

**think**   
**CONTAMINANTS**

SCOTT PEARCE  
Kent Fire and Rescue Service



**Kent** Fire &  
Rescue Service

# About me....

8 years military service

23 years service – 18yrs on stations across East Kent

Height Vehicle, Marine Operations Officer', Commercial Training Unit

Currently working in Operational Policy and Development

'Think Contaminants' project - closed for BAU!



**Kent** Fire &  
Rescue Service

## Firefighting can be dangerous.....

Burns

Heat Stress

Building collapse

Explosions

Rapid developing fires – man made products

Carcinogens and toxic gasses are present at all fires:

- Benzene
- PAH's - Polycyclic Aromatic Hydrocarbons
- Carbon Monoxide & Hydrogen Cyanide
- Asbestos

To name just a few.....



## Badge of Honour???



# CANCER RISK STATISTICS and THE HEALTHY FIRE FIGHTER EFFECT

- Brain: **3.5** times more likely
- Leukaemia - Lymph: **3** times more likely
- Non-Hodgkin's: **3** times more likely
- Bladder: **3** times more likely
- Kidney: **4** times more likely
- Prostate: **2** times more likely
- Testicular: **2.5** times more likely
- Large Intestine: **2** times more likely
- Liver: **2** times more likely
- Skin: **3** times more likely
- Multiple Myeloma: **2.5** times more likely rising to **10** times after 30 years of service

\* Graeme Geer, Secretary, United Firefighters Union of Australia



**Kent** Fire &  
Rescue Service

# Presumptive Legislation - are UK firefighters at a disadvantage?

In British Columbia, the following cancers are now recognized as firefighter occupational diseases:

Brain	Oesophageal
Bladder	Non-Hodgkin's lymphoma
Colorectal	Leukaemia
Kidney	Breast
Ureter	Prostate
Testicular	Multiple myeloma.
Lung	

\*Stec et al, 2018, scientific reports



**Kent** Fire &  
Rescue Service

So if science can prove all fires are toxic and many FRS' globally have already reacted to the risk to firefighters.....

What are UK FRS' doing about it?



# THINK CONTAMINANTS project - KFRS



- IOSH – No Time to Lose
- Campaign material and service awareness



**Kent** Fire &  
Rescue Service



# think CONTAMINANTS

Reducing exposure to operational contaminants project

Project update March 2016



Contaminants are all around us in the environment and we are very aware that as firefighters you may come into contact with them from time to time, as may staff such as our fire investigation team, drivers and engineers or indeed any one of us.

This is why it is so important that with our support, you do as much as possible to protect yourselves. I am proud that we are one of the first fire and rescue services in the country address this important issue with our "Think Contaminants" project.

### Changes to ways of working

Although there isn't any definitive research linking contaminants to any specific health risks, we believe that by providing you with practical, common sense guidance and support, we will assist you in remaining safe whilst on duty. It may well require you to make some small changes to your ways of working in order to help protect yourselves and your workmates and we are starting by launching a new section on the intranet with guidance on the subject.

### Watch out for project updates

We are also sending out information to stations, including notices and posters and have briefed your managers so ask them for more information. It is really important that you read the information we send and you keep an eye on the intranet page for updates

We certainly don't have all of the answers, so the "Think Contaminants" project, led by Scott Pearce and Graham Day, will be working with operational groups from across the organisation to help define work streams and possible solutions to reduce the risks from exposure to contaminants. If you have any ideas, thoughts or suggestions please don't hesitate to get in touch with the project team.

Ann Millington, Chief Executive



## Changes you can make today

- 1 Protect yourself when you are cleaning equipment – e.g. use dust masks and nitrile gloves when cleaning BA sets, equipment or when handling outgoing laundry.
- 2 Think about your journey – e.g. clean as much as you can at the scene (BA sets, boots, gloves, helmets etc) and where possible store 'dirty' equipment in the lockers not in the cab.
- 3 Be mindful of your own exposure at the scene – e.g. use SCBA when fire gases are present, make use of dust masks and use respiratory protection for scene investigation. Ensure your PPE is being worn correctly and all closures are appropriately fastened.
- 4 Keep yourself and the clean areas clean – e.g. avoid taking 'dirty' or contaminated equipment and PPE into the dormitory, general office etc and shower and change clothes as soon as possible on return to base.



### Project team

Scott Pearce, WM from Canterbury, has been seconded to run the Think Contaminants project which is managed by GM Graham Day.

Scott said:

"I raised this issue with management and I was delighted that they immediately took up the challenge. The more understanding we gain, the more we can help everyone to reduce the risk. I think everyone can feel reassured that KFRS is taking such a pro-active lead in the wellbeing of staff, and together we will all play a key part in reducing our exposure to contaminants."

"As far as we are aware KFRS is the first fire and rescue service to take these pro-active steps" according to Scott. "We are certainly the first fire service to sign up to a national IOGH pledge to tackle the issue of contaminants in the workplace. This project takes us on the next step of the journey to help keep our staff safe at work."

### Next steps

As part of the project we will be reviewing operational procedures across a range of incidents to see whether any changes are needed that will help control exposure to contaminants, this will include training. We will be considering how we can reduce or eliminate contamination in our buildings and exploring how we can tackle contamination for firefighters and other teams such as fire investigation and third parties, this will include journeys, and training.



### Intranet site and posters for stations



Please display posters and notices in the appropriate areas of the station or office.



# think CONTAMINANTS



Use dust masks and gloves to clean BA sets and equipment



# think CONTAMINANTS



No fire gear beyond this point



# think CONTAMINANTS



Use dust masks and gloves when handling laundry



# Think Contaminants project - KFRS



- IOSH – No Time to Lose
- Campaign material and service awareness
- Subject included in all operational courses
- RPE improvement – dust masks to respirators
- Clean cab policy
- Fire engine cab design
- Gas monitors on fire engines
- FIRT, Training, Properties, Procurement



**Kent** Fire &  
Rescue Service

# A national approach



- KFRS – ‘think contaminants’ project
- NFCC – PPE contaminants working group
  - Literary review + additional documents
  - Prof Anna Stec – HFRS, scientific report 02/2018\*
  - UCLan & FBU research project
  - Brighton University project

\*The first study of its kind in the UK



**Kent** Fire &  
Rescue Service



Thank you for listening 😊



**Kent** Fire &  
Rescue Service