

ASBESTOS: ENVIRONMENT/POLLUTION

NEWS: Govt bans use of asbestos in KVs, Navodaya Vidyalayas

WHAT'S IN THE NEWS?

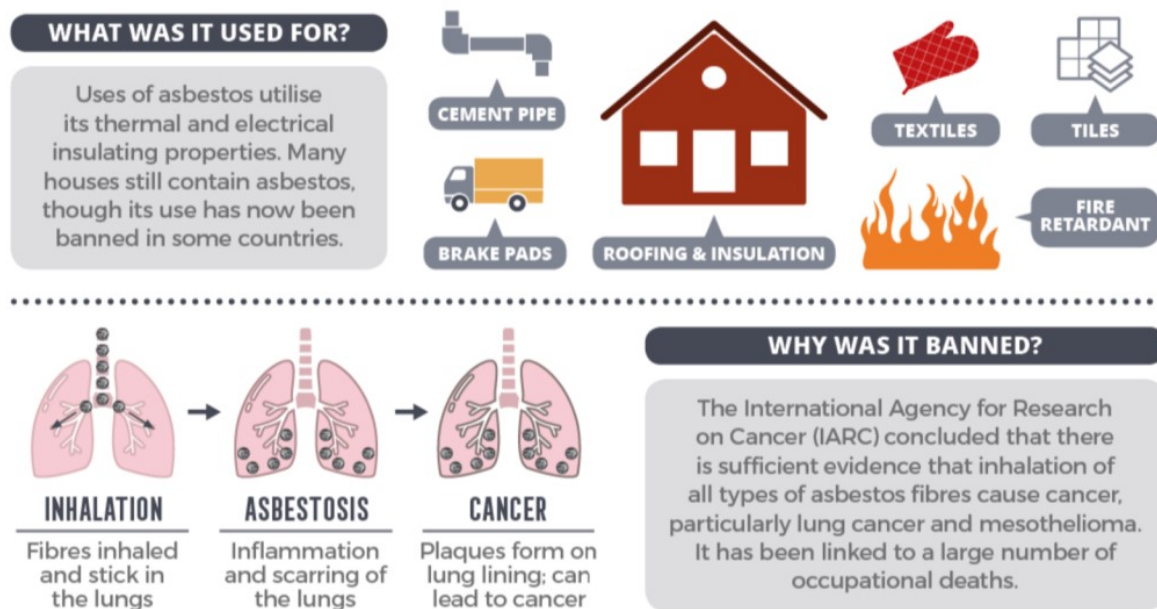
The Ministry of Education has banned the use of asbestos in the construction or refurbishment of Kendriya Vidyalayas (KVs) and Jawahar Navodaya Vidyalayas (JNVs) due to serious health risks. Asbestos exposure is linked to chronic respiratory diseases, cancers, and DNA damage, prompting global health concerns.

Ministry of Education's Ban on Asbestos

- The Ministry of Education has banned the use of asbestos in the construction or refurbishment of Kendriya Vidyalayas (KVs) and Jawahar Navodaya Vidyalayas (JNVs) due to health concerns.
- This ban aims to protect students, staff, and the community from the harmful effects of asbestos exposure, which can lead to serious health issues.

About Asbestos

- **Composition:** Asbestos is a group of six naturally occurring silicate minerals composed of long, thin fibers.
- **Chemical Structure:** Asbestos contains atoms of silicon and oxygen in its molecular structure, with the most commonly used form being chrysotile (white asbestos).
- **Properties:** Asbestos is valued for its durability, heat resistance, and insulating properties, which made it widely used in construction and other industries.



Uses of Asbestos

- **Construction:** Asbestos is commonly used in construction materials, such as asbestos-cement roofing and insulation.
- **Textiles:** It has been used in manufacturing heat-resistant textiles.
- **Automotive Parts:** Asbestos is used in automotive components, particularly brake linings and gaskets, due to its heat resistance.
- **Continued Use in India:** Despite a ban on asbestos mining in 1993, India still imports chrysotile asbestos from countries like Russia, Kazakhstan, and China. It continues to be used primarily for asbestos-cement roofing and other applications.

Health Risks and Issues Associated with Asbestos

- **Respiratory Diseases:** Exposure to asbestos fibers can cause chronic respiratory diseases, such as asbestosis (fibrosis of the lungs), which leads to scarring and reduced lung capacity.
- **Airborne Fibers:** When asbestos-containing products are disturbed, tiny asbestos fibers are released into the air, posing a risk of inhalation.
- **Lung Scarring and Inflammation:** Asbestos fibers can become trapped in the lungs, and over time, this accumulation can lead to lung scarring, inflammation, and further respiratory complications.

- **Carcinogenicity:** All six forms of asbestos have been classified by the World Health Organization (WHO) as carcinogenic to humans.
 - It is linked to cancer of the lung, larynx, and ovaries.
 - **Mesothelioma:** Asbestos exposure is a known cause of mesothelioma, a cancer of the pleural (lung lining) and peritoneal (abdominal lining) linings.
- **DNA Damage:** Continuous exposure to asbestos can cause genetic damage, leading to mutations and increasing the risk of cancer.

Conclusion

- The ban on asbestos in educational institutions like KVs and JNVs is a critical step in preventing health risks associated with asbestos exposure.
- This move aligns with global health recommendations to minimize the use of asbestos and protect public health, especially in sensitive environments like schools.

Source: <https://indianexpress.com/article/india/govt-bans-use-of-asbestos-in-kvs-navodaya-vidyalayas-9912328/>