

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:













Colon cancer

Prostate cancer

Testicular cancer

Melanoma of the skin

Non-Hodgkin lymphoma

Strong mechanistic evidence in exposed firefighters











Genotoxicity

Epigenetic alterations

stress

Chronic inflammation

Modulation of receptor-mediated effects



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