CONTAMINANTS

PROTECTION AGAINST CANCER

FIRE BRIGADES UNION

Cancer in the workplace is a very serious threat for firefighters and is something that the FBU takes very seriously. Recent conferences have discussed the issue of contaminants in some detail. In 2015 the executive council was tasked with assessing the level of cancers amongst UK firefighters. Conference also requested that the control measures contained in the 2013 report 'Taking action against cancer in the fire service' were distributed to members. This advice was distributed but it contained several American slang terms, which differed slightly from UK terminology.

For this reason this paper contains basic guidance to alert members on how they can initially protect themselves against contaminants from the incident ground.

Some fire and rescue services have already taken proactive steps towards advising firefighters how they can reduce the possibility of contamination at incidents. Kent and Merseyside have produced advice, some of which is included in this document. Elsewhere we have been working with brigades and encouragingly in some cases have developed a joint approach to dealing with contaminants.

CANCERS/CONTAMINANTS ARE FIREFIGHTERS AT A GREATER RISK?

Mounting evidence suggests that firefighters may be at a higher risk of exposure to carcinogens and other contaminants in the course of their career. In 2006 an international study on cancers linked to firefighting was carried out by the International Agency for Research on Cancer (IARC) which drew attention to a possible increased occurrence in three types of cancer affecting firefighters:

- Testicular cancer
- Prostate cancer
- Non-Hodgkinson lymphoma

As part of ongoing work the FBU will be looking at information around other types of contaminants and cancer that affect firefighters. Part of this research may include specific work on the impact of particular types of incidents, roles and gender. The connection may be difficult to prove in some cases. However, many states and provinces in North America and elsewhere in the world have introduced presumptive legislation that recognises these dangers.

Presumptive legislation is a provision under workers' compensation law that decrees certain types of cancer as an occupational disease. Firefighters who develop any of the cancers listed in the legislation would be covered under workers' compensation — even if the disease occurs at a later stage in the firefighter's life. Whilst these laws and their impact are undoubtedly a step forward, firefighters in the UK do not currently have this protection. This may be one of our long term aims but this initial approach will not provide the evidence required to make this connection. The FBU is aware that there is a great deal more to do in this field and that this may require assistance from experts and academics. Whilst this work is being undertaken it is important that you know what you can do to prevent unnecessary contamination today.

BEFORE THE INCIDENT

Make sure your station has a clean area and designated ‘no go areas’ for PPE.

Looking after your PPE:

- Make sure it is clean and in good condition
- Make sure it fits correctly
- Make sure there is no contaminated PPE stored near your clean PPE
- Make sure your PPE is stored in clean air i.e. not in the vicinity of diesel fumes.

Knowing what PPE is suitable for each incident:

- Make sure you know in advance what PPE is required for each incident type.
- Plan for dealing with contaminated equipment.
- Make sure that your appliance has its full stock of cleaning equipment, disposable gloves, dust masks, wet wipes etc.
- Part of any incident plan should establish how contaminated PPE/equipment is transported back to the station.

AFTER THE INCIDENT - AT THE STATION

- Replace dirty fire kit with clean fire kit
- Replenish all cleaning equipment used– gloves / masks
- If appropriate clean contaminated fire kit, helmets boots etc. making sure you wear gloves and a dust mask or send dirty fire kit to be cleaned
- Clean cab interior, equipment, lockers thoroughly
- If necessary have a shower and change your clothes
- Do not transport or store dirty fire kit in your vehicle
- Do not take dirty fire kit home.

WHY ARE FIREFIGHTERS AT GREATER RISK?

The nature of the role of a firefighter brings our members into contact with three potential areas where carcinogenic contaminants are present:

- Fires and by-products
- Diesel fumes
- Building materials such as dust, asbestos.

Firefighters may be protected to some degree whilst fighting the fire but some of these contaminants may remain on PPE and skin after the fire has been extinguished.

HOW DO WE PREVENT UNNECESSARY CONTAMINATION?

Preventing unnecessary contamination does not happen by accident. It is planned for in the same way that tackling a particular incident is planned for and practiced. There are four basic phases to consider:

Before the incident

During the incident

After the incident on scene

Back at the station

Management should:

- Agree a process to minimise the exposure to contaminants before, during and after incidents
- Ensure every appliance has the resources necessary to enable firefighters to ‘clean’ themselves at incidents. These should include wet wipes, disposable gloves, dust masks, hand washing facilities etc.
- Ensure every incident commander is aware of and adheres to the agreed policy on how exposure to contaminants can be minimised.

Advice for reps when discussing how to minimise danger when working in environments involving potential contaminants:

- Raise this issue at the next joint health, safety and welfare committee meeting
- If you haven’t already got the necessary cleaning equipment including disposable gloves, dust masks etc. on every appliance this should be raised with management
- Agree a policy so that everyone is clear what measure they should take to minimise exposure to contaminants before, during and after incidents
- Work with management and if possible issue a joint statement with simple principles on how this can be achieved

DURING THE INCIDENT

- Make sure you are wearing the correct PPE for the incident type
- Wear breathing apparatus when you are in an area where airborne combustible products are present
- Make sure you minimise your exposure to smoke and particles – i.e. if possible stand upwind of the fire in the cleaner air
- Use personal issue respirators when damping down
- Position appliances as far as possible from smoke
- Make sure all windows and doors are kept closed on appliances – remember this is the environment you will be in when travelling back from the incident
- If you have to eat or drink at the incident make sure that you are away from the incident area and that you wash your hands properly beforehand
- If you are taking a comfort break make sure you choose a place that is free from contaminants.

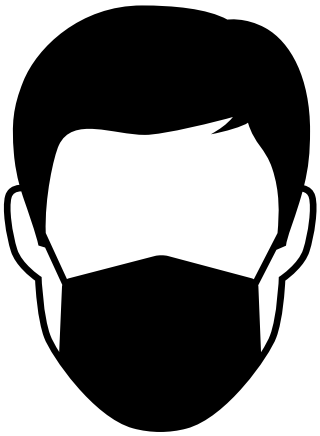
AFTER THE INCIDENT - ON THE SCENE

- While you are in full PPE take the time to clean your equipment and your fire kit
- Part of your planning for any incident may involve having established a simple contamination free and cleaning area
- Avoid putting any dirty equipment into the ‘clean’ appliance cab
- As soon as it is safe to do so get out of PPE that is potentially contaminated
- Wear a dust mask and disposable gloves when you are taking off your fire kit
- If possible bag your fire kit if you think it needs to be cleaned thoroughly
- Use wet wipes to remove as much soot and dirt as possible from your head, neck, jaw, underarms and hands while at the scene
- If in doubt have a thorough shower on your return to the station

STOP CONTAMINANTS

10 PRINCIPLES TO FOLLOW

1. **ENSURE** your PPE is clean, fits correctly, is in good condition - always wear the right PPE for the incident
2. **CONSIDER** wearing BA if you are in an environment where the possibility of airborne products of combustion may be present
3. **ALWAYS** wear full PPE when you are damping down, consider using a personal issue respirator too
4. **CLEAN** your PPE on the scene to remove as many products of combustion as possible
5. **REMOVE** soot etc. with wet wipes from head, neck, jaw, throat, underarms and hands immediately



6. **WEAR** disposable gloves and dust masks when cleaning dirty PPE
7. **REPLACE** dirty fire kit on return to station and clean your helmet, boots etc.
8. **CLEAN** thoroughly the fire appliance interior, equipment and lockers after a fire
9. **CONSIDER** the need to shower and change after removing your PPE
10. **NEVER** take dirty PPE home or store it in your vehicle