Asbestos Awareness – Firefighters Meeting Kit

WHAT’S AT STAKE

Asbestos is a dangerous mineral that was commonly used in construction materials in the past. It has been linked to several serious health conditions, including lung cancer, mesothelioma, and asbestosis. Firefighters are at particular risk of exposure to asbestos because it can be present in buildings and other structures that have been damaged by fire.

WHAT’S THE DANGER

THE DANGERS OF ASBESTOS EXPOSURE FOR FIREFIGHTERS

Asbestos is a highly toxic mineral that was widely used in building materials until the 1970s, when its dangers became well-known. When asbestos-containing materials are disturbed, they release microscopic fibers that can be inhaled into the lungs, causing a range of serious health problems, including lung cancer, mesothelioma, and asbestosis.

Firefighters are at a high risk of exposure to asbestos, as many older buildings and homes contain asbestos insulation, flooring, ceiling tiles, and other materials that can release asbestos fibers when burned. Firefighters can also be exposed to asbestos during the cleanup process after a fire.

The danger of asbestos exposure for firefighters is significant because they often work near burning asbestos-containing materials and may inhale high levels of asbestos fibers. The risk of developing asbestos-related diseases is higher for firefighters than for the general population due to their repeated exposure to asbestos.

THE HAZARDS OF ASBESTOS EXPOSURE FOR FIREFIGHTERS

- **Respiratory problems:** Asbestos fibers can cause serious respiratory problems, including lung cancer, asbestosis, and mesothelioma. Firefighters are at risk of inhaling these fibers during firefighting and rescue operations, especially when they are in buildings that contain asbestos-containing materials.
- **Skin irritation:** Asbestos fibers can cause skin irritation and rashes. Firefighters who meet asbestos-containing materials may develop skin problems, particularly if they have cuts or abrasions on their skin.
- **Eye irritation:** Asbestos fibers can also irritate the eyes, causing redness, itching, and watering. Firefighters may be at risk of eye irritation if they meet asbestos fibers during firefighting or rescue operations.
- **Increased risk of cancer:** Firefighters who are exposed to asbestos on a regular basis are at an increased risk of developing cancer, particularly lung cancer and mesothelioma. These cancers can take years or even decades to develop, so firefighters may not realize they have been exposed until much later in life.
- **Difficulty in decontamination:** Asbestos fibers are difficult to remove from clothing, equipment, and vehicles, making it challenging for firefighters to decontaminate themselves after exposure.

HOW TO PROTECT YOURSELF

FIREFIGHTER STEPS TO PREVENT EXPOSURE TO ASBESTOS

Firefighters need to be aware of the potential for asbestos in older buildings and structures and take appropriate precautions to prevent exposure. They should also be trained to recognize the signs of asbestos-containing materials and know how to handle them safely. If they suspect the presence of asbestos, they should follow the appropriate procedures for handling and disposing of these materials, such as:

Use proper personal protective equipment (PPE): Firefighters should wear the appropriate PPE, including respiratory protection,

gloves, and other protective clothing. The PPE should be designed to prevent the inhalation or ingestion of asbestos fibers.

Get proper training: Firefighters should be trained to recognize the signs of asbestos-containing materials and know how to handle them safely. They should be aware of the risks associated with asbestos exposure and understand the proper procedures for removing and disposing of asbestos-containing materials.

Limit exposure: Firefighters should limit their exposure to asbestos by using proper ventilation and containment procedures when working with asbestos-containing materials. They should avoid disturbing asbestos-containing materials unless it is absolutely necessary.

Clean equipment and clothing: After working in an area with asbestos, firefighters should thoroughly clean their equipment and clothing to remove any asbestos fibers that may have accumulated.

Follow proper disposal procedures: Asbestos-containing materials should be disposed of according to local regulations. Firefighters should be trained to properly handle and dispose of these materials to avoid releasing asbestos fibers into the environment.

SAFETY TIPS TO AVOID ASBESTOS EXPOSURE

Firefighters are at a higher risk of contact with carcinogens like benzene, formaldehyde, and asbestos, mainly from the inhalation of smoke or diesel exhaust. Clothing and equipment can transfer these substances, potentially resulting in second-hand exposure.

QUICK SAFETY TIPS

- Get an airtight seal when putting on your respirator and make sure it has the correct level of protection. Respirators equipped with a purple HEPA filter; or those with an N-100, P-100, or R-100 NIOSH rating; specifically filter asbestos fibers.
- Reduce airborne dust by wetting parts of the building where firefighters are working. This keeps asbestos fibers from becoming airborne.

- Wear a respirator when conducting overhaul operations, like searching for hotspots or fighting structural fires.
- Keep cleaning supplies, replacement cartridges, and replacement respirators easily accessible.
- Wear protective equipment when using venting and entry techniques that involve opening walls.
- Avoid handling dry dust at a site. Only trained personnel who are certified in asbestos abatement should decontaminate areas suspected of containing ACMs.
- After a fire, shower and change into clean clothes before leaving the site. Ask your supervisor about specialized cleaning procedures, like NFPA 1851. Changing and disposing of clothes on-site avoids contaminating other areas, like your firehouse or home.

FINAL WORD

Asbestos exposure is a serious health risk for firefighters, and it’s important for them to take proper precautions to minimize their exposure to this hazardous material.