

Talk to Your Contractor

When negotiating with a contractor to sealcoat a driveway, tennis court or common subdivision road, ask what type of product is used. Specify that you want a non-coal tar sealant. Request a safety data sheet for the contractor's product to confirm. Avoid a sealant with any of the following Chemical Abstract Service (CAS) numbers on its ingredient list:

- Coal tar pitch - 65996-93-2
- Coal tar – 800745-2
- Coal tar distillate – 65996-92-1



Sealants are applied on driveways, playgrounds, and other asphalt pavements to give old surfaces a black, glossy restored appearance. But if toxic coal tar sealants are used, they come with a potential danger. Coal tar sealants are linked to an increased risk of cancer, especially in children. Look inside for ways to protect yourself and your family.

The Barrington Area Council of Governments is a regional planning organization whose members are the Villages of Barrington, Barrington Hills, Lake Barrington, North Barrington, South Barrington, Tower Lakes, Deer Park, and Cuba and Barrington Townships.



**Barrington Area
Council Of
Governments**

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If You Buy and Apply

When shopping for a sealant to apply yourself, look for a "coal tar free" label on the container. Most home improvement stores sell these safer sealants. Avoid products with the words: coal tar, refined tar, refined coal tar pitch, coal tar pitch volatiles, RT-12, tar, or related terms and avoid products with the CAS numbers above.

Lastly, talk to your neighbors. Be sure they know the dangers too so our neighborhoods are safer for everyone.

**For more information go to
www.bacog.org**

**Can Your Driveway
Make You Sick?**

**COAL
TAR
SEALANTS**



**Barrington Area Council
Of Governments**



Pouring seal coating on a driveway.
photo: Minnesota Pollution Control Agency

I'm Putting WHAT on My Driveway?

The black shiny top coat you put on your driveway to protect it from weathering and to maintain a dark, glossy appearance could be a coal tar-based sealant.

Coal Tar is a Carcinogen

Coal tar is a recognized carcinogen¹ by the National Institutes of Health and other national and international agencies. Coal tar contains a high level of polycyclic aromatic hydrocarbons (PAHs). Prolonged exposure is hazardous to humans, animals and aquatic life.²



Coal Tar is Toxic

In humans, prolonged exposure to PAHs has been linked to blood, kidney, liver, lung, scrotal, skin and stomach cancers.³

Coal tar particles in rivers and streams can inhibit reproduction and cause DNA damage, tumors, cataracts, liver damage and death in aquatic life forms.



Mouth tumors in fish have been linked to PAH concentration in sediments (Pinkney, 2009).
Photograph by A. E. Pinkney



Skin contact is one way humans can be exposed to PAHs.
Photograph courtesy of McHenry County Planning and Development

Why Does it Matter?

Coal tar doesn't stay on your driveway. Sealant particles flake off with vehicle and foot traffic and in sunlight. Particles can blow away or wash into ponds and streams with stormwater. Coal tar dust is tracked into homes by people and pets, where potentially carcinogenic dust and PAHs can be inhaled, ingested and absorbed through the skin.

Median total PAH [mg/kg]



Mahler et al., 2010, Environ. Sci. Technol

USGS

Studies have shown that dust in homes by parking lots with coal tar-based sealants have PAH concentrations 25 times higher than homes next to parking lots without coal tar sealants.⁴ Models suggest that over a lifetime the risk for cancer can be 38 times higher from the ingestion alone of coal tar dust. Exposure for children under six years of age carries the greatest risk.⁵

Better Alternatives

Safer, asphalt-based sealants have about 1/1,000th the PAHs of coal tar sealants.⁶ Asphalt-based sealants are similar in cost and durability to coal tar sealants and are widely available in stores and from contractors. Alternately, residents may choose to leave pavement unsealed or replace asphalt with concrete, pavers or surfaces other than asphalt.

Notes:

¹United States Environmental Protection Agency, National Institute of Environmental Health Sciences, The U.S. Dept. Of Health and Human Services, Agency for Toxic Substances and Disease Registry, <http://www.invw.org/content/new-studies-toxic-asphalt-sealants-threaten-kids-cause-air-pollution> (2/17/2012) ²Ibid ³Ibid ⁴U.S. Geological Survey (2011). Coal-Tar-Based Pavement Sealcoat, Polycyclic Aromatic Hydrocarbons (PAHs), and Environmental Health. ⁵Williams, E.S.; Mahler, B.J.; Van Metre, P. C. Coal-tar pavement sealants might substantially increase children's PAH exposures. Environmental Pollution, 2012. ⁶ United States Environmental Protection Agency op. cit.