

3. PREVENTION AND CONTROL

- ❖ Necessity for extensive and proper training
 - ❖ Learn correct "universal precautions" to prevent blood borne infections
 - ❖ Good personal hygiene-handwashing extremely important
 - ❖ Ergonomics
 - ✓ Proper manual handling and correct lifting techniques
 - ❖ Ensure use of personal protective equipment:
 - ✓ fall protection equipment when working at heights
 - ✓ appropriate to the hazard
 - ❖ Learn how to work safely on ladders (e.g. use ladder hooks), compressed gases etc
 - ❖ Follow recommended shiftwork pattern
 - ❖ Ensure adequate rotation and breaks during the active stages of rescue, fire suppression and overhaul
- ❖ Health surveillance programme for firefighters to identify ill health effects early and appropriate vaccinations
 - ❖ Stay fit from regular exercise and training-it will help in reducing likelihood of injuries
 - ❖ Seek counselling when experiencing mental burnout, stress and post traumatic stress



**OCCUPATIONAL HEALTH DIVISION
DEPARTMENT OF HEALTH SERVICES**

WORKING AS A FIREFIGHTER



*FACTS ON THE HEALTH
AND SAFETY RISKS*

1. INTRODUCTION

- ❖ Firefighters are exposed to various health and safety hazards in the line of their duty
- ❖ Main duties are to save life, perform rescue operations and minimize damage to property and includes:
 - Controlling fires using various techniques and equipments
 - Responding to fire alarms, accidents (motorvehicle, industrial etc), acts of nature (floods ets)
 - Responding to hazardous and chemical spills or acts of terrorism
 - Rescue victims
 - Rendering first aid
 - Provide safety education to public

2. HEALTH AND SAFETY HAZARDS

❖ Physical Hazards

- Burns from the fire itself
- Heat stress and heat exhaustion is common-heat from fire and surroundings as well as body heat (can be worsened by protective clothing)
- Exposure to noise in the vicinity of the pump-loud noise can cause hearing loss which is permanent and has no cure

❖ Biological hazards

- Exposure to various infectious diseases including blood borne diseases such as HIV, Hepatitis B and C while helping victims
- Animal bites e.g. snakes, bees

❖ Chemical Hazards

- Exposure to various combustion products including:
 - carbon monoxide
 - hydrogen cyanide
 - nitrogen dioxide
- Oxygen depletion or hypoxia can result in loss of physical performance, confusion and inability to escape
- Exposure to chemicals during chemical emergencies

❖ Ergonomic Hazards

- The duties performed are physical demands involving force, repetition, awkward postures and prolonged activities
- Upper limb disorders and back problems e.g. strains, sprains, pain, numbness

❖ Psychosocial Hazards

- Exposure to dangerous and serious traumatic events are a main source of stress
- Consequences of traumatic events can lead to post traumatic stress

❖ Safety Hazards

- Risk of injury due to:
 - Caught in collapsing structures
 - Unstable floors
 - Struck by falling objects
 - Fall from height during ladder work or collapsing structures
 - Slips and trips
 - Electrical shocks
 - Cuts and lacerations due to stepping on, struck by or striking against sharp objects
 - Explosions
 - Inhalation of superheated air
- Fires can create dangerous situations
 - Flashover
 - Backdraft
- Traffic accidents due to speeds traveled and road conditions