



# California Department of Health Services

## Indoor Air Quality Info Sheet

### Asbestos in the Home and Workplace

March 2000

*This fact sheet provides information to people who are trying to determine whether there is asbestos-containing material in their home or workplace, and what they might do if there is. It reviews health concerns about asbestos exposures, plus options and resources to address these concerns.*

## ABOUT ASBESTOS

### What is Asbestos?

Asbestos is a **mineral fiber**. It is mined just like any other mineral. The fibers are heat resistant, resistant to chemical attack, have excellent tensile strength and have high electrical resistance. These properties make asbestos a useful material for electrical and thermal insulation. It was often added to building materials for this reason. There are several types of asbestos; the most common are *chrysotile*, *amosite*, and *crocidolite*.

### Asbestos and Indoor Air

The main source of asbestos in indoor air is insulation products. Buildings built in the last 50 years used a variety of materials composed of asbestos mixed with other fibers like paper, fiberglass, or synthetic fibers and a binder, usually lime or gypsum mortar. The most commonly reported material in California homes is the *cottage-cheese* ceiling insulation. Other common materials include vinyl floor tiles, patching compounds and textured paints, furnace, stove and pipe insulation, stove door gaskets, some roofing shingles and siding material, and parts of some pre-1979 appliances (e.g. toasters, clothes dryers, hair dryers).

## ASBESTOS & HEALTH

### How dangerous is asbestos to my health?

You will not be harmed by touching it or being near asbestos-containing materials. Your health **may** be affected by inhaling asbestos fibers, where the fibers may become lodged in the microscopic tubules of your lower lung. Symptoms of lung problems do not usually appear until 20-30 years of exposure to high levels of asbestos fibers. **Most people do not develop health problems when exposed to small amounts of asbestos.** However, the risk of lung disease from asbestos exposure is greater among smokers. Many studies have shown that the combination of smoking and asbestos exposure is particularly hazardous. A study recently published in the *New England Journal of Medicine* (May 28, 1998) reports that, "exposure to moderate levels of asbestos does not appear to significantly increase a person's risk of developing lung cancer." However, this is an area of continued debate among scientists.

Individuals who know or suspect they have been chronically exposed to asbestos dust on the job or at home should inform their physician of their exposure history. A physical examination is recommended if any of the following symptoms develop:

- shortness of breath; change in cough pattern or prolonged hoarseness; difficulty in swallowing
- pain in the chest or abdomen; blood in the sputum (fluid coughed up from the lungs);
- significant weight loss.

## WHAT CAN I DO?

### How can I find out if I have asbestos in my home?

It is **not** possible to identify asbestos just by looking at it. It can only be identified by a person trained in fiber identification with a special polarized light microscope. There are certified labs throughout California that can identify asbestos in building materials (see attached list). Contact a lab to find out how the sample should be collected and sent for testing. It's not an expensive test and should cost about \$35 per sample.

### What should I do if there is asbestos in my home?

If you have an asbestos-containing material in your home, your choices are to remove it, contain it, or live with it. **The best thing to do, if the asbestos-containing material is in good condition, is to leave it alone. The only way that it can affect your health is when the material is damaged and fibers become airborne. If it is moderately damaged, it is recommended that you *manage it in place* (repair the damage and contain it, possibly with a coat of paint or sealer). Removing and disposing of any asbestos-containing material is expensive and also increases the likelihood of fiber release.**

If you feel that you cannot live with it, then you need to hire a certified professional for its safe removal and for testing the air after its removal. You can get help with these matters by calling the CalOSHA Asbestos Consultants Unit or U.S. EPA Asbestos Ombudsman (see Hotline phone list). They can guide you through the process. You should also contact your local health or air quality department to find out local regulations.

### Who handles asbestos issues in California?

In California, asbestos wastes are regulated by local, state and federal agencies. Information on regulations, certification, and health and safety is available from the following State agencies:

- Department of Toxic Substances Control is responsible for disposal and transport issues (**916-255-3618**).
- Department of Consumer Affairs' Contractors State License Board gives information on the certification requirements for asbestos abatement contractors (**800-321-2752**).
- Cal-OSHA (Department of Industrial Relations) handles worker-safety and asbestos exposure issues (**415-972-8589**). Or call your local air pollution control/air quality management district.

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## ASBESTOS AND THE WORKPLACE

Health hazards from asbestos dust have been recognized in workers exposed in shipbuilding trades, asbestos mining and milling, manufacturing of asbestos textiles and other asbestos products, insulation work in the construction and building trades, brake repair, and a variety of other trades. Demolition workers, drywall removers, and firefighters also may be exposed to asbestos dust. Generally, workers who develop asbestos-related diseases show no signs of illness until many years after first exposure. For example, the time between first exposure to asbestos and the appearance of lung cancer is generally 15 years or more; a delay of 30 to 35 years is not unusual.

## Free Software for Building Professionals

The *Asbestos Advisor* is an interactive compliance assistance tool that provides guidance to building owners, managers and lessees, as well as contractors of building renovations, maintenance, and housekeeping services on how asbestos standards may apply to those buildings and that work. It is available OSHA web page, [spider.osha.gov/oshasoft/asbestos/](http://spider.osha.gov/oshasoft/asbestos/). Select *Asbestos Advisor* for your operating system. When the software is run, the user is asked a series of questions regarding the buildings and employees in question. A final report is created which describes all OSHA-related responses.

## Useful Phone Numbers

- U.S. EPA Asbestos Ombudsman **800-368-5888**
- Cal/OSHA Asbestos Consultants Unit **916-574-2993**
- Asbestos Information Association **703-412-1150**
- NCI's Cancer Information Service **800-422-6237**
- CDHS' IAQ Assistance Line **510-540-2476**
- CDHS' Hazard Evaluation System and Information Service (HESIS) **510-540-2115**

## OTHER RESOURCES

### Literature

- *Asbestos Revisited* by Alleman & Mossman, *Scientific American*, p 70-75, July 1997.
- *Asbestos in Your Home*, from the American Lung Association (contact your local office).
- *Asbestos in the Home*, from the U.S. Consumer Product Safety Commission at **800-638-2772**.

The following EPA documents can be obtained from their IAQ INFOLINE at **800-438-4318** (refer to EPA document No.):

- *Managing Asbestos in Place, A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials*, (20T-2003).
- *Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials*, (560/5-85-030a).
- *Asbestos Waste Management Guidance*, (530-SW-85-007).
- *Guidance for Controlling Asbestos-Containing Materials in Buildings*, (560/5-85-024).
- *Measuring Airborne Asbestos following an Abatement Action* (600/4-85-049).

## Useful Web Sites

- EPA's Region 5 Asbestos Program: [www.epa.gov/reg5foia/asbestos/index.html](http://www.epa.gov/reg5foia/asbestos/index.html)
- National Cancer Institute Fact Sheet [http://198.77.70.12/3\\_21.htm](http://198.77.70.12/3_21.htm)
- NIOSH Selected Topics: Asbestos [www.cdc.gov/niosh/asbestos.html](http://www.cdc.gov/niosh/asbestos.html)
- The Asbestos Institute: [www.asbestos-institute.ca/index.html](http://www.asbestos-institute.ca/index.html)
- Commonly Asked Questions: [www.oklaosf.state.ok.us/~okdol/asbestos/index.htm](http://www.oklaosf.state.ok.us/~okdol/asbestos/index.htm)
- Asbestos Fact Sheet: [www.inform.umd.edu/des/os/asbestos/factsheet.html](http://www.inform.umd.edu/des/os/asbestos/factsheet.html)
- Asbestos Information & Articles [www.pp.okstate.edu/ehs/asbestos.htm](http://www.pp.okstate.edu/ehs/asbestos.htm)

### Up-to-Date Lists of Accredited Laboratories for Asbestos Testing:

- Bulk Building Materials (Polarized Light Microscopy Method) [ts.nist.gov/ts/htdocs/210/214/scopes/plmtm.htm](http://ts.nist.gov/ts/htdocs/210/214/scopes/plmtm.htm)
- Air Testing (Electron Microscopy Method) [ts.nist.gov/ts/htdocs/210/214/scopes/temtm.htm](http://ts.nist.gov/ts/htdocs/210/214/scopes/temtm.htm)
- Air Testing (Light Microscopy Method) [www.aiha.org/labstate.html](http://www.aiha.org/labstate.html)

**Laboratories in California Accredited for Analysis of Asbestos in Bulk Building Materials (Polarized Light Microscopy Test Method)**

The following laboratories are currently accredited by the National Institute of Standards and Technology Asbestos Program. **Source:** U.S. Department of Commerce (refer to web site on previous page). As of March 16, 2000

<u>Laboratory</u>	<u>Location</u>	<u>Phone Number</u>
ASBESTECH	Carmichael, CA	916-481-8902
Analytical Labs San Francisco, Inc.	San Francisco, CA	415-552-4595
Asbestos TEM Laboratories, Inc.	Berkeley, CA	510-528-0108
Bay Area Air Quality Management District	San Francisco, CA	415-749-4625
CAMCO Laboratory	Fontana, CA	909-428-3099
CTL Environmental Services	Harbor City , CA	310-530-5006
City of Los Angeles Dept of Water and Power	Los Angeles, CA	213-367-7271
Clark Seif Clark, Inc.	Chatsworth, CA	818-727-2553
Concord Analysis, Inc.	Chatsworth, CA	818-407-0128
Design for Health, Inc.	San Diego, CA	619-291-1777
EMS Laboratories, Inc.	Pasadena, CA	626-568-4065
EMSL Analytical, Inc.	Malpitas, CA	408-934-7010
EMSL Analytical Inc.	San Mateo, CA	415-570-5401
ENCORP	El Segundo, CA	310-640-9811
Environmental Science Services	Lockeford, CA	209-333-6157
Forensic Analytical Specialties, Inc.	Hayward, CA	510-887-8828
Forensic Analytical Specialties, Inc.	Rancho Domingues, CA	310-763-2374
Health Science Associates	Los Alamitos, CA	714-220-3922
Hygeia Laboratories, Inc.	Sierra Madre, CA	626-355-4711
JMR Environmental Services	San Diego, CA	619-222-0544
KSL	Mokelumne Hill, CA	209-286-1822
Kellco Services, Inc.	Hayward, CA	510-786-9751
LA Testing	S. Pasadena	323-254-9960
Los Angeles Harbor Department Testing Lab	Wilmington, CA	310-732-3976
Los Angeles Unified School District	Los Angeles, CA	213-743-5086
MACS Lab., Inc.	Santa Clara, CA	408-727-9727
Micro Analytical Laboratories, Inc.	Emeryville, CA	510-653-0824
Micro Analytical Laboratories, Inc.	San Francisco, CA	510-653-0824
Micron Environmental Labs	Duarte, CA	626-357-8627
NATEC International, Inc.	Garden Grove, CA	714-894-7577
National Econ Corporation	Irvine, CA	714-752-5866
Patriot Environmental Lab. Services	Garden Grove, CA	714-899-8900
RJ Lee Group, Inc.	San Leandro, CA	510-567-0480
San Joaquin Enviromental, Inc.	Fresno, CA	559-298-8500
SCILAB California, Inc.	Carson, CA	310-834-4868
South Coast Air Quality Management District	Diamond Bar, CA	909-396-2172
Hi-Tech Environmental & Laboratory Services	Cypress, CA	714-827-0693
Western Analytical Laboratory	Burbank, CA	818-845-7742

List updated March 2000.