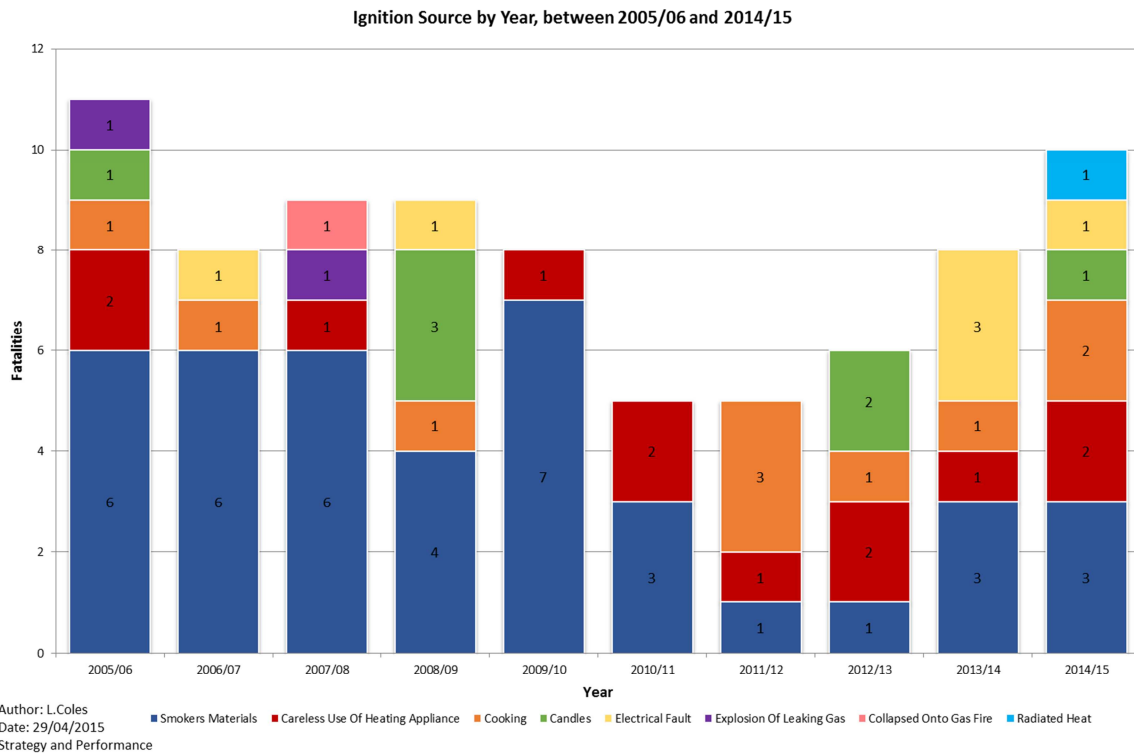


Chart 4 provides a breakdown, by year of the ignition sources involved in fatal fires. The chart identifies that deaths involving Smokers Materials (dark blue) had been consistently high between 2005/06 and 2009/10, after this period fire deaths involving Smoking Materials had fallen markedly until 2013/14. In the last year (2014/15) Smokers Materials accounted for the highest number of fatalities (3). Fatalities involving Heating Appliances (red) have remained relatively consistent.

Fatalities linked directly to cooking and cooking practices (orange) have fluctuated between the years, with the exception of 3 incidents during 2011/12. As a result of this peak Fire and Rescue service personnel have used targeted campaigns promoting fire safety in the kitchen.

During the ten year period analysed Smokers Materials account for 40 deaths equating to 50.6% of total fire deaths, this is followed by Careless use of Heating Appliances with 12 deaths (or 15.2%) then Cooking related fires with 10 deaths (or 12.7%).

A breakdown of the ignition sources is contained in the following table (4).

Table 4: Causal factors involved in Accidental Dwelling Fatalities

Ignition Source		Total
Smokers Materials		40
Careless Use Of Heating Appliance	Careless Use Of Heating Appliance	12
Cooking	Cooking - Accidental Ignition Of Clothing	3
	Cooking - unattended food left on hob	2
	Cooking - Unknown	2
	Chip Pan Left Unattended in Kitchen	1
	Cooking - Misuse of Microwave	1
	Cooking - Residual Fat Ignited in Frying Pan	1
Candles	Candles	7
Electrical Fault	Electrical	4
	Electrical - Fridge burning out	1
	Mains Electric Fault Overload	1
Explosion Of Leaking Gas	Ignition Of Gas From Cooker - Gas Leak	1
	Spark From Fridge/Freezer - Ignition of gas mistakenly left on	1
Radiated Heat	Radiated Heat - from table top lamp	1
Collapsed Onto Gas Fire	Collapsed Onto Gas Fire	1
Grand Total		79

5.2.2 Room of Origin and Ignition Source

Table 5: Room of Origin and Ignition Source with whether the victim had consumed alcohol prior to the incident

Room of Origin	Ignition Cause	Total	Of Which Involved Alcohol		
			Yes	No	Unknown
Living Room	Smokers Materials	20	8	9	3
	Careless Use Of Heating Appliance	8	3	5	
	Candles	3	1	2	
	Collapsed Onto Gas Fire	1		1	
	Radiated Heat	1		1	
	Sub Total	33	12	18	3
Bedroom	Smokers Materials	14	8	3	3
	Careless Use Of Heating Appliance	4		4	
	Candles	3	2	1	
	Electrical Fault	3	2	1	
	Sub Total	24	12	9	3
Kitchen	Cooking	9	3	3	3
	Smokers Materials	4	3	1	
	Electrical Fault	2		1	1
	Explosion Of Leaking Gas	2		2	
	Sub Total	17	6	7	4
Bedsit (Open plan sleeping and living area)	Smokers Materials	2	2		
	Sub Total	2	2		
Bathroom	Candles	1	1		
	Sub Total	1	1		
Hallway	Electrical Fault	1		1	
	Sub Total	1		1	
Caravan	Cooking	1		1	
	Sub Total	1		1	
Total		79	33	36	10

Table 5 provides a breakdown of the fire's room of origin, its respective ignition source and whether the victim was under the influence of alcohol¹⁰ at the time. The table identifies that *Smokers Materials* have a root cause in the majority of fires in the *Living Room* and *Bedroom*; with *Careless Use of Heating Appliance* also being common to these rooms.

Taking the influence of alcohol into account; 33 or 41.8% of fatalities are linked to the consumption of alcohol. Where alcohol use is combined with *Smokers Materials* then 52.2% deaths are linked to this combination of factors.

The influence of alcohol is greatest in the *Bedroom* where 12 of the 24 fire deaths involved alcohol consumption. Regarding deaths in the *Living Room*,

¹⁰ A further piece of analysis was conducted analysing whether the use of Alcohol was influenced by gender. The analysis identified that the use or not of alcohol was roughly equal between males and females.

alcohol was not as significant a contributory factor with 12 of the 33 involving alcohol use.

Within the *Kitchen, Cooking* and its associated activities is the most common cause of fire death with 9 deaths in combination.

5.2.3 Habitation and Carer Status

Table 6: Habitation status at time of incident and whether deceased was known to have a carer

Status	Lived Alone		Cohabited		Other		Total
	Alone at Time	Accompanied	Alone at Time	Accompanied	Alone at Time	Accompanied	
Yes	22	0	1	5	0	0	28
No	24	1	6	8	5	2	45
Unknown	5	0	1	0	0	0	6
Total	51	1	8	13	4	2	79

Table 6 identifies that the majority of victims (51 from 79 or 63.8%) *Lived Alone* and were *Alone at the Time* of the incident. Of the victims to have *Cohabited*, 8 were *Alone at the Time* with 13 being accompanied. In combination 63 of the 79 victims (79.7%) died alone.

Concerning whether a victim had need of a carer or not, the majority of victims did not have a carer (45 of 79, or 57%). Many of the victims who *Lived Alone* (22 of 52, or 42.3%) had need of a carer.

Table 7: Habitation status at time of incident and whether deceased was known to have a carer – OVER 60 Age Group Only

Status	Lived Alone		Cohabited		Other		Total
	Alone at Time	Accompanied	Alone at Time	Accompanied	Alone at Time	Accompanied	
Yes	19	0	1	3	0	0	23
No	12	0	2	3	2	0	19
Unknown	4	0	0	0	0	0	4
Total	35	0	3	6	2	0	46

Table 7 identifies that the majority of victims above the age of 60 (35 of 46 or 76.1%) *Lived Alone* and were *Alone at the Time* of the incident. Of the victims above the age of 60 to have *Cohabited*, 6 were *Accompanied with 3 being Alone at the Time*. Overall 38 of the 46 fatalities (or 82.6%) were *Alone at the Time* of the incident.

Given the age group analysed, 50% or (23) of the victims had access to carers. The majority of victims who *Lived Alone* required carers, though given the age range under analysis this figure is much more pronounced - with 19 victims out of 35, (or 54.3%).

5.3 Demographic Analysis

Table 8: Fatalities by Age and Gender (with fatalities per 100,000 population ratio)¹¹

Age Group	Male	Female	Total
0-4	0 (0)	0 (0)	0 (0)
5-9	0 (0)	0 (0)	0 (0)
10-14	0 (0)	0 (0)	0 (0)
15-19	0 (0)	0 (0)	0 (0)
20-24	0 (0)	0 (0)	0 (0)
25-29	0 (0)	2 (4.3)	2 (2.1)
35-39	1 (2.7)	0 (0)	1 (1.3)
40-44	3 (6.7)	1 (2.1)	4 (4.4)
45-49	3 (6.3)	8 (15.6)	11 (11.1)
50-54	5 (10.5)	3 (5.9)	8 (8.1)
55-59	3 (7.1)	4 (9.0)	7 (8.1)
60-64	4 (10.2)	1 (2.5)	5 (6.3)
65-69	2 (5.5)	1 (2.6)	3 (4.0)
70-74	1 (3.8)	4 (13.0)	5 (8.7)
75-79	7 (4.5)	2 (7.2)	9 (18.0)
80-84	4 (26.7)	7 (31.8)	11 (29.7)
85+	9 (89.1)	4 (19.0)	13 (41.7)
Total	42 (6.2)	37 (5.2)	79 (5.7)

Table 8 provides the count of fire deaths by age and gender along with the ratio of fire deaths per 100,000 head of population. The table identifies three age groups at greatest risk from a fatality in an Accidental Dwelling Fire, including the: 45-49, 80-84 and 85+ age groups. When the ratio of deaths to proportion of population is taken into account it is very apparent that with age the risk of mortality as a result of an Accidental Dwelling Fire increases significantly. 10 of the 11 fatalities in the 45-49 age group had alcohol in their system at the time of the incident. Applying a regression analysis to the available data a R^2 value of 0.62 is achieved indicating a moderate statistical link between age and fire related mortality.

Concerning gender there is little bias towards either sex, with 37 (46.8%) female victims and 42 (53.2%) male victims.

Concerning racial profiling of the deceased; 74 victims were described as White – British, 1 was described as White – Irish and 4 from the category “Other”. When analysed proportionally 93.7% of victims were White British just slightly higher than the Census 2011 population ratio of 91.8%.

¹¹ Value is based on population of each age range by gender opposed to overall population.

5.4 Temporal Analysis

5.4.1 Fatalities by Month

Chart 5: Fatalities in Accidental Dwelling Fires by Month

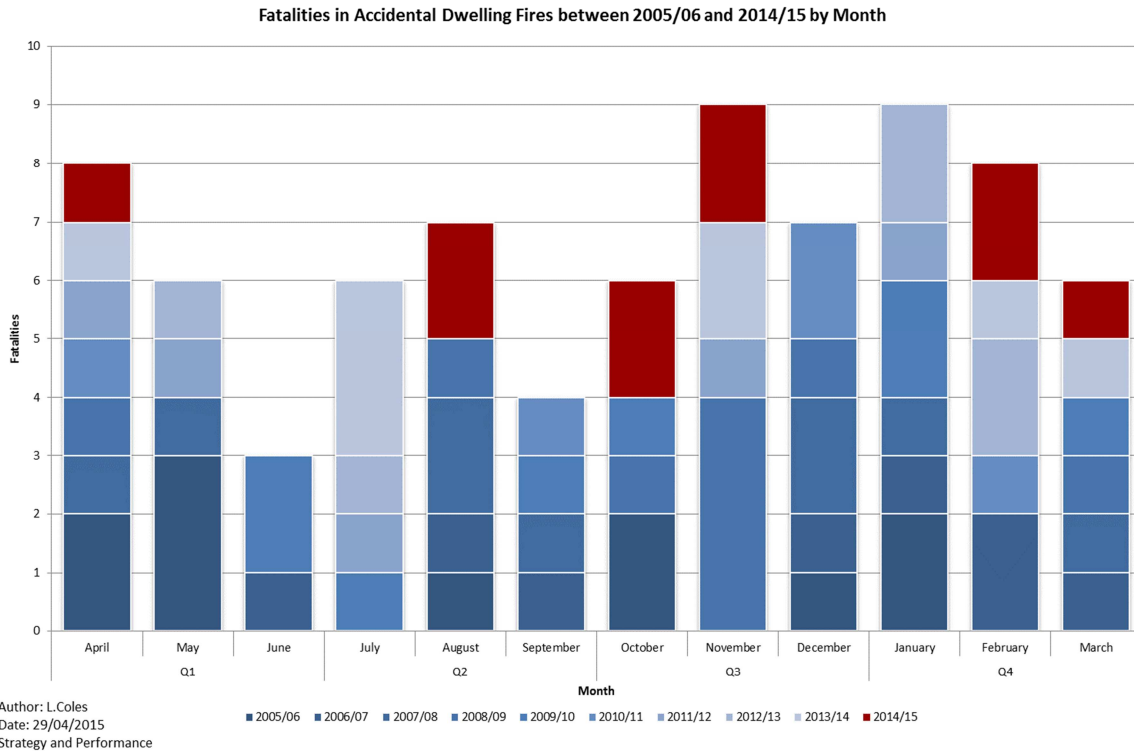


Chart 5 identifies that there is a strong link between fatalities in Accidental Dwelling Fires and seasonality with the winter months of: November and January in particular seeing high fatality numbers.

Chart 6: Fatalities in Accidental Dwelling Fires by Month and Ignition Source

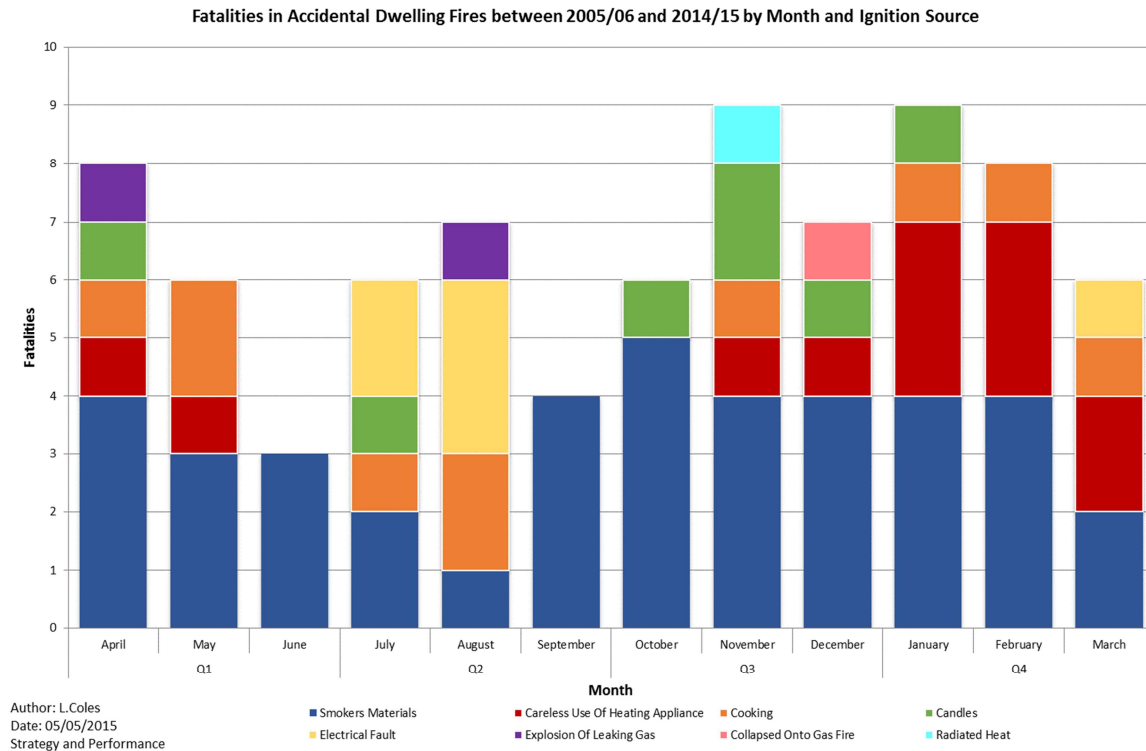


Chart 6 analyses ignition source by month for the period between 2005/06 and 2014/15. The chart identifies little evidence of seasonal trends in connection with an Accidental Dwelling Fire’s ignition source.

Fatalities involving *Smokers Materials* have relatively low levels of death during the summer months of July and August with secondary lulls during the month of March.¹²

When *Smokers Materials* are analysed by quarter the overall numbers of fatalities are relatively consistent with: 10 fatalities in Quarter 1, 7 in Quarter 2, 13 in Quarter 3 and 10 in Quarter 4.

During the winter months of January and February where the weather is most inclement *Careless Use of Heating Appliance* is more common. *Cooking* related deaths occur mainly during the Months of: May and August - the significance of this fluctuation is difficult to determine given the small scale of the dataset used.

¹² The following comments are hypothetical and should not be interpreted as truth: *July* and *August* tend to be peak months for holiday activity, also given the generally clement weather conditions people tend to spend more time outdoors. *March* is the first month of spring where weather improves, this transition from winter to spring can at least temporarily have a positive impact on individuals behaviours, both physically (gardening, walks etc) and psychologically (Seasonal Affective Disorder).

5.4.2 Fatalities by Day of Week

Chart 7: Fatalities between 2005/06 and 2014/15 by day of week

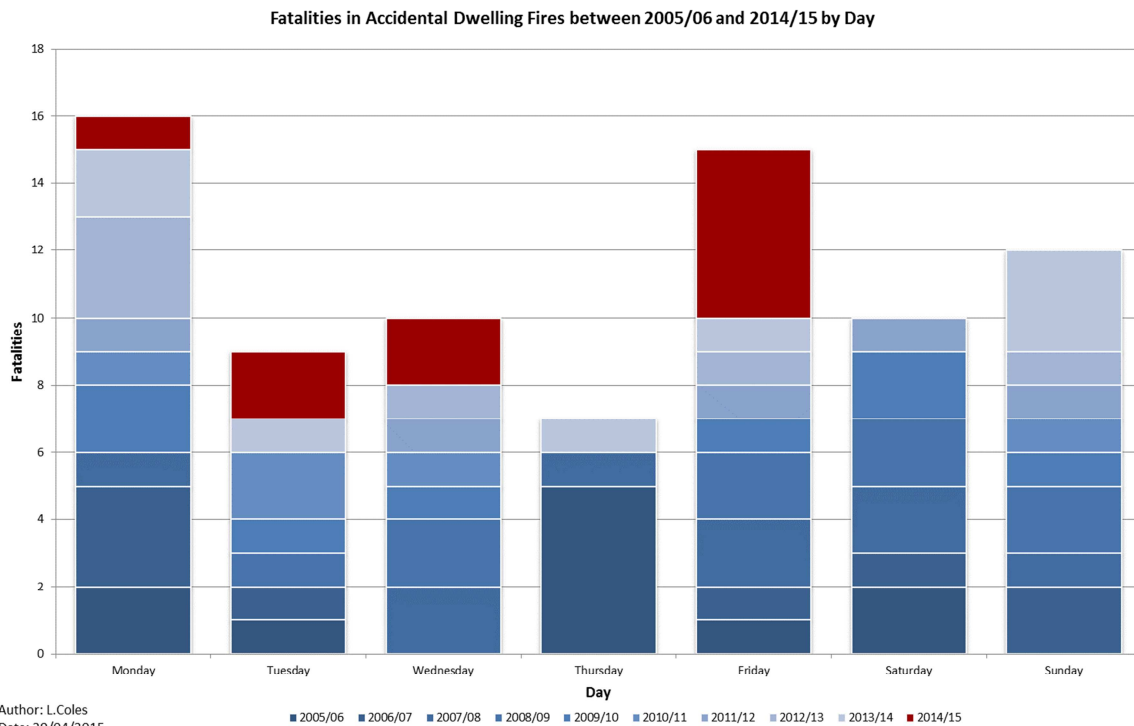


Chart 7 provides an analysis of fatalities in Accidental Dwelling Fires by day of week. The chart identifies two peaks, with 16 deaths occurring on Mondays and 15 deaths on Fridays.

Fatalities occurring over the weekend period (Saturday, Sunday and Monday) can be explained to an extent by behaviours associated with revelry and its unintended side effects including intoxication and unsafe cooking practices.¹³

¹³ Please note that of "late fire calls" i.e. incidents MF&RA attend after the initial fire took place, only one incident took place on a Monday.

6. Appendices

Table 9: Breakdown of age and Customer Insight Community Profile.

Segmentation	Total	Average Age	25-29	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1 - Wealthy over 50 population living in semi-rural locations	4	74				1						1		2
2 - Wealthy retirees	3	53				1	1	1						
3 - Middle income residents living in privately owned properties	20	68			2	1	3	1	1		2	4	4	2
4 - Average income older residents	6	71				1	1				1	1	1	1
5 - Students Living in City Centre Locations	0	0												
6 - Young families living in privately owned semi-detached homes	5	78					1						2	2
7 - Young families with high benefit need	14	63	1		1	2	1	1	2		1	2	2	1
8 - Residents living in social housing with high need for benefits	5	64				1		2			1			1
9 - Transient population living in poor quality housing	3	55				1		1	1					
10 - Younger, urban population living in high levels of deprivation	19	64	1	1	1	3	1	1	1	3		1	2	4
Total	79	66	2	1	4	11	8	7	5	3	5	9	11	13

Table 9 provides a complete breakdown of age group and where the victims perished according to the Customer Insight Community Profile. As previously mentioned within the report there are two risk age groups: 80-84 and 85+ and the profile at greatest risk is segmentation “3 - Middle income residents living in privately owned properties”.

When segmentation 3 is analysed in greater detail it identifies clustering between the age groups of 70 - 74 to 80 – 84 with a total of 10 fatalities. There is a secondary peak within this segmentation group particularly within the 50-54 age groups with 3 fatalities.

It must also be noted that within segmentation “10 – Younger, urban population living in high levels of deprivation” the 85+ age group in particular is at greatest risk of fatality in Accidental Dwelling Fire.

The table does identify that younger victims died in the more deprived profiles (segmentations 7 and 10) with particular clustering in the 45-49 age group with 5 fatalities in total for these segmentations.

MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	COMMUNITY SAFETY AND PROTECTION COMMITTEE		
DATE:	30 JULY 2015	REPORT NO:	CFO/067/15
PRESENTING OFFICER	DCFO PHIL GARRIGAN		
RESPONSIBLE OFFICER:	GM GUY KEEN	REPORT AUTHOR:	SM STEVE TAYLOR
OFFICERS CONSULTED:	COMMUNITY PROTECTION MFRA LEGAL DEPARTMENT		
TITLE OF REPORT:	PRIMARY AUTHORITY SCHEME 2015		

APPENDICES:	NONE
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Purpose of Report

1. To inform Members of the formalisation of partnership arrangements enacted under the Primary Authority Scheme (PAS) with two retail organisations, A.S.Watson (Superdrug PLC, Savers Health & Beauty, The Perfume Shop), and Ladbrokes Gaming PLC.

Recommendation

2. That Members;
 - a. Note and understand the advantages to MFRA of entering into these partnerships.
 - b. Note that following the general election, the new government have already stated that it is a key business objective to extend the existing PAS to include smaller businesses.
 - c. Approve the principal of seeking additional partnership agreements with other organisations within the retail sector.

Introduction and Background

3. In 2011, CFOA supported by the British Retail Consortium (BRC) introduced the Retail and Fire Key Authority Partnership (RAFKAP) with the objectives of promoting and improving statutory compliance within the retail sector with fire regulations, and creating consistency in approach within FRA's for enforcement of the regulations.
4. This scheme was then extended, administered, and re-named to Primary Authority Scheme (PAS) in late 2013 by the Better Regulation Delivery Office (BRDO).
5. Under PAS, MFRA were nominated for 2 compulsory pilot partnerships with Superdrug PLC, and Ladbrokes PLC, which ran for 6 months.

6. During this period, both companies were provided with 'assured advice' by officers of MFRS Community Protection department on improving their company fire safety policies and procedures. The pilot partnership arrangements successfully concluded in June 2014.
7. In October 2014, A.S.Watson, who are the parent company of Superdrug, Savers Health & Beauty, and The Perfume Shops, officially requested the formulation of a full partnership agreement with MFRA for entry on to the PAS public register, covering approximately 1500 retail outlets in the UK.
8. This was followed by a similar request by Ladbrokes PLC earlier this year for their 2200 premises in the UK.
9. Following discussions, formal application was made to BRDO for partnership agreements with both companies, and these were officially nominated by the Secretary of State and entered onto the public register in April 2015.

Equality and Diversity Implications

10. There are no equality and diversity implications arising from this report.

Staff Implications

11. At present, Community Protection have nominated 2 appropriately experienced and qualified Fire Engineers as contact officers for these partnerships, which is the statutory minimum number of contact officers required under PAS.
12. Each partnership is contracted for 120 hours input per year, and will run for a period of 2 years.
13. Costs are recovered by MFRA at an agreed rate of £65 per hour.
14. Increasing the number of partnership agreements may require the nomination of further appropriately trained officers, but this may be off-set against the cost recovery arrangements.

Legal Implications

15. There is a risk of reputational damage to MFRA if incorrect advice is issued, or inappropriate actions are undertaken by MFRS in the administration of the PAS.
16. Further legal or financial implications will be mitigated within the terms of the partnership agreements drawn up and agreed between the legal departments of MFRA and the individual partner organisations.

Financial Implications & Value for Money

17. PAS cannot be used to generate income, but legitimate costs for officer's time can be recovered from both retail partners.

18. PAS is therefore cost neutral to MFRA, and further expansion of these partnerships can be covered as long as there are appropriately trained officers available to administer the arrangements.
19. Given the agreed rate of cost recovery, approximate annual salary costs for 1 officer could be recovered from 4 partnerships.

Risk Management, Health & Safety, and Environmental Implications

20. The existing H&S and Lone working policy has been applied where appropriate

Contribution to Our Mission: *Safer Stronger Communities – Safe Effective Firefighters*

21. The PAS is linked to the strategic aims of MFRA in that it promotes good fire safety practices in retail premises which should contribute significantly to reducing incidents of fire in such premises.
22. Ensuring good fire safety standards in these premises will also contribute to safer buildings for the occupation of the public, and should allow for effective intervention from fire crews, in the event of a fire.

BACKGROUND PAPERS

CFO/096/12 Introduction of RAFKAP

CFO/118/13 Pilot Scheme Update

CFO/026/14 Extension to PAS

GLOSSARY OF TERMS

MFRA	Merseyside Fire and Rescue Authority.
MFRS	Merseyside Fire and Rescue Service.
PAS	Primary Authority Scheme is the name for the partnership arrangement between Fire Authorities and Retail Organisations for issuing assured advice on fire safety policies and procedures.
BRDO	Better Regulation Delivery Office
CFOA	Chief Fire Officers Association
RAFKAP	Retail and Fire Key Authority Partnership
BRC	British Retail Consortium

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MERSEYSIDE FIRE AND RESCUE AUTHORITY			
MEETING OF THE:	COMMUNITY SAFETY AND PROTECTION COMMITTEE		
DATE:	30TH JULY 2015	REPORT NO:	CFO/072/15
PRESENTING OFFICER	DEPUTY CHIEF FIRE OFFICER		
RESPONSIBLE OFFICER:	DCFO PHIL GARRIGAN	REPORT AUTHOR:	SM ANDY GROOM
OFFICERS CONSULTED:	GM GUY KEEN		
TITLE OF REPORT:	SPRINKLERS INITIATIVE UPDATE		

APPENDICES:	APPENDIX A: HOARDING DESIGNS
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Purpose of Report

1. To inform Members on the progress of the initiative to fit sprinklers in purpose built blocks of flats.
2. To seek approval from Members to extend the scope of this scheme to other types of premises in Merseyside that house vulnerable residents.

Recommendation

3. That Members approve the broadening of the scope of premises that can be supported by the capital funding programme to include other premises that house vulnerable residents (e.g. persons with limited mobility, dementia or mental health issues) or buildings that pose a particular risk to firefighter safety.

Introduction and Background

4. Authority Report CFO135/13 gave approval for £200k funding for the provision of capital funding to support the installation of fire suppression and engineered solutions to enhance the safety of Firefighters and residents in purpose built blocks of flats.
5. The Protection Department have actively engaged with Housing Associations and Registered Social Landlords (RSL's) to generate interest in the retro fitting of sprinklers in purpose built blocks of flats. A symposium was held at the Training and Development Academy with a realistic sprinkler demonstration. Presentations have also been delivered to individual RSL's and Chief Executives of all local housing providers have been written to informing them of the grant scheme.
6. Liverpool Mutual Homes (LMH) has agreed to enter into a partnership with MFRA to fit sprinklers into Marwood Towers which is a 14 storey block on

Scotland Road. This development will comprise 81 units for tenants aged over 55 including 10 'supported living' units.

7. Works on the redevelopment of Marwood Towers have commenced with completion anticipated in autumn 2016. Hoardings have been erected around the site. Merseyside Fire and Rescue Service (MFRS) have designed sprinkler messages to be included on the hoardings and LMH have produced the graphic designs for MFRS free of charge. See Appendix A.
8. The tendering process for the sprinkler sub-contractor has not yet been completed however it is expected that Merseyside Fire and Rescue Authority (MFRA) 'part-funding' contribution to the sprinkler installation will be around 100k. Subsequent revenue and lifecycle costs for the system will be met by LMH.
9. Despite some initial expressions of interest from other Housing Associations and RSL's there has been no further acceptance to install sprinklers in any other high rise blocks of flats.
10. There has however been significant interest from other organisations to enter into partnership with MFRA to fit sprinklers into premises other than purpose built flats. These include Peasley Cross Mental Health Hospital and Helena Housing in St Helens for a tenant with hoarding issues living in a semi-detached house.

Equality and Diversity Implications

11. Each premises identified for capital funding will be subject to an Equality Impact Assessment. It is recognised some of the most vulnerable residents are the elderly which will be considered when identifying which premises to target.

Staff Implications

12. Staffing contribution for this project will be met from existing resource.

Legal Implications

13. Through liaison with the legal department a Suppression Grant Funding Agreement has been developed for MFRA and the RSL's to formally sign up to.

Financial Implications & Value for Money

14. Any capital expenditure will be met from the £200k that members approved at the initiation of the project.:-

Risk Management, Health & Safety, and Environmental Implications

15. The provision of sprinklers will limit the spread and intensity of fire in the room or compartment of origin and mitigate fire spread beyond to other parts of the building.

16. The provision of a tannoy/intercom system allows residents to be informed of their actions in the event of a fire. For example, if a “stay put” policy is in place then this can be reinforced to prevent residents entering areas of risk.

Contribution to Our Mission: *Safer Stronger Communities – Safe Effective Firefighters*

17. The provision of fixed installations such as sprinklers and intercom will have a positive impact upon the fire risk management of premises making them safer for residents and Firefighters.

BACKGROUND PAPERS

CFO/135/13 Fire Risk Management In Residential Blocks

GLOSSARY OF TERMS

LMH	Liverpool M utual H omes
MFRA	M erseyside F ire and R escue A uthority is the physical and legal entity. When writing reports MFRA is the “object”.
MFRS	M erseyside F ire and R escue S ervice is the service provided by MFRA.
RSL	R egistered S ocial L andlord

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SPRINKLERS SAVE LIVES

They protect:

PEOPLE
PROPERTY
BUSINESSES

Learn the facts and hear about the benefits at:

www.merseyfire.gov.uk

This redevelopment will be the first in Merseyside to benefit from a partnership between LMH and Merseyside Fire & Rescue Service to fit residential sprinklers and protect people from the outbreak of fire.



Creating Safer Stronger Communities Through Partnership

SPRINKLER MYTHS

MYTH In a fire all the sprinkler heads go off together.

FACT Only the sprinkler heads directly affected are triggered.

MYTH Water from the sprinkler causes more damage than the fire.

FACT Sprinklers attack the fire quickly and directly so less water is needed. As they also operate the fire alarm, the flow can be quickly turned off when the fire is out.

MYTH A smoke detector will always provide enough protection.

FACT Operational smoke detectors do save lives, however they do nothing to extinguish a growing fire.

MYTH Sprinklers go off accidentally.

FACT The odds of winning the lottery are greater than the 16 million to one chance of a properly maintained sprinkler malfunction.

SPRINKLERS SAVE LIVES

They help prevent fires spreading and protect:
PEOPLE / PROPERTY / BUSINESSES

Learn the facts and hear about the benefits of sprinklers at: www.merseyfire.gov.uk

For the added protection of residents and thanks to a funding initiative between Merseyside Fire & Rescue Service and LMH, a sprinkler protection system will be fitted in all properties in this redevelopment to control any outbreak of fire.



Creating Safer Stronger Communities Through Partnership