

Reducing Firefighters' Exposure to Carcinogens and Developing Safe Areas at Tathra Station

Introduction

When firefighters head out to a structure / bush fire, they put their lives at risk in more ways than we can understand, beyond the dangers of racing to the incident and putting out a fire. The threat of getting burned by roaring flames is an obvious danger to firefighting, but other health risks are more subtle.

For example, firefighters have been found to develop cancer at a higher rate than the general population. Why? Because of their exposure to toxins at the fire ground firefighters also deal with the residual materials tracked back from the incident call including carcinogens, to the station and their homes.

When a firefighter enters a structure fire or bin fire, we're surrounded by a haze of cancer-causing toxins. When materials burn, these chemicals can combine to form even more toxic compounds called carcinogen. They seep into our personal protective clothing (PPC), they attach to our breathing apparatus (PPE) even create secondary exposures back at the station and third exposures back home with your family.

Firefighters and officers are becoming more informed and educated about the increased risk of contact with toxic and carcinogenic compounds that is an inherent risk of the profession. By taking steps at your station and all your crew, you can better protect yourself, your loved ones and your future health. It is time to start thinking about it today.

If one firefighter falls short in the implementation of the following actions set out, he or she is putting all the crew at risk and your loved ones.

A carcinogen is any substance that has the potential to cause cancer in living tissues. **Carcinogens** act on our DNA, causing changes at the cellular level which can lead to cancers.

Mechanisms of Carcinogen Exposure

- Inhalation, breathing carcinogens in.
- Ingestion, taken in through the mouth.
- Absorption, carcinogens are absorbed through contact with the skin.

Understand How Your Station Works

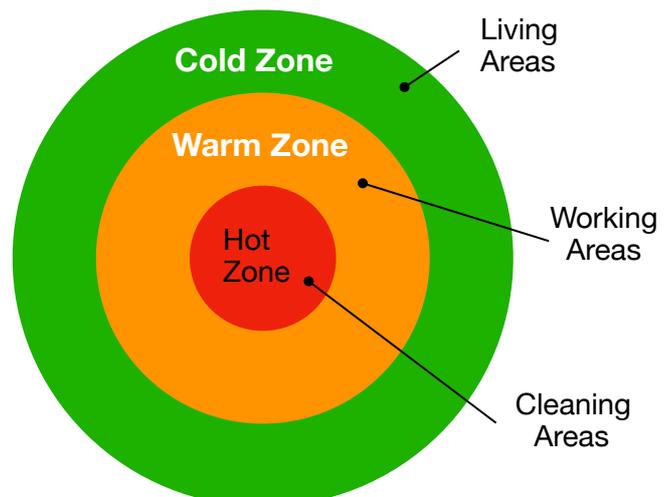
By now, every firefighter and officer should be aware of their increased risk of developing cancer when compared to the general population. But awareness and education alone are not going to reduce your risk as a firefighter. Only specific actions taken by you the firefighter and all your crew can do that. How?

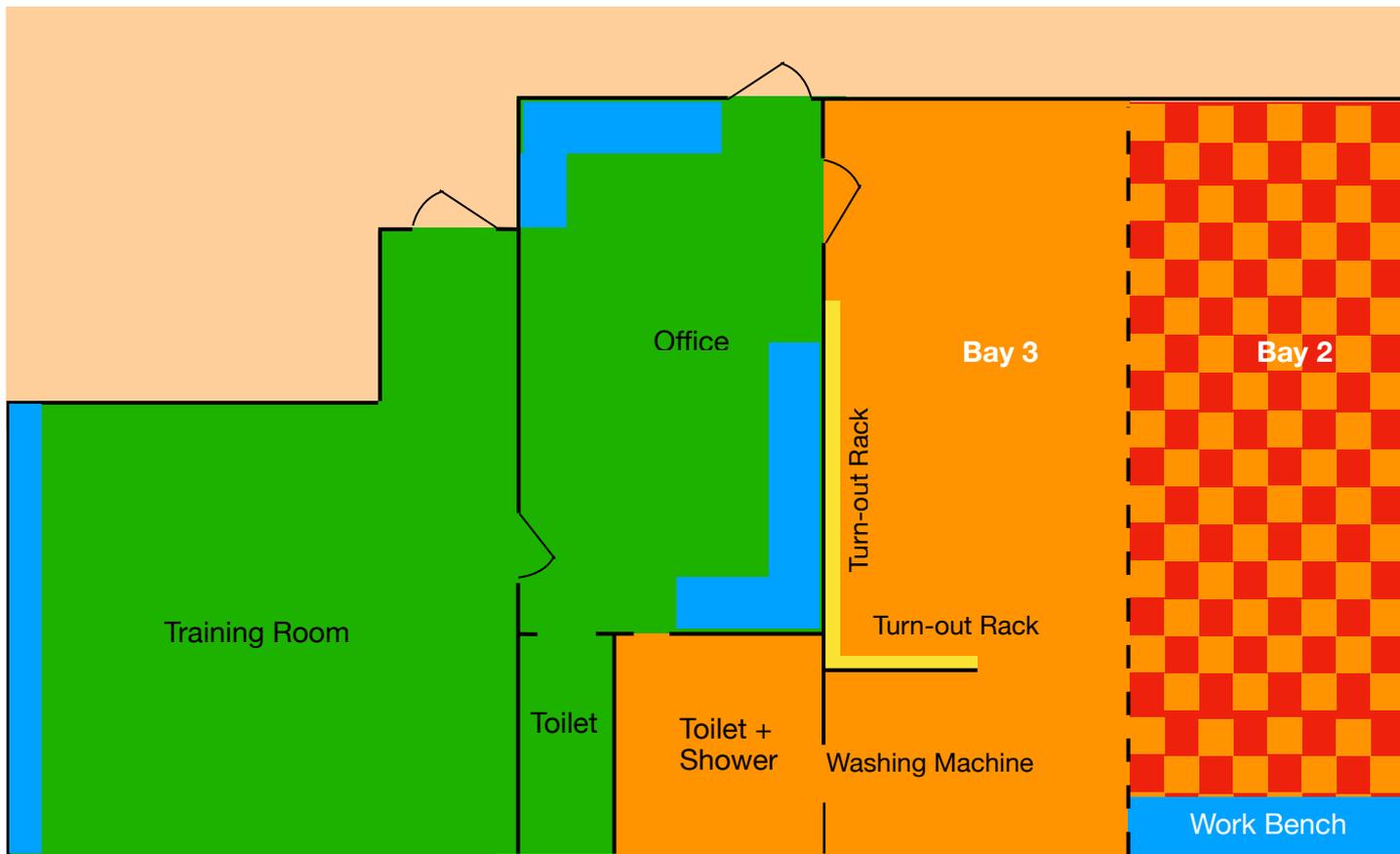
We should have clearly identified safe areas through our station, identifying the following areas, keeping **Living, Working** and **Cleaning** areas separate.

Within our station, create the control measures that are taken to prevent, eliminate or reduce the occurrence of carcinogens:

How? Hot, Warm and Cold zones.

- Hot Zone identified as the **Cleaning Area**. all PPE, PPC (firefighter boots) and equipment after the incident for final stage of decontamination.
- Warm Zone identified as the **Working Areas**. Engine Bays, toilet / shower area, carpark, outside training area, PPC area and hands-on training with equipment.
- Cold Zone identified as the **Living Areas**. Office, kitchen, toilet, face to face training only but **NO hands-on training within these areas with equipment**

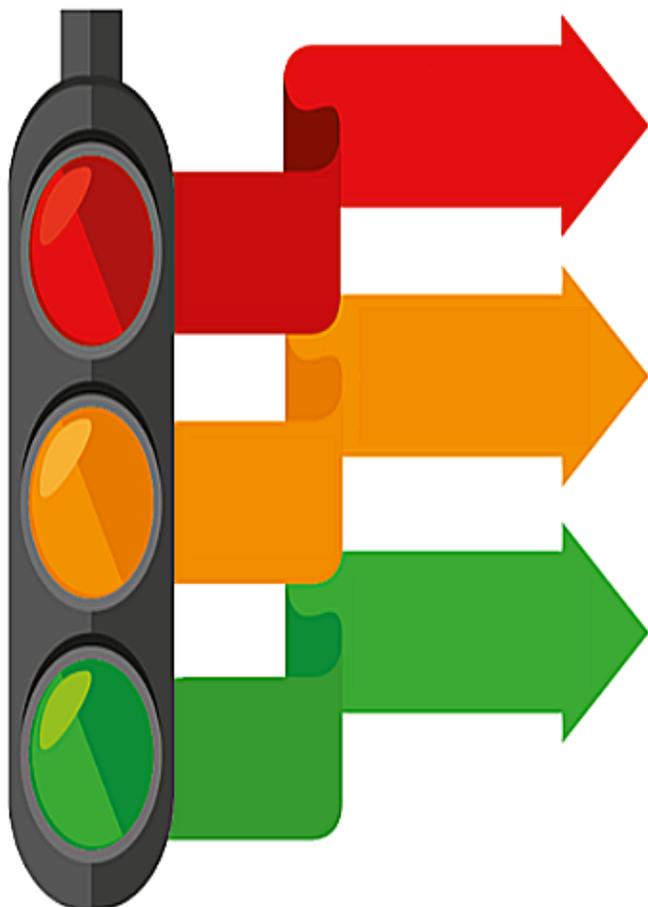




Bays 1 and 2 are designated both Cleaning Area and Working Area. It is up to the Crew leader in charge of the incident to determine the status of this area immediately upon returning to Station.

Members are not allowed to work in this area until determined by CL to be Working Area.

Identifying Control Zones and Colour Coding At Tathra Station



Identifies **CLEANING AREA**; all contaminated or potentially contaminated gear is left in the CLEANING AREA. This includes all PPE and PPC (firefighter boots), equipment used after the incident for final stages of decontamination. As you enter this area, the trim that surrounds the door(s) is painted RED to identify as CLEANING AREA

Identifies **WORKING AREAS**; Fire vehicles + bays, store room equipment, shower / toilet area, carpark front of station, outside training area of station, PPC storage and hands on training with equipment is conducted in these areas. As you enter this area, the trim that surrounds the door is painted AMBER to identify as WORKING AREA

Identifies **LIVING AREAS**; Office, kitchen, radio and computer area, toilet, face to face training. NO hands-on training with equipment and **CLEAN PPC**, PPE and equipment in these areas. As you enter this room or area, the trim that surrounds the door is painted GREEN to identify as LIVING AREA.

Procedures at Tathra To Reduce The Exposure To Carcinogens

Action taken at Tathra Station before the fire call or Drill

- Open roller door before the truck(s) start.
- Do not allow the truck(s) to idle inside the engine bay.
- Keep the doors to the Living Area closed.
- Always wear the appropriate and correct PPC at the callout you are attending.
- Have a clear understanding of Living Areas, Working Area, and Cleaning Area in the Station.
- LAST FIREFIGHTER LEAVING THE STATION MUST CHECK AND LOCK THE STATION UP.

Action taken by Tathra Brigade at the incident

- Position appliance upwind and keep; windows, doors and lockers closed whilst at an incident
- Only enter smoke when necessary and always wear appropriate PPC and PPE.
- Decontaminate as much as possible at the incident.
- Store and air your PPC in the dedicated area
- Remove your PPC / PPE as soon as possible
- Use wet wipes to remove possible contaminants from head, face, neck, underarms and hands after coming off incident ground.
- Wash and decontaminate at the incident all equipment for initial decontamination.
- Keep appliance and cab clean at the incident.

Action taken by Tathra Brigade after the incident

- Keep doors to the Station Living Area closed.
- Do not allow the truck(s) to idle inside the engine bay.
- All contaminated / potentially contaminated gear is left in the Cleaning Area; This includes all PPE and PPC (boots) after the incident for final stage decontamination
- Contaminated PPC is washed immediately as possible,
- Shower as soon as practical on returning to Station after an incident for final stage decontamination.
- Be sure to put on fresh clothing after the shower.
- Always wear clean PPC and work with clean PPE.
- Keep appliance and cab AND the Station clean