



Meeting	Service Leadership Team	Agenda Item No.	4i
	Performance & Resources Board		12
Meeting Date	9 February 2021		
	22 February 2021		
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Presented By	Moira Bruin, Director of Operations		
Subject	Firefighter Safety – Risks to Health from Carcinogens, Contaminants, and other Hazards		
Type of Report:	Information		

RECOMMENDATIONS

The FBU conducted a research in conjunction with University of Lancashire (UCLAN) highlighting firefighter safety best practice when being exposed to toxic fire contaminants. This paper highlights the Service's position against the recommendations within the report, which have been considered as part of a wider Service Strategy into understanding the causes of occupational cancer and managing occupational cancer risks and how we protect our firefighters against them.

It is also proposed this workstream is incorporated into the ECFRS Annual Plan.

BACKGROUND

In October 2017, the Service demonstrated a commitment to maintaining a safe working environment for all employees by signing up the Institution of Occupational Safety and Health (IOSH) 'No Time to Lose' campaign (Appendix 1). This pledge ensured the Service, assess whether work activities that form part of our business have the potential to cause occupational cancer and develop an action plan to mitigate the risks of developing occupational cancer in our workplaces.

In 2018, the Service participated in the National Fire Chiefs Council (NFCC) Carcinogenic Project directed through Brighton University. The project focused mainly on the effects of live fires in the training environment and looked at carcinogenic contamination, the effects of heat on repeated Breathing apparatus wears and de-hydration. The research involved taking skin swabs, blood, and urine samples from Breathing Apparatus Instructors over a three-month period. Outcomes resulting from the NFCC carcinogen project for the Service led to the introduction of washing machines at Wethersfield training facility and the supply of additional fire hoods to ensure a replacement was used after each live fire wear as well as improved guidance on hydration.

Seeking further improvements, the Health and Safety Manager also engaged with the lead researcher for UCLAN (Anna Stec) in early 2019, offering the Service's support to take an active part in the 'National Carcinogenic Project' commissioned by the FBU prior to its launch. A team from UCLAN then visited the Service on 5 November 2019, to conduct air sampling from PPE storage rooms, appliance cabs and station work areas where swab sampling, as well as a review of our control measures to prevent cross contamination at our stations and training venues.

As well as supporting the national project this also provided feedback in the Service ahead of the final project report allowing an early review of control measures.

As a result of the accumulative work above the Service has been able issue new guidance which is continually reviewed continues to be issued to improve our work environment:

- Fire Contaminated Operational Equipment – Toolbox Talk (June 2018/revised September 2019)
- Fire Contaminated Structural Fire Fighting PPE – Toolbox Talk (July 2018/revised September 2019)
- Stowage of Structural Fire Fighting Personal Protective Equipment (PPE)- Toolbox Talk (January 2019)
- Reducing the risk from firefighting contaminants – Guidance article (January 2019)
- Clean cab and contaminated firefighting personal protective equipment -Guidance (January 2019)
- Safe Undress Procedure for Structural Firefighting PPE and BA (January 2019)

Along with new and additional guidance, the Service has introduced control measures to create and maintain a safer work environment specifically for firefighter's and improvements to our operational procedures:

- Decontamination wipes, nitrile gloves, hand soap, paper towel and decontamination bags provided to all appliances (2019)
- Decontamination wipes, nitrile gloves and decontamination bags provided to all Flexi Officer vehicles (2019)
- PPE boxes/bags issued to all Flexi Officer vehicles (2018/19)
- Disposable aprons issued to all stations
- Posters identifying safe working PPE issued to all stations
- 'No Time to Lose' presentation delivered to all stations as part of the Health and Safety roadshow (2018/19)
- Restricted areas and one-way systems in place at Wethersfield Training Centre (2019/20)
- Safe Undress procedure embedded in live fire Training delivered by BAI's
- Stock of clean Fire Hoods at Wethersfield Training centre for all participants
- Washing machine at Orsett and Wethersfield BA Training venues
- Personal issue Towels for showering (2019/20)
- Carcinogen awareness training program delivered to all new recruits (began October 2019)
- Collaborative working with Property Services to provide support to all Station Commanders to comply with PPE stowage Guidance
- Property Services will consider the spread of carcinogens when renovating any workplace
- Collaborative working with Property Services in the early planning stages for Shoeburyness

Further work is currently being undertaken to consider or discount additional opportunities for improvement. The list below is current areas the Service is exploring further:

- Barrier cream for the skin
- Sauna/steam showers for live fire training venues
- Gas Monitoring devices for all alliances
- Carcinogen resistant Fire Hoods

- Laundry facilities for workwear (washing machines on stations/external laundering)

Working towards taking action to optimise Firefighter safety has not been undertaken as a stand-alone project. Different aspects have been progressed by different departments across the organisation within business as usual processes, making reduction of exposure to carcinogens and contaminants part of what we do. Costs recorded as specifically attributable to the No Time to Lose campaign are primarily to Property Services. To date the figure is just over £51,000. Breakdown of this spend is provided at appendix 2.

OPTIONS AND ANALYSIS

The Operational Assurance team are developing a gap analysis highlighting over eighty potential actions or events that may result in a hazard that may cause harm to operational staff following the full report from UCLAN. However, due to previous research and new control measures, many of the actions have acceptable control measures in place and in some instances control measures that exceed the minimum standard required.

The Operational Assurance department in conjunction with the Health and Safety department will continue to liaise with other relevant departments to make improvements in the operational environment with new technology and information taken into consideration. The Operational Assurance department is also committed to implement and maintain industry wide best practice to ensure a safe work environment and feedback from national and local incident debriefs are considered, seeking continual improvement.

BENEFITS AND RISK IMPLICATIONS

The Service embraces a positive Health and Safety culture, and this is demonstrated by senior management's commitment to evaluate and invest in new and improved equipment and PPE when it becomes available.

When considering the risk to the Service there are moral, legal, and financial factors to consider. The impact of not effectively managing firefighter safety resulting from carcinogenic hazards in the workplace can be far reaching. Including the impact on the individual and their family, friends and colleagues, the reputational damage to the Service and the wider sector.

FINANCIAL IMPLICATIONS

There are potential financial impacts associated with ineffective management of workplace carcinogenic risks. There could be direct costs like insurance claims, sick pay and medical costs and indirect costs like loss of staff morale which may impact on employee turnover and reputational damage.

EQUALITY AND DIVERSITY IMPLICATIONS

Staff may be exposed to risk from carcinogens contained in fibres being released into air and inhaled leading to long term chronic respiratory injury. Staff groups impacted may including staff with existing medical conditions, staff registered with disabilities and other vulnerable staff such as new or expectant mothers.

WORKFORCE ENGAGEMENT

The effective management of carcinogenic hazards in the workplace requires ongoing liaison with all stakeholders including management, Trade Union rep bodies and operational staff. Quarterly 'No Time to Lose' meetings take place to ensure all relevant staff groups are engaged and supported to ensure we create a safer environment for staff exposed to carcinogens.

The Service has produced guidance and introduced control measures to create and maintain a safer work environment. These are reviewed on a regular basis to ensure best practice and industry standards are being maintained. Communication messages, toolbox talks and where

appropriate, training will be provided to ensure operational staff groups receive information to help them stay safe in the work environment.

Some respiratory injuries have the potential to cause serious life changing injuries which may not become apparent for many years. Staff should be able to feel confident attending the workplace and carrying out their role, knowing the Service is committed to look after their health, welfare and mental wellbeing should they become ill or injured.

LEGAL IMPLICATIONS

The Service has a legal duty to comply with the Health and Safety at Work etc. Act 1974 which is the principal piece of statute law enforceable by the Health and Safety Executive. There are no exemptions for Fire and Rescue Services, although it is recognised some aspects to the firefighter role may result in operational staff being exposed to increased risks in some emergency situations. Firefighter's and operational staff are often exposed to higher risks than other workers in emergency situations.

HEALTH AND SAFETY IMPLICATIONS

The Service has a legal duty to comply with the Health and Safety at Work etc. Act 1974 which is the principal piece of statute law enforceable by the Health and Safety Executive. There are no exemptions for Fire and Rescue Service's although it is recognised some aspects to the firefighter role may result in operational staff being exposed to increased risks in some emergency situations. Firefighter's and operational staff are often exposed to higher risks than other workers in emergency situations.



WORK CANCER: CAMPAIGN PLEDGE

My organisation commits to an action plan to:

1. assess whether work activities that form part of our business have the potential to cause occupational cancer
2. develop and deliver a prevention strategy that reflects the risks of developing occupational cancer in our workplaces
3. ensure senior and operational managers understand relevant occupational cancer risks and manage them proactively as a significant health issue
4. ensure our employees use the preventative measures in place properly and consistently, and check that our preventative measures are working
5. demand the same standards of our supply chain as we do ourselves
6. include our protective measures against occupational cancer risks in our annual report or other public reporting format

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- I want to receive an IOSH certificate demonstrating our commitment
We will need to review your pledge before issuing your certificate
- Remind me in 12 months' time to review and revise my pledge
- My organisation's name may be used in association with
IOSH's No Time to Lose campaign



1 Assess whether work activities that form part of our business have the potential to cause occupational cancer.

How the Service is delivering on this pledge item:

Essex County Fire and Rescue Service (ECFRS) pledges to utilise the risk management approach when identifying and implementing precautions associated with work related health risks. This strategy will allow us to assess the individual requirements of the project workforce by:

- Completing an assessment of our work activities to understand better those that may pose a risk to employees and contractors developing occupational cancer
- Avoiding health risks as a first principle
- Evaluating the remaining health risks which cannot be avoided
- Explaining the hazards and putting them in their true perspective
- Ensuring appropriate control measures are introduced that sensibly reflect the identified risk
- Giving priority to collective protection measures over individual protection measures
- Giving appropriate instructions to everyone working on our behalf
- Ensuring contractors substitute higher risk materials for lower or nil risk materials wherever possible
- Ensuring manufacturers' instructions for equipment and chemical data sheets are checked

Management of work related illness or injury will be achieved by:

- Suitable and sufficient workplace risk assessments
- Compliance with statutory requirements as a minimum
- Ensure ongoing health surveillance where appropriate for those exposed to identified workplace health risks
- Looking back at our accident and ill-health records to identify the less obvious hazards
- Being mindful of the longer-term hazards to health
- Supporting an informed workforce
- Maintaining greater links between the Health and Safety and Occupational Health departments
- Outlining the competencies required of occupational health providers delivering occupational health related services
- Taking into account the statutory requirements for health surveillance with guidance on best practice for the different types of workers

Our occupational health service is led by the HR Directorate who also maintains responsibility for monitoring the effectiveness of the health service provided.

2 Develop and deliver a prevention strategy that reflects the risks of developing occupational cancer in our workplace.

How the Service is developing on this pledge item:

ECFRS pledges to develop and deliver a prevention strategy that reflects the risks of developing occupational cancer in our workplace by:

- Developing a coherent overall prevention approach which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment
- Completing an assessment of all our work activities
- Ensuring that the risks of developing occupational cancer in our workplace are taken into account when completing Service risk assessments
- Keeping up to date with new technology
- Avoiding the cross contamination of contaminated Service equipment, PPE, and vehicles wherever reasonably practicable
- Raising awareness of occupational cancer at the Health, Safety and Welfare Functional Forum

3 Ensure senior and operational managers understand the relevant occupational cancer risks and manage them proactively as a significant health issue.

How the Service is developing on this pledge item:

ECFRS Senior and Operational Managers understand the relevant occupational cancer risks and manage them proactively as a significant health issue by:

- Raising awareness of occupational cancer at the Service's Health, Safety and Welfare Strategy Group
- Raising awareness of occupational cancer at the Service Managers briefing sessions and the Services Operational Awareness and Development Day
- Ensuring Managerial staff follow procedures for reporting of incidents, clearly and in a timely manner
- All staff to ensure positive action is taken to not put suppliers or work colleagues at risk from the risks of exposure. Vehicles, equipment, BA, and PPE not to be returned for repair or replacement in a contaminated condition without appropriate control measures in place.
- Initiate campaigns raising awareness of occupational cancer via posters, daily desktop adverts, Toolbox talks and discussion at all relevant meetings e.g., H&S meetings, operational meetings, and occupational health discussions
- Linking Service occupational health topics wherever possible to national cancer campaigns e.g., prostate, bowel, lung, skin cancer etc
- Including the IOSH 'No Time to Lose' campaign material into our existing campaigns and training
- Adopted of the TUC 'Dying to Work' scheme
- Use of dedicated strap lines

4 Ensure our employees use the preventative measures in place properly and consistently, and check that our preventative measures are working.

How the Service is developing on this pledge item:

ECFRS will ensure employees use the preventative measures in place properly and consistently, and check that our preventative measures are working by:

- Reviewing all relevant risk assessments' if any significant changes have been made to working practices or equipment, safety events having been reported or if ECFRS believe the risk assessment to be no longer valid
- Reviewing all relevant COSHH Data/assessments relating to substances and follow manufacturers control measures
- Consulting closely with Trade Union Health and Safety Reps
- Undertaking premise quarterly inspections in conjunction with Safety Reps
- Reviewing the tender, supply, and laundry processes for Service PPE
- Ensuring scheduled PPE checks are undertaken by individuals and by the supplying company
- Monitoring and reviewing performance via the Service audit and review team (Ops Assurance Group)

5 Demand the same standards of our supply chain as we do of ourselves.

How the Service is developing on this pledge item:

ECFRS are delivering on this pledge by demanding the same standards of our supply chain as we do of ourselves. Our engagement in this IOSH campaign will promote further opportunities to improve occupational health awareness in those working on our behalf, in particular but not exclusively our:

- Laundry service providers
- Providers of firefighting PPE
- Specialist Health, Safety and Environmental advisors (Bureau Veritas)
- Providers of specialist fire and rescue equipment including; ISG Thermal Imaging Cameras, Interspiro, Holmatro, Rosenbauer, Akron and Radio Comms
- Specialist heavy rescue providers including: Extreme Rescue, VimpeX and Weber
- Appliance and equipment cleaning companies including: Bristol Uniform, Ballyclare, Fire Hosetech etc
- Suppliers of services to Fleet Workshops
- Use of accredited contractors
- Reviewing our Service suppliers approved list

6 Include our protective measures against occupational cancer risks in our annual report or other public reporting format.

How the Service is developing on this pledge item:

ECFRS are delivering on this pledge by ensuring:

- Our annual report and monthly reports include details on our occupational health activities. We have already made a commitment to report on our progress; our commitment to the IOSH No Time to Lose campaign will have an equal footing
- We publish our sign-up to IOSH's pledge to all employees across the Service
- Feedback is given to our Service Leadership Team showing the specific actions undertaken as part of the Services Health, Safety and Welfare Forums
- The annual health and safety report is presented to Members of the Authority every year