

(Polycyclic Aromatic Hydrocarbons)

Studies of pavement sealant dust or debris have raised awareness of Polycyclic Aromatic Hydrocarbons (PAHs) in the environment and also raised questions regarding potential exposure to these chemicals. The purpose of this guide is to inform the public about PAHs, how people are exposed, and how exposure to these compounds can be minimized.



What are PAHs?

PAHs are a group of chemicals formed during the incomplete burning of coal, gasoline, wood, garbage or other organic substances such as tobacco and charbroiled meat. PAHs are found throughout our environment in the air, water and soil.





How Are We Exposed To PAHs?

People are exposed to PAHs by:

- Breathing air containing PAHs
- Contact with contaminated soil, water, air, or debris
- · Consuming contaminated food or water

How can PAHs affect my health?

Harmful effects of PAHs depend on several factors:

- Individual health
- Personal habits
- How long you have been exposed to PAHs
- How much PAH has entered the body
- How the PAHs entered the body, and
- How your body responds to PAHs

Exposure to PAHs will not necessarily result in harmful effects. However, some health impacts have been documented:

- Some people exposed to high concentrations over a long period of time have developed cancer
- Skin contact to high concentration of PAHs can cause skin irritation and rashes
- Developmental and reproductive effects have been seen in laboratory animals exposed to high concentrations of PAHs

Little is known about the potential impacts associated with short-term exposure to PAHs in forms such as pavement sealant debris.



How can [limit my exposure to PAHs?

- Visible accumulation of degraded pavement sealants may occur around edges of parking lots or in the soil at the edges of parking lots, driveways and other paved surfaces. These accumulations may be the result of historical applications of high PAH coal tar sealants. In these areas:
 - Clean and remove shoes before entering the house
 - Wash hands and face often, especially before eating or drinking
 - Keep children's play areas and toys clean
 - Damp mop or clean floors and other household surfaces to reduce dust and dirt in homes and buildings
 - Bag and throw any visible accumulation of degraded asphalt sealants in the trash
 - Maintain grass, landscaping, or lawn to provide a barrier to exposed soils
- Avoid gardening or digging in areas with significant accumulation of coal tar based asphalt sealant in soil
- Quit smoking
- Wear protective clothing when handling products containing PAHs



- Reduce the amount of smoked or charbroiled foods consumed
- Reduce use of wood burning fireplaces and stoves
- Avoid use of coal tar-based shampoos and creams.



- In 2005, the City of Austin approved a ban of coal tar-containing pavement sealants to address water quality issues
- In 2005, the City also banned smoking in public places, reducing fine particle air pollution in local bars by 94%





- If you have a potential health concern or want to determine your exposure to PAHs, call:
 - Austin/Travis County Health & Human Services at 512-972-5555
 - Department of State Health Services, Environmental Toxicology at 800-588-1248
- For more information about the effects of pavement sealants on the environment, contact
 - City of Austin Watershed Protection and Review Department at 512-974-2550, or
 - Visit their website at www.austintexas.gov/department/coal-tar

