

# Eco-Friendly Homes Presentation

## Asbestos, Mold, and Lead-Based Paint



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# What Is Asbestos?

- Asbestos is a mineral fiber.



## I thought Asbestos was banned?

- 1989 Ban and Phase Out Rule was vacated by the Fifth Circuit Court of Appeals in October of 1991.
- In 1994, EPA published a Final Rule which established the following products as still subject to the original Ban and Phase Out Rule:
  - Corrugated paper
  - Rollboard
  - Commercial paper
  - Specialty paper
  - Flooring Felt
  - New uses of asbestos

# North America Free Trade Act

- Some asbestos-containing products that are banned in the U.S, but still made in Mexico and Canada may be available in the U.S.

**I didn't think Asbestos was still an issue!**



Crocidolite (Blue Asbestos)

## How Can Asbestos Affect My Health?

- Occupational exposure studies
  - lung cancer;
  - Mesothelioma;
  - asbestosis
  
- Most people exposed to small amounts of asbestos, as we all are in our daily lives, do not develop these health problems.

# Regulatory Overview

- Asbestos is a highly regulated material, falling under the scope of multiple jurisdictions, legislative acts and state and local ordinances

## Where do I find it in my home?

- Roofing and siding shingles (asbestos cement)
- Houses built between 1930 and 1950 may have asbestos as insulation.
- Attic and wall insulation produced using vermiculite ore, particularly ore that originated from a Libby, Montana mine, may contain asbestos fibers.

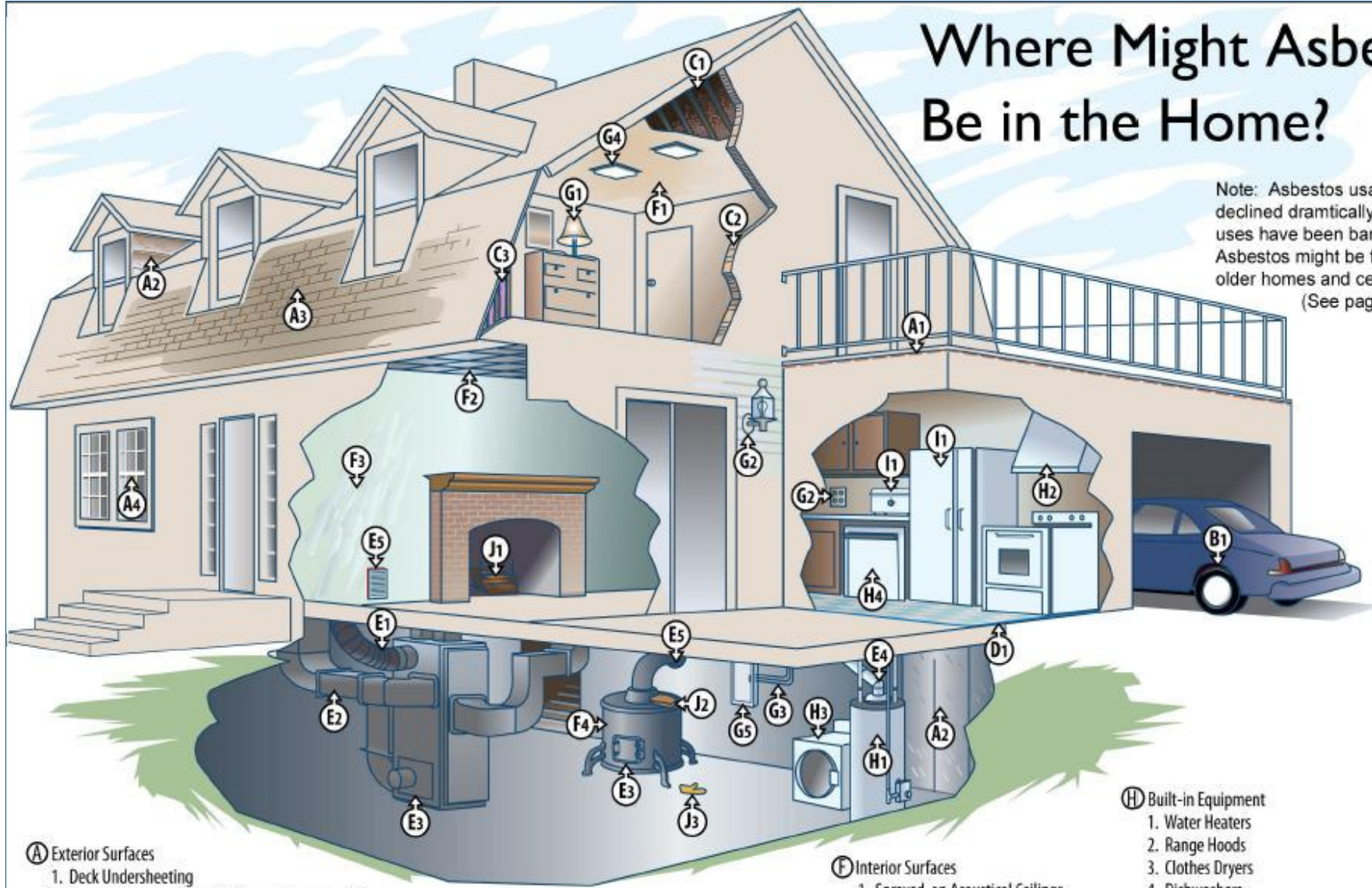


## Where do I find it in my home?

- Textured paint and in patching compounds used on wall and ceiling joints. (Their use was banned in 1977.)
- Artificial ashes and embers sold for use in gas-fired fireplaces
- Older products such as stove-top pads
- Vinyl floor tiles and the backing on vinyl sheet flooring and adhesives.
- Hot water and steam pipes
- Oil and coal furnaces and door gaskets

# Where Might Asbestos Be in the Home?

Note: Asbestos usage has declined dramatically; some uses have been banned. Asbestos might be found in older homes and certain products. (See page 5)



- (A) Exterior Surfaces**
  1. Deck Undersheating
  2. Cement Asbestos Board Siding and Undersheating
  3. Roof Felt and Shingles
  4. Window Putty
- (B) Automobiles**
  1. Brake Linings, Clutch Facings, and Gaskets
- (C) Insulation**
  1. Vermiculite Attic Insulation
  2. Batt Insulation
  3. Vermiculite Wall Insulation

- (D) Flooring**
  1. Vinyl Asbestos Sheets, Tiles, and Undersheating
- (E) Boilers, Heaters and Piping**
  1. Heat Source Covering
  2. Air Duct Lining
  3. Door and Cover Gaskets
  4. Pipe Lagging
  5. Wall Gaskets and Lining

- (F) Interior Surfaces**
  1. Sprayed-on Acoustical Ceilings
  2. Acoustical Tiles
  3. Textured Paint
  4. Heat Reflectors (Woodstoves)
- (G) Electrical Equipment**
  1. Lamp Sockets
  2. Outlet and Switchboxes
  3. Insulation on Knob and Tube Wiring
  4. Recessed Lighting
  5. Main Panel and Fuse Boxes

- (H) Built-in Equipment**
  1. Water Heaters
  2. Range Hoods
  3. Clothes Dryers
  4. Dishwashers
- (I) Appliances**
  1. Refrigerators, Freezers, Portable Dishwashers, Toasters, Slow-cookers, Ovens, Hair Dryers (not shown) and Portable Heaters (not shown)
- (J) Miscellaneous**
  1. Fireplace Logs
  2. Asbestos Hot Pads
  3. Asbestos Gloves

## What Should Be Done About Asbestos In The Home?

- Don't panic
- Check material regularly if you suspect it may contain asbestos.
- If asbestos material is more than slightly damaged, or if you are going to make changes in your home that might disturb it, repair or removal by a professional is needed.

## What if I want to remove asbestos from my home?

- Trigger Levels
  - 50 linear feet on pipes
  - 32 square feet on other surfaces
  - Volume equivalent of a 55-gallon drum
- Home owners must provide written notification to CDPHE at least 10-days prior to work commencing.
- Opt-out Option

## Asbestos Do's...


- **Do** keep activities to a minimum in any areas having damaged material that may contain asbestos.
- **Do** take every precaution to avoid damaging asbestos material.
- **Do** have removal and major repair done by people trained and qualified in handling asbestos.

## ...And Don'ts for the Homeowner

- **Don't** dust, sweep, or vacuum debris that may contain asbestos. (wet methods)
- **Don't** saw, sand, scrape, or drill holes in asbestos materials

# Asbestos Ads

THE CURTAIN CALL




The curtain call

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# Damaged Pipe Insulation





# Pipe Insulation



# Boiler Insulation



# Asbestos Insulation



## Helpful Links

- [What is Banned?](#)
- [CDPHE Asbestos Home](#)
- [General Information on Asbestos](#)
- [Renovation Guidance](#)
- [Asbestos FAQs](#)

# Mold in the Home

- The key to mold control is moisture control.
- Clean up the mold promptly *and* fix the water problem.
- 24-48 hours to prevent mold growth.



# Why is mold growing in my home?

- Molds are part of the natural environment.
- Wet Surfaces
- Mold will not grow without moisture

# Can mold cause health problems?

- Molds produce
  - allergens
  - Irritants
  - potentially toxic substances (mycotoxins).
- Allergic responses include
  - Sneezing
  - runny nose
  - red eyes,
  - and skin rash (dermatitis)



# How do I get rid of mold?

- It is impossible to get rid of all mold and mold spores indoors
- The mold spores will not grow if moisture is not present.
- Control Moisture
- Fix the water problem





## Consult the Mold Professionals

- EPA's *Mold Remediation in Schools and Commercial Buildings*
- EPA's guide *Should You Have the Air Ducts in Your Home Cleaned?*
- Damage caused by sewage/contaminated water

# Helpful Links

[EPA Mold Homepage](#)

[CDPHE Mold Fact Sheet](#)

[CDPHE Mold FAQs](#)



# Lead-Based Paint

- Lead is highly toxic and affects virtually every system of the body.
  - impact on children's developing brains and nervous systems,
  - reductions in IQ,
  - decreased attention span,
  - reading and learning disabilities,
  - hyperactivity and behavioral problems.

# Lead-Based Paint

- Lead-contaminated surface dust.
- Leaded dust is generated as lead-based paint deteriorates over time.
- The Colorado Department of Public Health and Environment, Air Pollution Control Division

# Helpful Links

- [CDPHE Lead Program](#)
- [Lead Regulations and Guidance](#)
- [Colorado Regulation 19](#)
- [Colorado's Pre-Renovation Rule](#)

# Contact Information

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