

MERSEYSIDE FIRE & RESCUE AUTHORITY			
MEETING OF THE:	SCRUTINY COMMITTEE		
DATE:	14TH JAN 2021	REPORT NO:	CFO/002/21
PRESENTING OFFICER	DAVE MOTTRAM		
RESPONSIBLE OFFICER:	DAVE MOTTRAM	REPORT AUTHOR:	CRAIG WHITFIELD
OFFICERS CONSULTED:	STRATEGIC MANAGEMENT GROUP / H&S GROUP AND STATION MANAGER		
TITLE OF REPORT:	PUBLICATION OF THE UCLAN 'MINIMISING FIREFIGHTERS' EXPOSURE TO TOXIC FIRE EFFLUENTS – INTERIM BEST PRACTICE REPORT'		

APPENDICES:	APPENDIX A:	MINIMISING FIREFIGHTERS' EXPOSURE TO TOXIC FIRE EFFLUENTS – INTERIM BEST PRACTICE REPORT
--------------------	--------------------	---

Purpose of Report

1. To inform Scrutiny Committee members of the publication of an independent UCLAN report entitled '*Minimising firefighters' exposure to toxic fire effluents – interim best practice*' and the recommendations made therein.

Recommendation

2. That Scrutiny Committee Members:
 - (a) note the recommendations of the report specifically those for 'Fire Personnel' and those for 'Fire and Rescue Services'.
 - (b) note the work carried out by MFRS in relation to contaminants and firefighter safety, including future developments.
 - (c) note that a short presentation from the H&S Manager will be given at the Scrutiny Committee meeting covering in more detail recommendations 1 & 2.

Introduction and Background

3. In November 2020 an FBU commissioned report entitled '*Minimising firefighters' exposure to toxic effluents – Interim Best Practice*' was published by the University of Central Lancashire (UCLAN). The full report can be found as Appendix A.

4. The report, led by Professor Anna Stec, is based on ground-breaking research into the link between firefighters' occupational exposure to toxic fire effluents, and cancer and other diseases, and provides evidence of the heightened risk faced by firefighters through their work.
5. The research, which included a comprehensive literature review, a review of UK FRS decontamination policies, a survey of over 10,000 firefighters and on-site contaminant testing at a number of UK FRS Fire Stations, has resulted in a suite of recommendations which have been divided into two sub-groups; 1) Recommendations for Fire Personnel; 2) Recommendations for Fire and Rescue Services. The report recommendations are detailed below:

For Fire Personnel:

- a. Respiratory protective equipment (e.g. SCBA) should be worn at all times whilst firefighting. This should also include during salvage and turning over activities and other activities undertaken by FRS personnel (and/or others) after firefighting has been completed, but whilst the building contents are still 'gassing off'. Respiratory protective equipment should be one of the last items of PPE removed during de-robing (after decontamination).
- b. PPE that is suspected of being contaminated should be transported back to the station or workplace in an air-tight container to prevent cross-contamination.
- c. Avoid eating, drinking or smoking with unwashed hands whilst wearing, or after de-robing PPE that may be contaminated.
- d. After attending a fire incident, all personnel should change into a set of clean, dry clothes as soon as possible, ideally before re-entering the appliance (or FDS vehicle).
- e. PPE should be clean and should be thoroughly decontaminated after every incident to avoid a build-up of toxic contaminants. PPE should be inspected for wear and damage on a regular basis, and replaced as necessary.
- f. It is important to protect areas of exposed skin and airways when cleaning soiled PPE/equipment. This requires appropriate respiratory protection (e.g. face masks or face coverings) and gloves.
- g. "Shower within an hour" when returning to the station from an incident, or following a live fire training exercise.
- h. Regular health screening and recording attendance at fire incidents over the course of a firefighter's career is strongly advised and will be key to the longer-term monitoring and management of health.

For Fire and Rescue Services:

- i. Every Fire and Rescue Service (FRS) must have fully risk-assessed decontamination procedures (en-route to, during and after fire incidents), and ensure all relevant staff are trained in implementing these procedures.

- j. All FRS personnel should receive regular and up-to-date training on the harmful health effects of exposure to toxic fire effluents, and how these exposures can be reduced, minimised or eliminated.
 - k. All FRSs should have policies in place for the routine care, maintenance, inspection and professional cleaning of PPE.
 - l. Establishing and strictly maintaining “designated zones” within the fire station must be a priority for preventing cross-contamination. PPE should never be worn in areas of the station designated a clean zone (e.g. kitchens, living quarters etc.) and should be stored away from personal items.
 - m. To reduce secondary exposures, appliance cabs and equipment from emergency response vehicles should be cleaned and decontaminated on a regular basis, especially after incidents where exposure to any combustion products occurred.
6. The release of the report in November drew media interest with articles published by newspapers such as the ‘The Times’ and ‘Morning Star’. Both articles had the headline that ‘*Firefighters are four times more likely to contract/suffer from cancer*’; when compared with the general population.
7. To date, and through the structures of Health & Safety, and the Health, Safety & Welfare Committee, MFRS has actively continued to undertake work to protect operational firefighters from exposure to fire contaminants. It has continued to collaborate with and share any research that has been conducted into the increased risks posed to firefighters from their exposure to fire products at fire related incidents. In 2015, a study commissioned by MFRS was undertaken by Bureau Veritas (BV) on exposure limits in appliance crew cabs and the final report was provided to the NFCC Health, Safety and Welfare Committee for sharing with all interested parties.
8. As sector specific guidance and research papers have been published, the Health, Safety & Welfare Committee have responded to all findings to ensure that our firefighters have the best protection possible from incidents involving fires. The measures already in place are covered in detail in the supporting presentation.
9. The next steps to proactively continue work in this area and support the existing NFCC ‘Clean is the New Tough’ national strategy are covered in detail in the supporting presentation and analysis of the UCLAN recommendations.
10. Finally, it should be noted that, the House of Commons Environmental Audit Committee has recommended that:

“the Health and Safety Executive monitors the progress of the Fire Brigades Union research and provides assistance in implementing recommendations which seek to improve the work environments of UK firefighters.

This should include measures to minimise contamination from clothing and equipment and reduce the overall exposure of firefighters, their families and the public”.

Equality and Diversity Implications

11. An Equality Impact Assessment (EIA) has not been undertaken at this time.

Staff Implications

12. Impact on operational firefighters is continually assessed against information available to the Authority in respect of their health and safety.

Legal Implications

13. The Authority continues to act in accordance with its legal requirements within its duty of care for its employees. This is further demonstrated by the ongoing work undertaken in this issue.

Financial Implications & Value for Money

14. There was no cost associated to MFRA for the UCLAN research or report and this is readily available in the public domain. Future costs may arise in addressing the recommendations in the report.

Risk Management, Health & Safety, and Environmental Implications

15. The Risk Management, H&S and environmental implications have been considered within this report.

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

16. The UCLAN report delivers clear and authoritative guidance about measures that can be taken by Fire & Rescue Services' to minimise firefighters' exposure to contaminants thus improving the overall safety of our firefighters. This will support the already completed work in this area by MFRS and continue to support 'Safe Effective Firefighters'.

BACKGROUND PAPERS

GLOSSARY OF TERMS

UCLAN	University of Central Lancashire
FBU	Fire Brigades Union
SCBA	Self-Contained Breathing Apparatus
PPE	Personal Protective Clothing
FDS	National Fire Chiefs Council
NFCC	Flexi-Duty System
BV	Bureau Veritas