How do I know if I have an asbestos-related disease?

Contact your physician if you suspect that you have been exposed to asbestos. To evaluate potential asbestos-related diseases, a physician will conduct the following:

- a work exposure history
- a physical examination
- diagnostic tests such as chest X-rays, lung function tests, and CT scans

Where can I get more information?

Texas Department of State Health Services
http://www.dshs.state.tx.us/epitox

National Institute for Occupational Safety and Health
http://www.cdc.gov/niosh

Agency for Toxic Substances and Disease Registry
http://www.atsdr.cdc.gov

National Cancer Institute
http://www.cancer.gov

Occupational Safety and Health Administration
http://www.osha.gov

The majority of the source material from this brochure was adapted from the Agency for Toxic Substances and Disease Registry (ATSDR) and the National Institute for Occupational Safety and Health (NIOSH) websites.
What is asbestos?

Asbestos is a group of naturally occurring fibrous minerals that are mined or released from native rock sources. There are many types of asbestos fibers, but the chrysotile, amosite, and crocidolite varieties are of most commercial importance.

Amosite

Crocidolite

The physical nature of asbestos fibers makes them strong, heat resistant, and unreactive. Because asbestos is a good insulator, industry has used asbestos in hundreds of commercial products. The following are examples of Asbestos Containing Material (ACM):

- Roofing materials
- Floor covering and ceiling tiles
- Fire and noise proofing insulations
- Asbestos cement products
- Automotive brake and clutch parts
- Boiler, heating, and refrigeration system insulations
- Heat-resistant fabrics

How can asbestos exposure occur?

Asbestos exposure can occur when ACM is handled. Fibers can be released into the air and inhaled by the workers when ACM is manufactured or used. Asbestos fibers do not break down in the environment.

Airborne exposures can occur as ACM is disturbed during maintenance, repair, abatement, and demolition of buildings and industrial facilities. When ACM is disturbed, microscopic fibers and particles can be released into the air of places of employment and the environment.

Unless proper controls and work practices are used at these sites, asbestos can be:

- Released to the outdoor air, water, or soil where residents or other workers also can be exposed to the fibers
- Carried home on the clothing or skin of workers and can result in exposures to their families and friends

How does asbestos enter and leave the body?

Inhaling asbestos-containing air into the lungs is one way that asbestos enters the body. This is the exposure route of greatest concern. Some of the asbestos fibers reaching the lungs are exhaled out; others are coughed from the lungs in mucus. The fibers that reach the deepest air passages of the lungs can become trapped in the lung tissue and can cause the most damage.

Asbestos can also be ingested when mucus cleared from the lungs and nasal passages is swallowed, or by drinking contaminated liquids. A small number of asbestos fibers may penetrate the cells lining the digestive system, but only a few of these will reach the bloodstream. These fibers will then be released in the urine. Asbestos fibers rarely pass through the skin into the body.

How can workers prevent asbestos exposure?

- Use proper level of personal protective equipment and respiratory protection.
- Change clothes before leaving work.
- If possible, shower before leaving work.
- Leave soiled clothes at work.
- Store non-work clothes separately from work clothes.
- Wash work clothes separately from non-work clothes and family clothes.
- Do not take tools, scraps, packaging, and similar items home.
- Prevent family members from visiting the work area.

What occupations are at risk of exposure to asbestos?

Any occupation that handles ACM is at risk for exposure. Some examples include:

- Asbestos abatement workers
- Demolition workers
- Automobile mechanics and brake repairers
- Heating, ventilation, and air conditioning technicians
- Masons
- Carpenters
- Plumbers
- Roofers
- Laborers
- Floor maintenance workers
- Building inspectors

What diseases are associated with asbestos exposure?

Asbestosis is a chronic, fibrotic lung disease that results from the long-term inhalation of respirable asbestos fibers.

Symptoms of asbestosis:

- Shortness of breath
- Cough
- Chest pain or tightness
- Hemothysis (coughing up blood)
- Recurrent respiratory infections

Lung cancer is a malignant tumor that affects the tissues and passages of the respiratory system. Cigarette smoking combined with exposure to asbestos greatly increases the chances that a person will get lung cancer.

Symptoms of lung cancer:

- Cough
- Wheezing
- Unexplained weight loss
- Coughing up blood
- Shortness of breath
- Persistent chest pain

Mesothelioma (cancer of the mesothelium) is a type of cancer that impacts the cells that line the chest or the abdominal cavities.

Symptoms of mesothelioma:

- Shortness of breath
- Chest pain due to an accumulation of fluid in the pleural cavity
- Weight loss
- Abdominal pain
- Bowel obstruction
- Blood system abnormalities

These asbestos-related diseases can take 20 to 50 years to develop after asbestos exposures occur.