

IARC MONOGRAPHS VOL. 132: OCCUPATIONAL EXPOSURE AS A FIREFIGHTER

Occupational exposure as a firefighter is carcinogenic to humans (Group 1)

on the basis of

sufficient evidence for cancer in humans









The IARC Monographs classification indicates the level of certainty that an agent can cause cancer (hazard identification)

Higher level of certainty

Lower level of certainty



Cancer types with sufficient evidence for cancer in humans:





Mesothelioma Bladder cancer

Cancer types with limited evidence for cancer in humans:









cancer

Melanoma



Non-Hodgkin of the skin lymphoma

Strong mechanistic evidence in exposed firefighters



Genotoxicity









Modulation of receptor-mediated effects

Epigenetic alterations

stress

Chronic inflammation



Exposures of firefighters include combustion products, diesel exhaust, building materials, asbestos, chemicals, shift work, ultraviolet radiation

Firefighters respond to various types of fire







Structure

Wildland

Vehicle