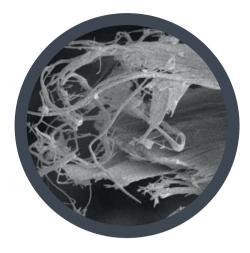
# **CHEMICAL CONCERNS: ASBESTOS**



CHRYSOTILE ASBESTOS

 $Mg_3(Si_2O_5)(OH)_4$ 

MAIN ASBESTOS SPECIES MINED



2 MILLION TONS PER YEAR

#### **WHAT IS ASBESTOS?**

Asbestos is a term used to refer to a group of six naturally occurring fibrous minerals. The fibres are soft and flexible, but also strong and resistant to heat. White (chrysotile) asbestos is the main type mined and used for a number of applications.

### **WHAT WAS IT USED FOR?**

Uses of asbestos utilise its thermal and electrical insulating properties. Many houses still contain asbestos, though its use has now been banned in some countries.





BRAKE PADS

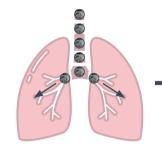






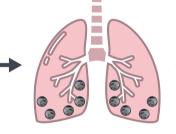


FIRE RETARDANT



### **INHALATION**

Fibres inhaled and stick in the lungs



#### **ASBESTOSIS**

Inflammation and scarring of the lungs



#### **CANCER**

Plaques form on lung lining; can lead to cancer

# **WHY WAS IT BANNED?**

The International Agency for Research on Cancer (IARC) concluded that there is sufficient evidence that inhalation of all types of asbestos fibres cause cancer, particularly lung cancer and mesothelioma. It has been linked to a large number of occupational deaths.

#### WHERE IS IT BANNED?



Many countries have full bans on the use of asbestos, but some only have partial bans. Nine of the ten most populous countries in the world have yet to adopt bans.

## **WHAT ARE THE HEALTH IMPACTS?**



# 107,000 DEATHS PER YEAR

due to asbestosis, asbestos-related lung cancer, and mesothelioma



4%

OF ALL LUNG CANCER CASES ESTIMATED TO BE CAUSED BY ASBESTOS



# **LONG LATENCY PERIOD**

ASBESTOSIS AND CANCERS CAN TAKE UP TO FORTY YEARS AFTER ASBESTOS EXPOSURE TO DEVELOP

IN SHORT: ALL TYPES OF ASBESTOS ARE KNOWN TO CAUSE CANCER. 107,000 DIE EACH YEAR FROM ASBESTOS-RELATED DISEASES.



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