U.S. Department of the Interior
Bureau of Indian Education

AHERA ASBESTOS AWARENESS AND DESIGNATED PERSON 2-HOUR TRAINING

OBJECTIVE

To provide an overview of Asbestos Hazard Emergency Response Act (AHERA) requirements, roles, and responsibilities to reduce AHERA infractions within BIE Funded Schools

MEETING TIPS FOR ONLINE TRAINING

- 1). Place yourself on “Mute” to prevent background noise.
- 2). Use the “Chat with all” feature to ask questions.
  - Note: All participants will be able to see your comments or questions.
- 3). Every participant will receive a certificate of completion.

WHITETAIL ENVIRONMENTAL, LLC

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ASBESTOS AWARENESS AND DESIGNATED PERSON TRAINING - AGENDA

- What is asbestos, and how do we recognize it?
- Where is asbestos located in your school?
- When is asbestos dangerous?
- How asbestos affects your health and how to avoid exposure?
- Who regulates asbestos, and what are the laws?
- What are the roles and responsibilities for asbestos management?
- Why you need an asbestos management plan (AMP)

DEFINITIONS

- **Asbestos:** Chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite, and any of these minerals that have been chemically altered.
- **ACM:** "asbestos-containing material" meaning any material containing > 1% asbestos.
- **Asbestos-containing building material (ACBM):** Surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building. (AHERA term)
- **Encapsulation:** The treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers
- **Enclosure:** Is an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.
- **Friable:** easily crumbled or pulverized.
- **Local education agency (LEA):** For tribally controlled schools, the Tribe, as an administrative director of the school, qualifies as a LEA pursuant to 40 C.F.R. § 763.83. and must ensure compliance among schools. For Bureau Operated Schools, BIE is the LEA.

DEFINITIONS CONTINUED

- **Miscellaneous ACBM:** Usually non-friable, e.g., vinyl floor tile, cement pipes or siding, roofing materials, gaskets, ceiling tiles.
- **PACM:** "presumed asbestos-containing material" if material is PACM it is subject to all regulations that apply to ACM. (OSHA term)
- **RACM:** "regulated asbestos-containing material" (NESHAP term)
- **School Building:** Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for school purposes.
- **Surface Material:** Material that is sprayed, troweled-on, or otherwise applied to surfaces for fire protection
- **TSI:** "thermal System Insulation" ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.

FEDERAL REGULATION- TERMS

- AHERA – Asbestos Hazard Emergency Response Act
- CFR – Code of Federal Regulation
- EPA - Environmental Protection Agency(EPA)
- NESHAP - National Emissions Standards for Hazardous Air Pollutants
- OSHA - Occupational Safety & Health Administration
- U.S.C. - United States Code

These terms will be discussed in much more detail later in the presentation, first you will need to know what Asbestos is.

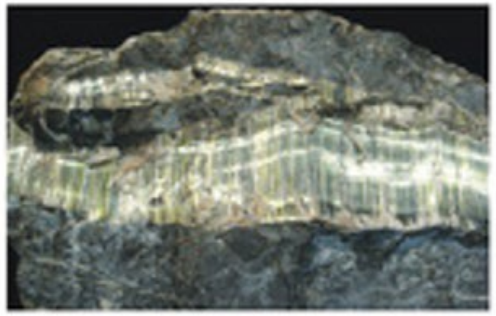
WHAT IS ASBESTOS?

Natural Asbestos

- Asbestos is a mineral fiber that occurs in rock and soil.
- Asbestos fibers are virtually indestructible.
- They are resistant to chemicals and heat, and very stable in the environment.
- They do not evaporate into air or dissolve in water, and they do not break down over time.
- Asbestos is probably the best-known insulator. Because asbestos has so many useful properties, it has been used in over 3,000 different products.
- Although asbestos is no longer mined in the U.S. and its use has declined significantly, American industry still legally imports, uses and sells both raw asbestos and products made with it.
- There is no “safe level of asbestos, exposure, for any type of asbestos fiber. Asbestos exposures as short in duration as a few days have caused mesothelioma in humans.

WHAT IS ASBESTOS?
TYPES OF ASBESTOS

Serpentine



Chrysotile

Amphibole

Amosite

Crocidolite

Tremolite

Actinolite

Anthophyllite

WHAT IS ASBESTOS? SERPENTINE GROUP-CHRYSOLITE

- Characterized by asbestos fibers which form curly structures or appear coiled when viewed in their natural state.
- Chrysotile makes up ~95% of the asbestos found in building products.

AMPHIBOLE GROUP

The Amphibole Group is characterized by asbestos fibers that are thin and straight: Amosite and Crocidolite asbestos are no longer mined. The remaining three currently have no commercial applications.

- Amosite (brown asbestos)
- Crocidolite (blue asbestos)
- Anthophyllite
- Actinolite
- Tremolite

Amosite

Crocidolite

Anthophyllite

Actinolite

Tremolite

THE HISTORY OF ASBESTOS

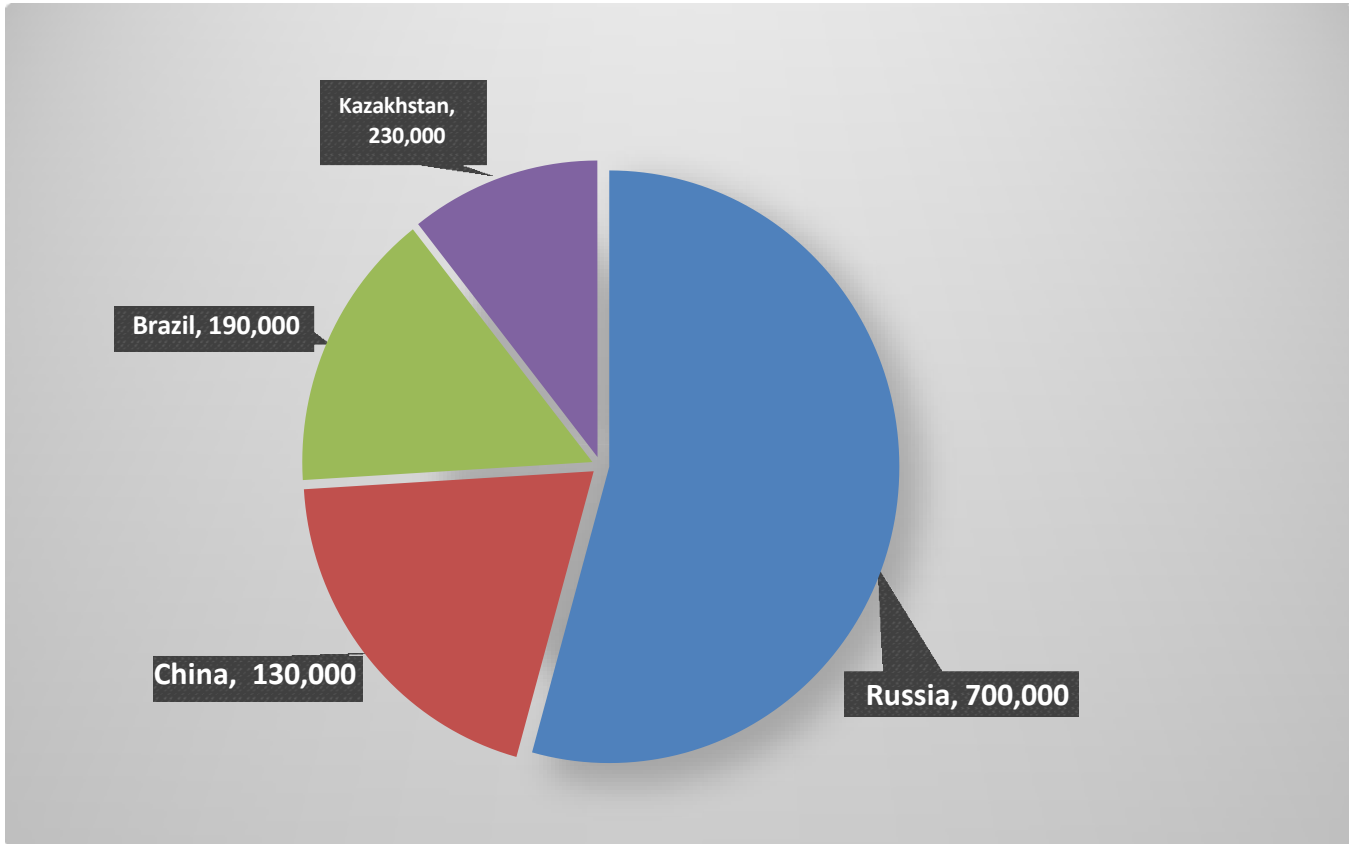
- Archeologists uncovered asbestos fibers in debris dating back to the stone age, 750,000 years ago.
- Ancient Greeks made it into cloth and named it “indestructible”
- 1st century AD: Roman slaves weaving asbestos cloth were observed to develop a "sickness of the lungs".
- 1879: First commercial production (Industrial Revolution- Steam powered engines)
- 1899: First documented case of “Lung Scarring” due to asbestos
- 1930’s: Medical journal articles on asbestos- related diseases

THE HISTORY OF ASBESTOS

- 1960 - 1970's: Use of asbestos peaked during post war building (Baby Boomers)
- 1989: EPA banned most asbestos- containing building materials (ACBMs) BUT….
- 1991: Asbestos ban "overturned" by courts.
- 1991: Materials that remained banned were: Sprayed or wet applied fire proofing and TSI, corrugated paper, roll board, commercial paper, specialty paper and new uses that began after 1989.
- 2005: Criminal charges begin for asbestos deaths

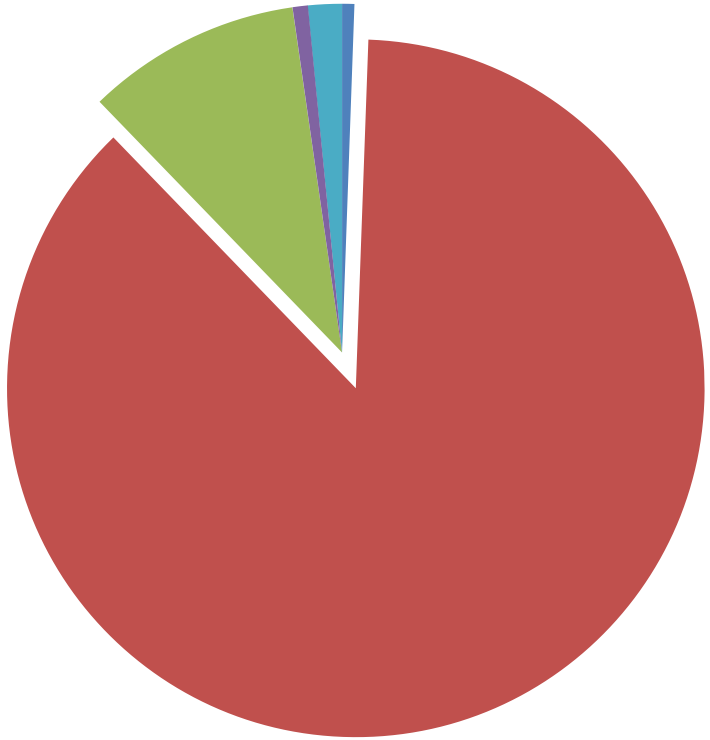
ASBESTOS CONSUMPTION

2022: Metric Tons Mined = 1,250,000



ASBESTOS CONSUMPTION

2022: Metric Tons Consumed = 1,338,642



- Africa 135
- Asia and Middle East 1,320,000
- South America 16,700
- Central and North America 1,040
- Europe 767

BANNED ASBESTOS MATERIAL REVIEW

- Spray applied ACMs for fireproofing
- Wet applied ACMs and TSI
- Corrugated paper, roll-board, commercial paper, specialty paper, and flooring felt
- Materials that are spray-applied, except when contained in a bituminous/resinous matrix
- Any new uses

WHAT IS ASBESTOS?

QUESTIONS?

QUIZ QUESTION

In what years was the use of asbestos as a building material most prevalent?

A. 1920 - 30s

B. 1940 - 50s

C. 1960 - 70s

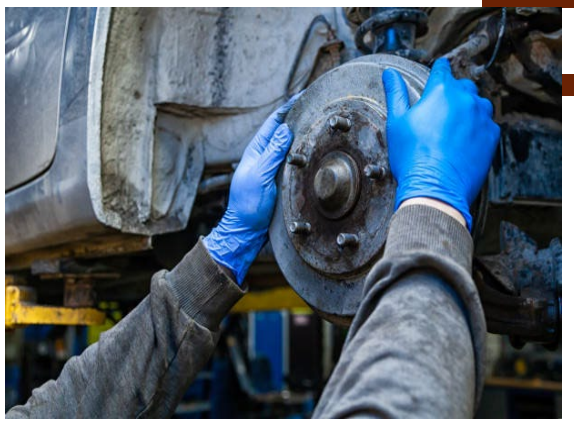
D. 1980 - 90s

WHERE IS ASBESTOS FOUND?

WHERE IS ASBESTOS FOUND?

Asbestos may be found in many different products and many different places. Examples of products that might contain asbestos are:

- Sprayed-on fire proofing and insulation in buildings
- Insulation for pipes and boilers
- Wall and ceiling insulation
- Ceiling and floor tiles
- Plaster material, Putties, caulks, and cements (such as in chemical carrying cement pipes)
- Mastic material (pipe, HVAC, sink)
- Roofing materials
- Some after market vehicle brake or clutch components
- Fire curtains, fire blankets, and fire doors
- Lab bench surfaces

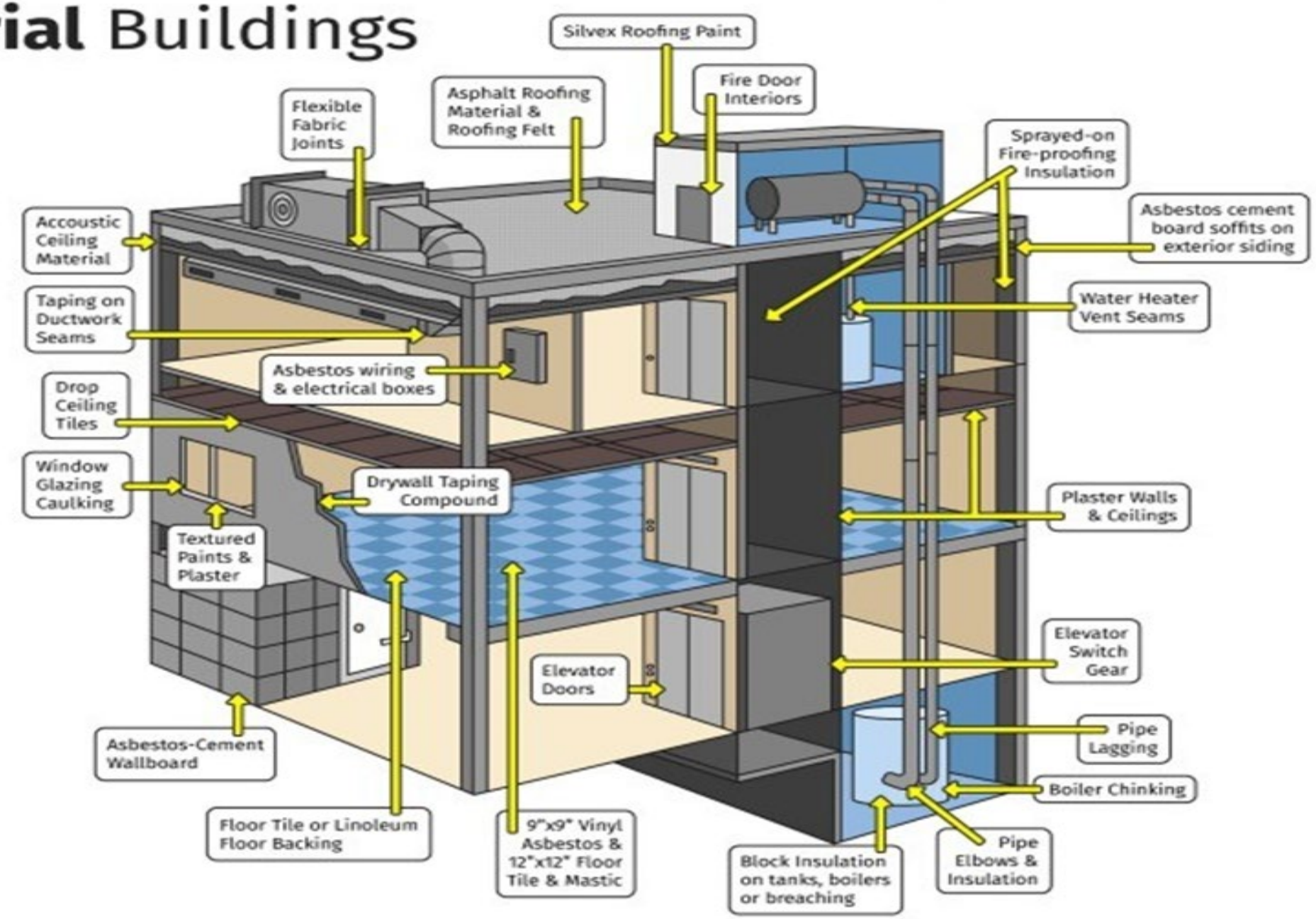


WHERE IS ASBESTOS LOCATED?

Common ACBM

- Most 9” x 9” floor tiles in buildings built prior to 1981
- Insulation around pipes and boilers
- Interiors of fire doors
- Sprayed-on insulation in locations such as mechanical rooms, steel reinforcing beams, and some ceilings in older buildings

Asbestos in **Commerical** & **Industrial** Buildings



THREE CATEGORIES OF ACBM UNDER AHERA

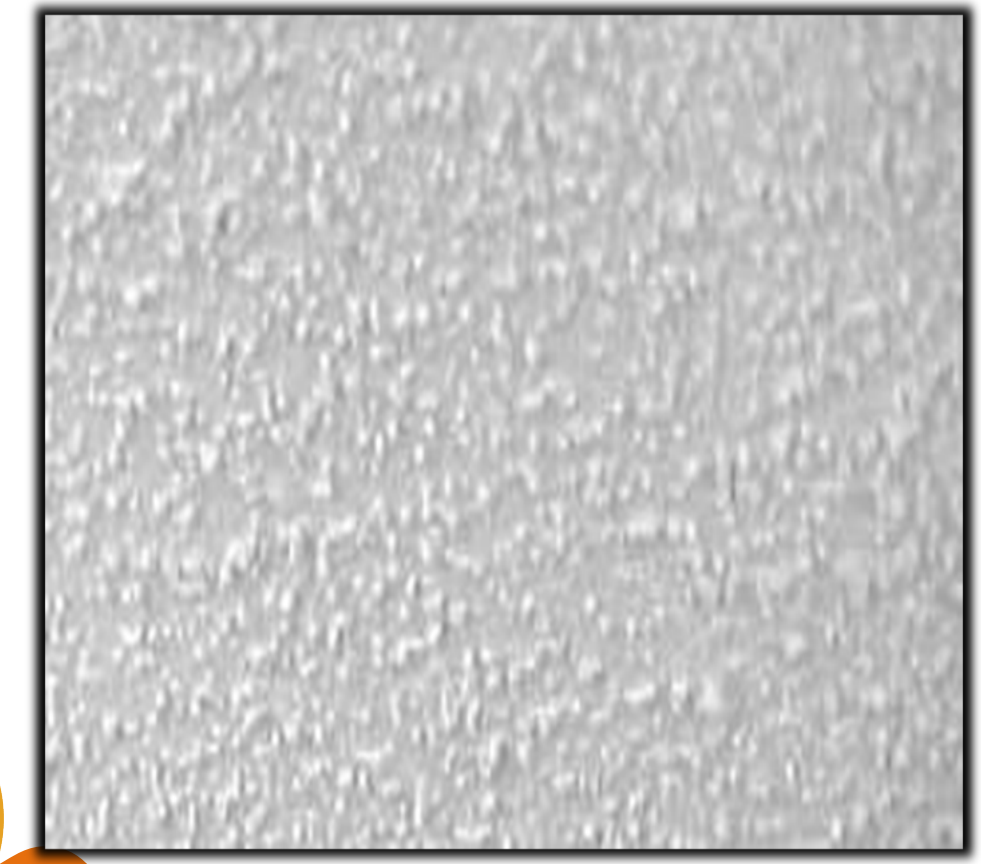
- Surfacing Materials
- Thermal System Insulation (TSI)
- Miscellaneous Materials

ACBM SURFACING MATERIALS

Interior ACBM that has been sprayed on, troweled on, or otherwise applied to surfaces (structural members, walls, ceilings, etc.) for acoustical, decorative, fireproofing, or other purposes.

- acoustical plaster
- hard plasters (wall or ceiling)
- fireproofing insulation
- spray-applied or blown-in thermal material
- joint or patching compound (wall or ceiling)
- textured paints or plasters

ACBM SURFACING MATERIALS



ACBM SURFACING MATERIALS

Joint Compound and Plaster

ACBM THERMAL SYSTEM INSULATION (TSI)

Insulation used to control heat transfer or prevent condensation on pipes and pipe fittings, boilers, breeching, tanks, ducts, and other parts of hot and cold water systems; heating, ventilation, and air conditioning (HVAC) systems; or other mechanical systems.

- pipe lagging
- pipe wrap
- HVAC duct insulation
- block insulation
- cements and muds
- gaskets and ropes

WHERE IS ASBESTOS LOCATED?

Thermal System Insulation (TSI) Pipe and boiler insulation

WHERE IS ASBESTOS LOCATED?

HVAC Joint Sealers and Vibration Dampers

WHERE IS ASBESTOS LOCATED?

TSI - Mechanical Room Equipment and Piping

MISCELLANEOUS A C B M

Other, mostly nonfriable products and materials found on structural components, structural members or fixtures

- Floor tile, ceiling tile, construction mastic for floor and ceiling materials, sheet flooring, fire doors, asbestos cement pipe and board, wallboard, acoustical wall tile, and vibration damping cloth, transite materials

OTHER ASBESTOS MATERIALS

Other, sources of asbestos not regulated under AHERA

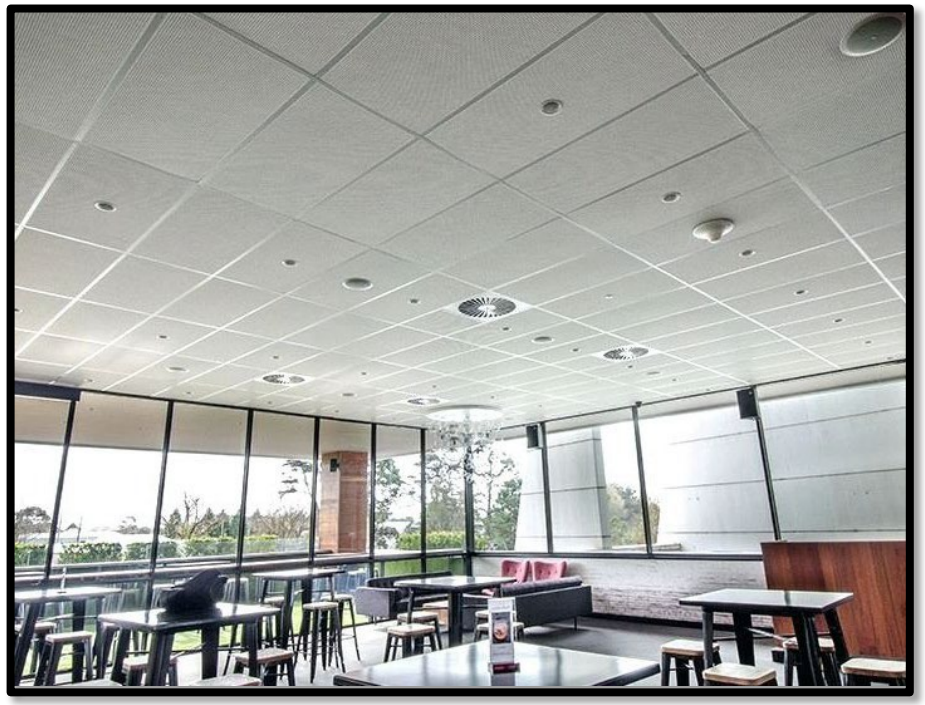
- Roofing felt, mastic, and siding (not regulated as ACBM under AHERA, but regulated under OSHA and NESHAP)
- Fabrics such as stage curtains (Not regulated as ACBM)
- Lab Tables (Not regulated as ACBM)

MISCELLANEOUS ACBM

Vinyl Floor Tiles and Adhesive

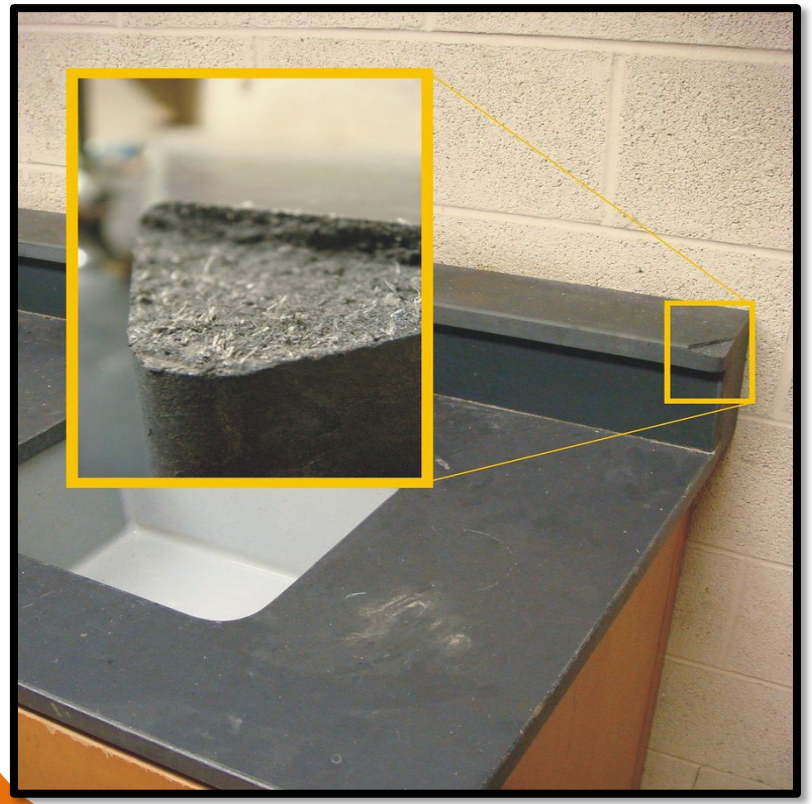
WHERE IS ASBESTOS LOCATED?

Ceiling Tiles



WHERE IS ASBESTOS LOCATED?

Lab Tables and Back Splashes



WHERE IS ASBESTOS LOCATED?

Roofing Joint Sealer

WHERE IS ASBESTOS LOCATED?

You may also see OSHA Warning Labels for Asbestos

29CFR1910.1001(j)(4)***Warning signs*** -

1910.1001(j)(4)(i)***Posting*.** Warning signs shall be provided and displayed at each regulated area. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.

1910.1001(j)(4)(ii)***Sign specifications:***

1910.1001(j)(4)(ii)(A)The warning signs required by paragraph (j)(4)(i) of this section shall bear the following legend:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

WHERE IS ASBESTOS LOCATED?

Building areas that have asbestos-containing materials in them will have notices posted near the entrances, frequently near the fire alarm panel

WHERE IS ASBESTOS LOCATED?

Pipe and boiler insulation that contains asbestos will be labeled with identifying stickers and placards

WHERE IS ASBESTOS FOUND?

QUESTIONS?

QUIZ QUESTION

Miscellaneous asbestos-containing materials are usually:

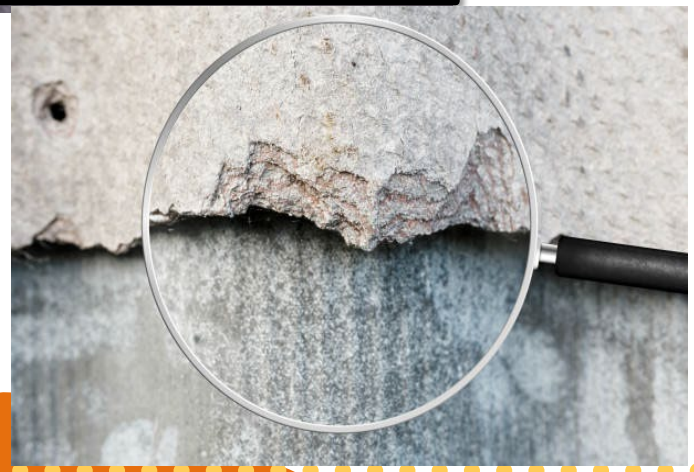
A. Friable
B. Non-friable
C. Applied to boilers as insulation
D. Used as fireproofing

WHEN IS ASBESTOS DANGEROUS?

WHEN IS ASBESTOS DANGEROUS?

- ACM is not generally considered harmful unless it is disturbed or damaged, releasing dust or fibers into the air where the fibers can be inhaled. Fibers can be suspended in the air up to 3 days.
- Many of the fibers will become trapped in the mucous membranes of the nose and throat where they can then be removed, but some may pass deep into the lungs.
- Once they are trapped in the lungs, the fibers can cause health problems.

WHEN IS ASBESTOS DANGEROUS?



FRIABLE

- Asbestos is easily crumbled by hand, releasing fibers into the air
- Damaged or disturbed friable ACM presents inhalation risk
- Includes previously non-friable material after it is damaged
- Friable fibers are more easily released into the air
- Examples: asbestos ceiling tile and thermal insulation on pipes

WHEN IS ASBESTOS DANGEROUS?

NON-FRIABLE

- ACM that are firmly bonded and harder to break
- Fiber release into the air would require major abrasion (i.e., cutting with power tool, drilling or breaking)
- If ACM is left alone and not disturbed it does not pose a health risk
- Examples: asbestos floor tile (vinyl), adhesives, and cement products

WHEN IS ASBESTOS DANGEROUS?

ACBM Damage, Deterioration, and Delamination

- Look for holes, rips, water stains, abrasion
- Damage and deterioration will increase the likelihood of disturbance of friable ACM and could result in fiber release
- Water damage, continual vibration, aging, and physical impact such as drilling, grinding, buffing, sawing or striking can break the materials down making fiber release more likely

WHEN IS ASBESTOS DANGEROUS?

ACBM Damage, Deterioration, and Delamination

Damaged

Properly Maintained

Note: Additional 14 hours of documented training from an approved vendor is required prior to making this repair.

WHEN IS ASBESTOS DANGEROUS?

ACBM Damage, Deterioration, and Delamination

Asbestos pipe and boiler insulation does not present a hazard unless the protective canvas covering is cut or damaged in such a way that the asbestos underneath is exposed to the air

WHEN IS ASBESTOS DANGEROUS?

QUESTIONS?

QUIZ QUESTION

Thermal system insulation (TSI) can be damaged by:

A. Water leaks
B. Steam leaks
C. Incorrect or unauthorized repair procedures
D. All of the above

QUIZ QUESTION

Friable asbestos is:

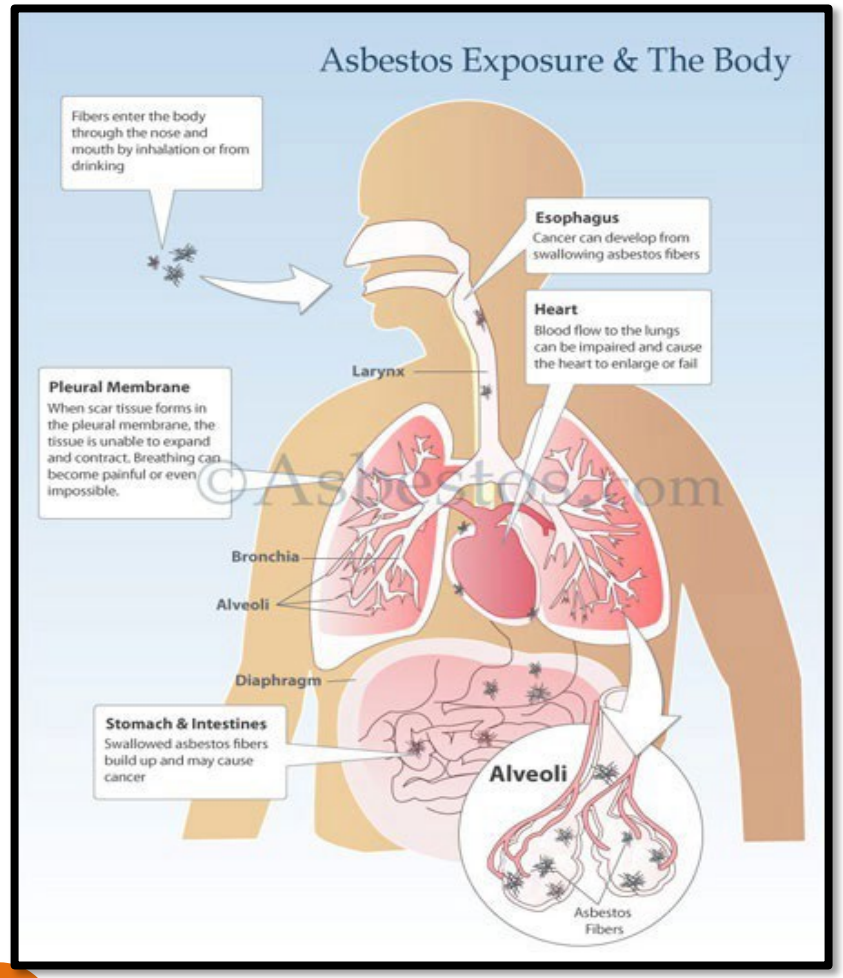
A. Contained in a solid matrix of other materials
B. Not regulated by OSHA or the EPA
C. Easily reduced to powder by ordinary hand pressure
D. Produced only in the *Freeabale* province of France

ASBESTOS HEALTH EFFECTS

ASBESTOS HEALTH EFFECTS

Because it is so hard to destroy asbestos fibers, the body cannot break them down or remove them once they are lodged in lung or body tissues. They remain in place where they can cause disease.

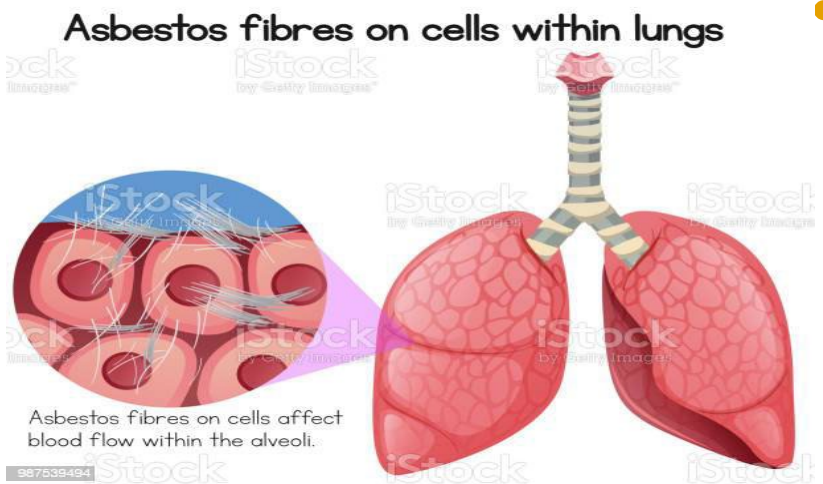
ASBESTOS HEALTH EFFECTS

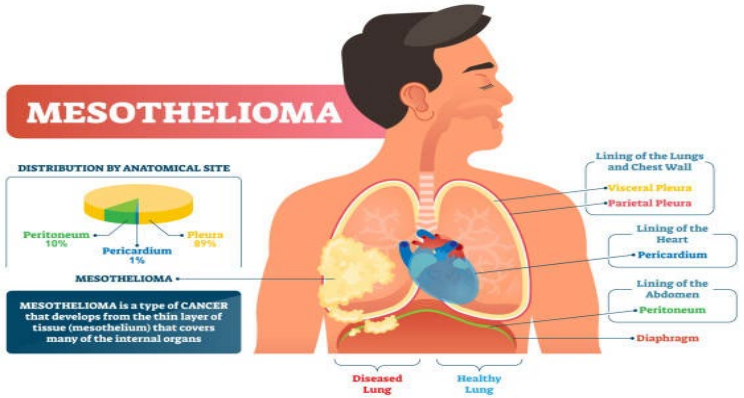


- Inhalation is the most common and most damaging pathway into the body
- Asbestos related diseases show dose response relationship
- Diseases are treatable but not curable

ASBESTOS HEALTH EFFECTS

- Breathing microscopic asbestos fibers can cause a buildup of scar-like tissue in the lungs called asbestosis and result in loss of lung function that often progresses to disability and death.
- Asbestos also causes cancer of the lung and other diseases such as mesothelioma of the pleura which is a fatal malignant tumor of the membrane lining the cavity of the lung or stomach.
- Epidemiologic evidence has increasingly shown that all asbestos fiber types, including the most commonly used form of asbestos, chrysotile, causes mesothelioma in humans.





ASBESTOS HEALTH EFFECTS

There are three primary diseases associated with asbestos exposure:

- Asbestosis
- Lung Cancer
- Mesothelioma

ASBESTOS HEALTH EFFECTS

Asbestosis

A serious, chronic, noncancerous respiratory disease that causes fibrotic scarring of the lungs. Common to workers with high exposure over many years.

- **Symptoms:** shortness of breath, rales, clubbing of fingers, chest pains, loss of appetite
- **Prognosis:** progressive, in advanced stages heart/lung disease and death
- **Latency:** 15-30 years

ASBESTOS HEALTH EFFECTS
LUNG CANCER

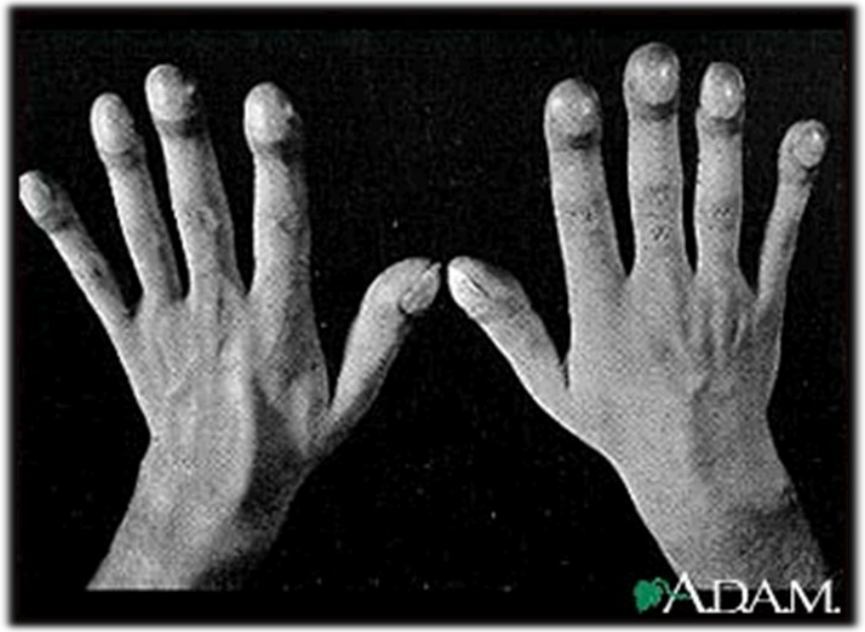
Lung cancer causes the largest number of deaths related to asbestos exposure. Both high level exposure and long-term exposure to asbestos increases risk.

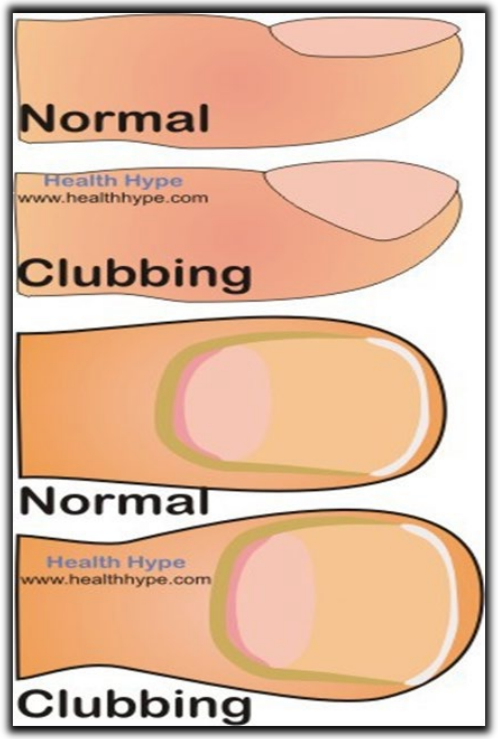
Directly working in mining, milling, manufacturing and using asbestos and its products can increase risk.

- **Symptoms:** persistent cough, chest pain, hoarseness, shortness of breath and anemia
- **Prognosis:** eventual death
- **Latency:** 15-30 years

ASBESTOS HEALTH EFFECTS

CLUBBING OF FINGERS



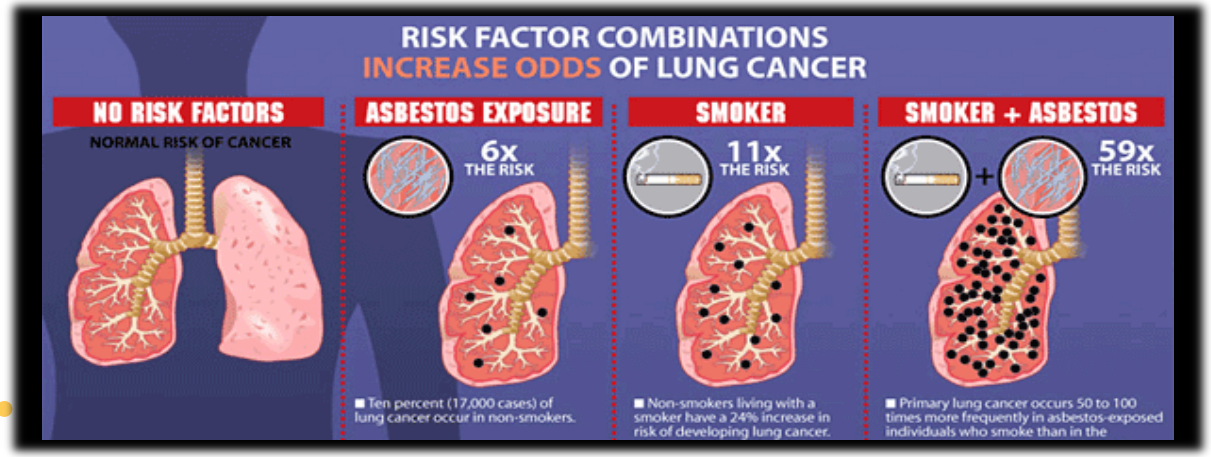


Lung cancer is the most common cause of clubbing. Clubbing often occurs in heart and lung diseases that reduce the amount of oxygen in the blood.

ASBESTOS HEALTH EFFECTS

SMOKING & EXPOSURE TO ASBESTOS

- Smoking temporarily paralyzes the ciliated cells of the bronchi
- The ciliated cells line the trachea and bronchi and provide an escalator like action designed to move particles from the lungs and deposit them onto the digestive track where they are passed
- However, since smoking paralyzes more of these cells, particles can be deposited deeper into the lung
- Individuals who have been exposed to asbestos and smoking increase their risk for lung cancer by 50 to 90-fold
- Smoking has a synergistic effect with asbestos exposure
- There is no “SAFE LEVEL” of exposure

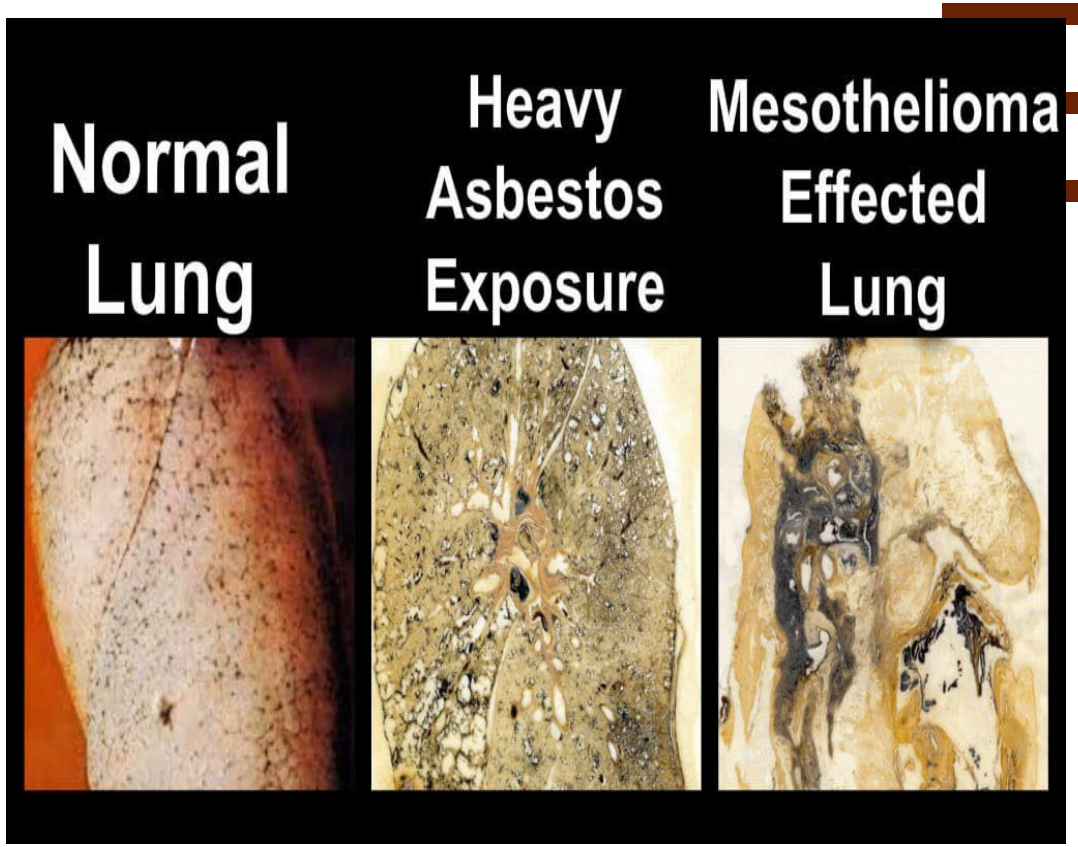


ASBESTOS HEALTH EFFECTS

MESOTHELIOMA

A rare form of cancer that most often occurs in the thin membrane lining of the lungs, chest, abdomen, and heart

- Symptoms: shortness of breath, chest pain, fluid in chest cavity
- Prognosis: generally quick, (1 year after diagnosis) death
- Latency: 30-40 years
- 70%-80% cases linked to asbestos exposure
- Approximately 2% of all miners and textile workers exposed to asbestos contract mesothelioma
- 200 new cases diagnosed per year in U.S.



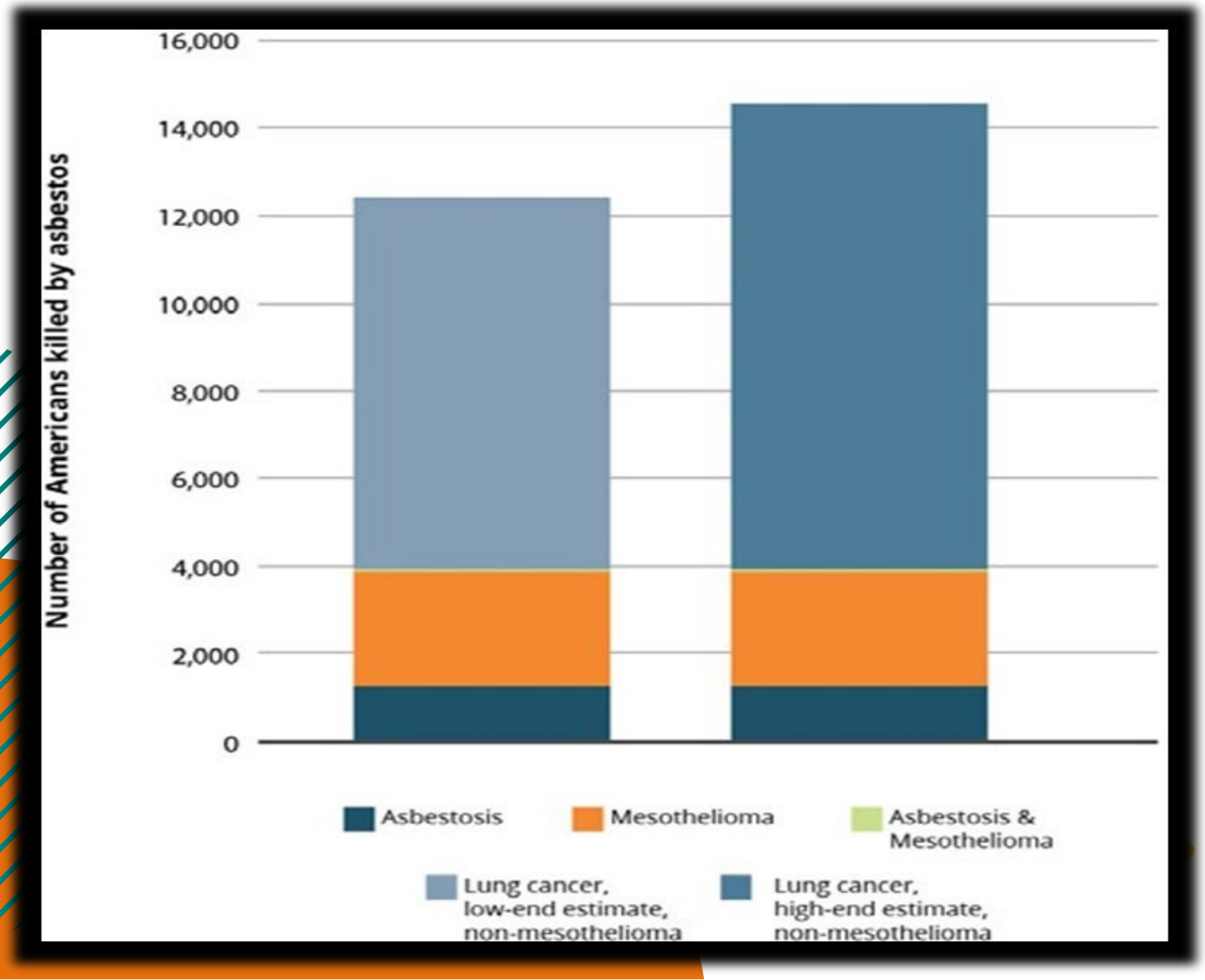
ASBESTOS HEALTH EFFECTS

Gastrointestinal Polyps and Related Cancers:

- Ingested asbestos fibers
- Immune system recognizes the foreign object and can’t break it down
- Object becomes encapsulated in the gastrointestinal system
- Delayed response

ASBESTOS HEALTH EFFECTS

UNITED STATES



- 12,000-15,000 asbestos related deaths per year
- 189,000-221,000 asbestos related deaths between 1999-2013

HOW CAN YOU AVOID EXPOSURE?

- In order to avoid being exposed to asbestos, you must be aware of the locations it is likely to be found.
- If you do not know whether something is asbestos or not and it fits the suspect material category, assume that it is until it is verified otherwise.
- Remember that you cannot tell if floor or ceiling tiles contain asbestos just by looking at them.
- Never try to take a sample yourself unless you have been trained to do so.

HOW CAN YOU AVOID EXPOSURE?

Disturbing any known or assumed ACM could release fibers, so "NEVER":

- Drill
- Hammer
- Cut
- Saw
- Break
- Damage
- Move (in a way that damages the material)

HOW CAN YOU AVOID EXPOSURE?

Vinyl Asbestos Tile (VAT) is one of the most prevalent source of asbestos containing material in schools and most likely will be for years to come. Although VAT is considered nonfriable, the frictional forces exerted on these materials during routine floor-care maintenance operations can release asbestos fibers.

HOW CAN YOU AVOID EXPOSURE?

- Never sand or dry buff asbestos-containing floor tiles
- Only wet stripping methods should be used during stripping operations
  - Strip as infrequently as possible, once per year max
- Only use low abrasion pads at speeds below 300 RPM

Custodial and maintenance personnel who are responsible for the care and maintenance of asbestos containing floor coverings should be thoroughly trained to safely and properly operate the machines, pads and floor care chemicals used at the facility.

HOW CAN YOU AVOID EXPOSURE?

By knowing where asbestos is likely to be located and then taking measures not to disturb it, you can protect yourself and others from exposure to this hazardous substance.

ASBESTOS HEALTH EFFECTS

QUESTIONS?

QUIZ QUESTION

The primary organ that asbestos affects is the:

A. Brain
B. Circulatory system
C. Intestines
D. Lungs

BREAK TIME

FEDERAL REGULATIONS

- Oversight of U.S. Environmental Protection Agency's (EPA's) AHERA and NESHAP regulation is assigned to BIE's Environmental Program.
  - 15 U.S.C, Title 15, CHAPTER 53, Subchapter II- Asbestos Hazard Emergency Response
  - 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA) Subpart E - Asbestos-containing Materials in Schools
  - 40 CFR 61 Subpart M National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Asbestos - Renovation and Demolition
- Occupational Safety & Health Administration (OSHA) regulations fall under the preview of BIE's Safety Program.
  - 29 Code of Federal Regulations (CFR) 1910 General Industry (1910.1001 Toxic and Hazardous Substances - Asbestos)
  - 29 CFR 1926 Safety and Health Regulations for Construction (1926.1101 Toxic and Hazardous Substances - Asbestos)

AHERA REGULATION

EPA: 40 CFR PART 763

SUBPART E

All schools are required to comply with the Asbestos Hazard Emergency Response Act (AHERA), regardless of whether they have asbestos-containing building materials (ACBM)

AHERA REGULATION

AHERA Requirements:

- All public-school buildings be inspected for asbestos and re-inspected for Asbestos-Containing Building Material (ACBM) every three years.
- All schools document inspections in an Asbestos Management Plan.
- All schools conduct periodic surveillance for ACM in each building at least once every 6 months.
- Two-hour Asbestos Awareness training for existing maintenance and custodial staff.
- New maintenance and custodial staff must receive Asbestos Awareness training within 60 days after commencement of employment in schools with ACBM.
- All schools must have a Designated Person (DP), in writing, and that person shall be properly trained.
- All schools must provide yearly notification to parents/guardians, students, teachers, and employees, temporary employees and contractors on the availability of the school's Asbestos Management Plan and any asbestos related actions taken or planned at the school.

ASBESTOS REGULATION

EPA: 40 CFR PART 61, SUBPART M

NESHAP Requirements:

- Specifies asbestos work practices during demolitions and renovations of all facilities, including, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units).
- Requires the owner/operator of the renovation or demolition operation to notify the appropriate delegated entity prior to any building demolition or renovations that contain regulated asbestos-containing material (>1% ACM).
- Requires work practice standards that control asbestos emissions.
- Designed to minimize the release of asbestos fibers during building demolition or renovation, waste packaging, transportation, and disposal.
- Performing the work in accordance with NESHAP regulations helps to ensure that areas in use during the renovation are not contaminated and that the area under renovation, when complete, is also free of contamination.

ASBESTOS REGULATION

OSHA: 29 CFR PART 1910.1001

OSHA Requirements:

The employer shall provide, at no cost, to employees who perform housekeeping operations in an area which contains ACM or Presumed ACM (PACM), an Asbestos Awareness training course, which shall at a minimum contain the following elements:

- Health effects of asbestos
- Locations of ACM and PACM in the building/facility
- Recognition of ACM and PACM damage and deterioration, requirements in this standard relating to housekeeping, and proper response to fiber release episodes
- Employees shall be trained at <u>least once a year</u>

ASBESTOS REGULATION

OSHA: 29 CFR PART 1926.1101

Class I

Asbestos work activities involving removal of Thermal Pipe Insulation (TSI) and sprayed on or troweled-on surfacing ACM and PACM.

Class II

Asbestos work activities involving the removal of ACM which is not TSI or surfacing material. This includes but is not limited to, the removal of asbestos wall board, floor tile, sheetrock, shingles, and mastics.

Class III

Asbestos work involving maintenance and custodial activities where ACM, including TSI, is likely to be disturbed.

Class IV

Asbestos work activities involving maintenance and custodial activities to clean up waste and debris containing ACM and PACM.

ASBESTOS REGULATION

TRIBAL, STATE, AND LOCAL LAWS:

- Each state follows federal regulations under AHERA and NESHAP, but may have different rules for permits, notifications, and asbestos worker training requirements and certifications.
- Before doing any asbestos remediation, renovations, removal or disposal, check with state and local authorities to ensure that all notifications, inspections, and land disposal requirements have been met.
- Check before you ACT!

ASBESTOS REGULATIONS

QUESTIONS?

QUIZ QUESTION

Asbestos training is required under:

A. Occupational Safety and Health Act (OSHA)
B. National Environmental Act (NEA)
C. Asbestos Hazard Emergency Response Act (AHERA)
D. Both A and C

ROLES AND RESPONSIBILITIES

ROLES AND RESPONSIBILITIES

Local Education Agencies (LEAs) Compliance requirements include but not limited to:

Perform original initial Inspection:

- Shall be conducted by an accredited inspector.
- Inspection required before use of a school building, or within 30 days in the event of an emergency.

Re-inspect every school building EVERY 3 YEARS

- Shall be conducted by an accredited inspector.
- Reinspect all friable and nonfriable asbestos in each school building.
- Reinspect all ACBM and assumed ACBM.

Periodic Surveillance: EVERY 6 MONTHS

- Custodial and Maintenance staff shall receive training to conduct surveillance.
- Visually inspect and record condition of all areas identified in the management plan listed as ACBM or assumed ACBM.

ROLES AND RESPONSIBILITIES

LEAs cont'd:

Implement Asbestos Management Plan (AMP):

- AMP must be developed by an accredited management planner following the guidelines listed in 40 CFR 763.93.
- Each school shall maintain and update the AMP with ongoing operations and maintenance, periodic surveillance, inspection, reinspection, and response action activities, etc.
- The EPA may conduct inspections and review management plans to ensure compliance.

ROLES AND RESPONSIBILITIES

LEAs Cont'd:

Ensure proper training:

- New custodial and maintenance (C&M) employees shall be trained within 60 days of employment.
- All members of C&M staff who may work in a building that contains ACBM must receive Asbestos Awareness Training of at least 2 hours, whether or not they are required to work with ACBM.
- Members of its C&M staff who conduct any activities that will result in the disturbance of ACBM (ex. repair damaged ACBM) shall receive 14 hours of additional training.
- All training records shall be kept in the AMP and be accessible upon request.

ROLES AND RESPONSIBILITIES

LEAs cont'd:

Designated Person (DP):

- The LEA shall designate a person, in writing, to ensure that requirements are properly implemented.
- The DP must receive adequate training to perform their duties.
- The DP's Name and Contact information must be listed in the AMP.

Notifications:

- Annually- Workers and building occupants, or their legal guardians, are informed the availability of inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress. All above information shall be in the AMP.
- Short-term external employees (e.g., utility workers or other contractors) who may come in contact with asbestos will be informed of the locations of ACBM and assumed ACBM.

ROLES AND RESPONSIBILITIES

LEAs cont'd:

Response Actions:

- Select the least burdensome response action identified in the AMP which will be sufficient to protect human health and the environment.
- Implement response actions in a timely manner.
- Document and maintain record of any response actions taken.

Operations and Maintenance:

- The LEA shall implement an operations, maintenance, and repair (O&M) program whenever any friable ACBM is present or assumed to be ACBM present in a school building.
- The LEA must also comply with either the OSHA Asbestos Construction Standard at 29 CFR 1926.1101, or the Asbestos Worker Protection Rule at 40 CFR 763.120, whichever is applicable.

ROLES AND RESPONSIBILITIES

LEAs cont'd:

Recordkeeping:

- All records shall be maintained in accordance with 40 CFR 763.94 in a centralized location at the administrative office of both the school and the LEA as part of the AMP.
- Areas where all ACBM has been removed, or response actions taken, records must be retained for 3 years after the next reinspection in accordance with 40 CFR 763.94. BEM recommends to keep records indefinitely as part of the AMP.
- All current training records should be kept in the AMP.
- BIE BEM recommends schools keep all asbestos-related records indefinitely.

ROLES AND RESPONSIBILITIES

LEAs cont'd:

Warning Labels:

- Shall be attached adjacent to any friable and nonfriable ACBM and assumed ACBM located in routine maintenance areas at each school building.
- Prominently displayed in readily visible locations.
- The warning label shall read, in print which is readily visible because of large size or bright color, as follows:

CAUTION: ASBESTOS HAZARD
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT

ROLES AND RESPONSIBILITIES

QUESTIONS?

QUIZ QUESTION

How often is a re-inspection conducted and by whom?

A. Every year, by custodial or maintenance staff

B. Every 3 years, by an accredited inspector

C. Every 6 months, by an accredited inspector

D. Every 3 years, by custodial or maintenance staff

ASBESTOS MANAGEMENT PLAN

ASBESTOS MANAGEMENT PLAN

- Annual Notification
- Designated Person contact Information
- ACBM Information
  - 3-year asbestos reinspection
  - Asbestos-free certifications
  - Records of ACBM removal
- Training Records
- Updated copy must be kept in Administration Office

ASBESTOS MANAGEMENT PLAN

ALL SCHOOLS – ANNUAL NOTIFICATION

- Provide to parents/guardians, students, teachers, employees/temporary employees
- Must include:
  - Notification date
  - Recent 3-year reinspection date
  - Response actions, inspections, and planned activities
  - Designated Person (DP) contact information
  - Availability of Asbestos Management Plan (AMP)
- Document the steps taken to distribute

ASBESTOS MANAGEMENT PLAN

ALL SCHOOLS

- DESIGNATE TRAINED STAFF
- 2-HOUR ASBESTOS AWARENESS TRAINING
- LOCATION OF AMP AND ACBM IN THE SCHOOL
- SIGNED CERTIFICATION STATEMENT FROM MANAGEMENT PLANNER
- DP CONTACT AND TRAINING INFORMATION

ASBESTOS MANAGEMENT PLAN

Schools with ACBM – Reinspection:

- Inspect every 3 years
- Report provided to management planner within 30 days of inspection
- Includes ACBM condition, location, samples, and recommended corrective actions
- Revised surveillance forms

ASBESTOS MANAGEMENT PLAN

Example

ACBM Inventory from a reinspection report

BUILDING: 1025 Multi Purpose

H.A. NO.	HOMOGENEOUS MATERIAL	HOMOGENEOUS AREA LOCATIONS	QUANTITY ESTIMATE	FRIABLE	ASBESTOS DETECTED (Y/N)	CONDITION
01	**12" White w/Grey Specks FT / Mastic**	**Multi Purpose Area/Hallway (Locker Room/Restrooms)**	**2,400 s.f.**	**NF**	**Yes (1-2% Chrysotile)**	**Good**
02	1" Blue Ceramic Tile	Locker Room/Restrooms	700 s.f.	NF	N	Good
03	4" Brown Ceramic Tile	Kitchen/Hallway (Kitchen)	750 s.f.	NF	N	Good
04	**12" Brown w/ Specks FT / Mastic**	**Storage Rooms/Custodial Rooms/Kitchen Office**	**300 s.f.**	**NF**	**Yes (2-5% Chrysotile)**	**Good**
05	4"x4" Brown Ceramic Floor Tile and mortar	Kitchen Closets and Restroom	200 s.f.	NF	N	Good
06	Brown Cove Base / Mastic	Multi Purpose Area/Storage Rooms/Custodial Rooms/Kitchen Office/Kitchen Restroom/Hallway (Locker Rooms/Restrooms)	1,200 s.f.	NF	N	Good
07	Textured Drywall - Offwhite	Multi Purpose Area/Storage Rooms/Custodial Rooms/Kitchen Restroom/Hallway (Kitchen)/Hallway (Locker Rooms/Restrooms)/Locker Room/Restrooms	3,000 s.f.	NF	N	Good
08	4" Blue Ceramic Tile	Locker Room/Restrooms	600 s.f.	NF	N	Good
09	Textured Drywall - White	Storage Rooms/Custodial Rooms/Kitchen Office	1,100 s.f.	NF	N	Good
10	4" Yellow Ceramic Tile	Kitchen	350 s.f.	NF	N	Good
11	12" White Ceiling Tiles	Kitchen/Hallway (Kitchen)	850 s.f.	F	N	Good
12	White spray-on acoustical ceiling	Multi Purpose Area/Hallway (Locker Room/Restrooms)	2,400 s.f.	NF	N	Good
13	Tan Cove Base / Mastic	Storage Rooms	80 s.f.	NF	N	Good

ASBESTOS MANAGEMENT PLAN

Example

Recordkeeping review from a reinspection report

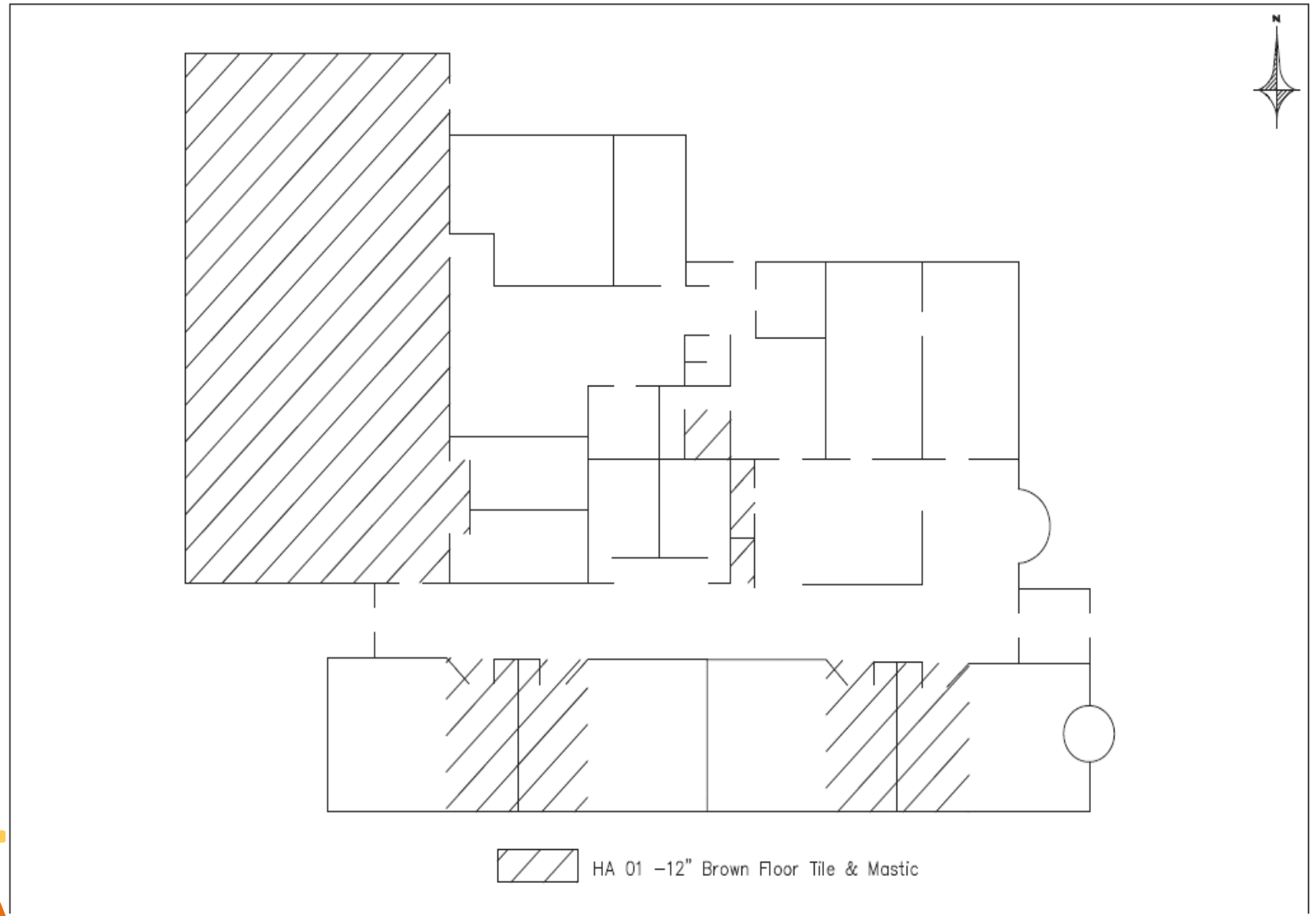
Table 1 – AHERA Records Requirements and Findings

Required Documentation	On File (Y/N)	Date(s)	Comments
Previous 3-Year Reinspection	Y	06/04/2020	
Annual Parent/Guardian Notification	Y	2021	Yearly
Annual Short-Term Worker Notification	Y		Kept in O&M, used as needed
Awareness Training and Refreshers for Custodial Staff	Y	2020	
Response Action Documentation for Major Asbestos Activity-Reports, Manifests, etc.	Y		
Asbestos Operations and Maintenance Plan	Y	Nov 2007	
Letter of Designation for AHERA Designated Person	Y		Joe Cotton
6 Month Inspection Reports	Y	2020,2021	Forms kept with O&M
Safety Data Sheet (SDS) or Letter from Manufacturer/Architect/Certified Inspector stating No Asbestos in School	N		

ASBESTOS MANAGEMENT PLAN

Example

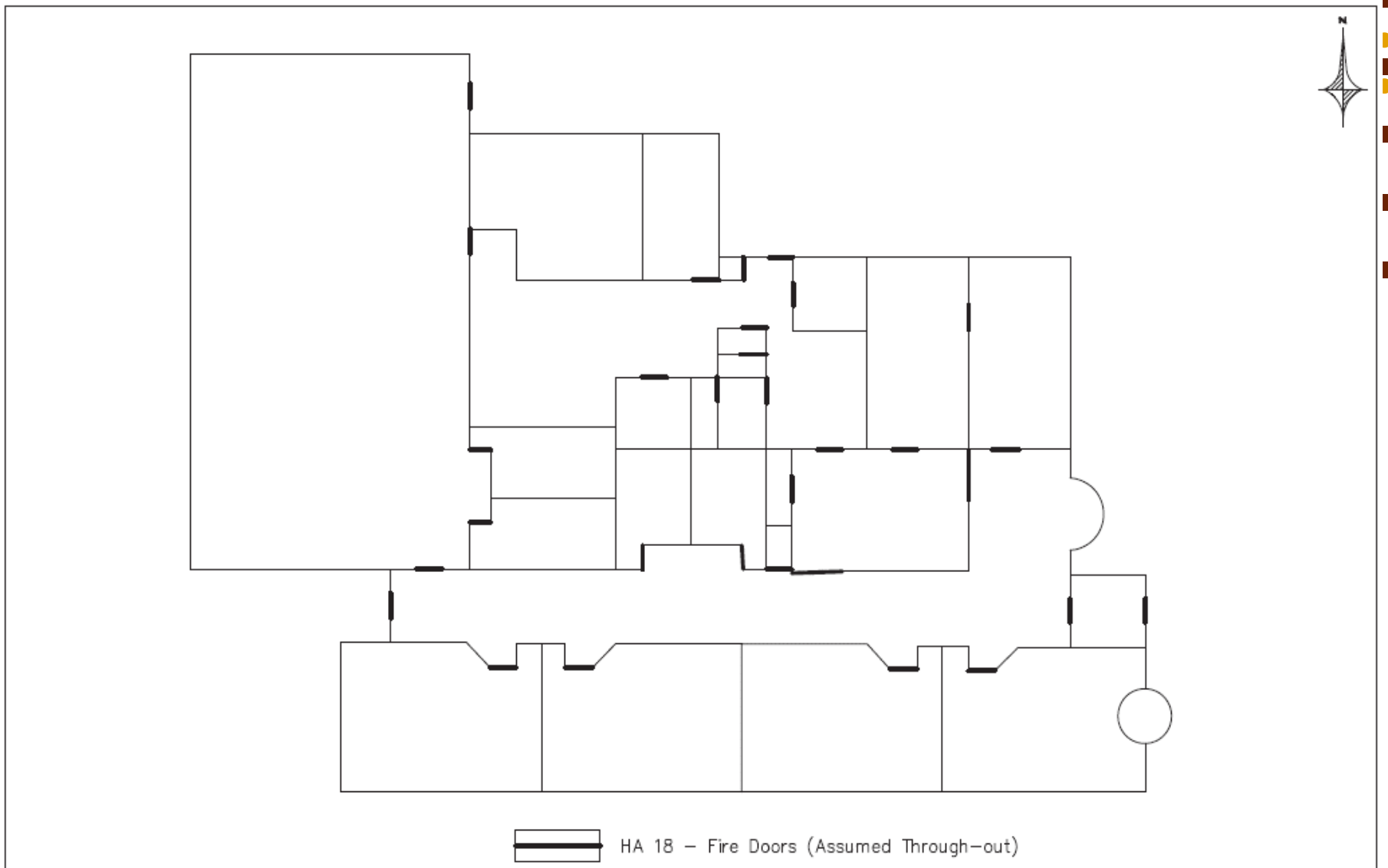
Figure showing location of ACBM from a reinspection report



ASBESTOS MANAGEMENT PLAN

Example

Figure showing location of assumed ACBM fire doors from a reinspection report



ASBESTOS MANAGEMENT PLAN

Training Requirements:

- Maintenance and custodial staff who work in a building with ACBM
  - 2-hour Asbestos Awareness (annual OSHA requirement)
  - Within 60 days of hire date
- Maintenance and custodial staff who could disturb ACBM
  - 16-hour training (2 hours Asbestos Awareness + 14 hours maintenance or asbestos handling)
- Document in AMP

ASBESTOS MANAGEMENT PLAN

Surveillance Inspections:

- Survey all locations of ACBM every 6 months
- Verify and document condition of ACBM and response actions
- Utilize most recent surveillance form
- Document in AMP

6 MONTH SURVEILLANCE INSPECTION

Periodic Surveillance Plan: At least once every six months after the AMP is in effect, periodic surveillance will be conducted in each building that the LEA leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM.

Each person performing periodic surveillance must: Visually inspect all areas that are identified in the AMP as ACBM or assumed ACBM, record the date of the surveillance, his or her name, and any changes in the condition of the materials, and submit a copy of the record to the DP for inclusion in the AMP.

6 MONTH SURVEILLANCE INSPECTION

Template for Periodic Surveillance Record from the USEPA Model AHERA Asbestos Management Plan, 2009

LEA NAME: **SCHOOL NAME:**

(Number __ of__, make copies as necessary)

AMP FORM 18 - PERIODIC SURVEILLANCE PLAN/REPORT

Periodic Surveillance Plan: At least once every six months after the AMP is in effect, periodic surveillance will be conducted in each building that the LEA leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM. At a minimum, surveillance is planned to be conducted during the fall and spring (insert alternate time frames and other details, as needed). Each person performing periodic surveillance must: visually inspect all areas that are identified in the AMP as ACBM or assumed ACBM, record the date of the surveillance, his or her name, and any changes in the condition of the materials, and submit a copy of the record to the DP for inclusion in the AMP.

			1st six months Date_____	2nd six months Date_____	
HA No.	Description of ACBM	Area Inspected	ACBM Condition*	ACBM Condition*	Date ACBM Removed

* If no change in condition, write N/C

Surveillance Inspector's Name	**Surveillance Inspector's Signature**	**Date**

6 MONTH SURVEILLANCE INSPECTION

Template for Periodic Surveillance Record from the USEPA Model AHERA Asbestos Management Plan, 2009

			1st six months Date_____	2nd six months Date_____	
HA No.	Description of ACBM	Area Inspected	ACBM Condition*	ACBM Condition*	Date ACBM Removed

Make sure the Homogenous Area (HA) listed on this form matches the HA identified in your school's most recent reinspection report.

Has the condition changed since the last 3 year reinspection? If it has changed, contact BIE Environmental for guidance.

Surveillance Inspector's Name	Surveillance Inspector's Signature	Date

Anyone with documented AHERA Awareness and Designated Person training can conduct and record surveillance. It can also be done by an accredited AHERA Building Inspector.

ASBESTOS MANAGEMENT PLAN

WARNING LABELS

- Attach a warning label immediately adjacent to any friable and non-friable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school building
- Labels must be visible until ACBM is removed

ASBESTOS MANAGEMENT PLAN

ADDITIONAL RECORDS

- Short-term/temporary staff notifications
- Dated statements with Operations and Maintenance (O&M) activities
- Asbestos removal and renovation records

ASBESTOS MANAGEMENT PLAN

OPERATIONS & MAINTENANCE PROGRAMS

The purpose of the O&M program is to prevent the release of asbestos fibers through careful, in-place management of ACBM.

An AHERA Accredited Management Planner will develop an O&M plan for your school as part of the AMP.

Major Objectives:

- Clean up existing contamination (if any)
- Minimize fiber release by controlling access to ACBM and instituting proper work practices
- Properly maintain the ACBM until it is removed

ASBESTOS MANAGEMENT PLAN

OPERATIONS & MAINTENANCE

O&M Program binder should include:

- Maintenance policy and procedures for cleaning
- Specialized work procedures for O&M activities disturbing friable ACBM
- Periodic surveillance procedures and records
- Emergency response procedures

Recordkeeping:

- Training records for maintenance staff
- O&M forms
- Waste manifest and other disposal records
- Any other records related to O&M of ACBM

ASBESTOS MANAGEMENT PLAN

EMERGENCY RESPONSE

As long as ACBM remains in a building, there is a risk of a fiber release episode. Custodial and maintenance workers should be aware of this and should always report any of the following occurrences to the LEA designated person:

- Any debris found on the floor or other horizontal surface
- Any water or physical damage to the ACBM
- Any other evidence of possible fiber release

ASBESTOS MANAGEMENT PLAN

EMERGENCY RESPONSE

Minor Release

- A minor fiber release episode consists of the falling or dislodging (damage) of 3 square feet or linear feet or less of **friable** ACBM
- Maintenance can be done in house with properly trained staff (i.e. requires additional 14 hours of training)
- Dispose asbestos in accordance with (IAW) federal and local regulations

ASBESTOS MANAGEMENT PLAN

EMERGENCY RESPONSE

Major Release

- A major fiber release episode consists of the falling or dislodging of more than three square or linear feet of **friable** ACBM.
- Response requires certified abatement personnel to remove/repair the material
  - Schools should not do this work in-house unless they have accredited personnel on staff and approval from BIE Safety and BIE Environmental
- Isolate the area and post signs to prevent entry
- Shut down HVAC that services the affected area
- Notify Supervisor, Designated Person and/or Local Education Agency (LEA) and Contact BIE Branch of Safety Management

ASBESTOS MANAGEMENT PLAN

EMERGENCY RESPONSE

Major Release

- BIE Branch of Safety Management contact information

Donald "DJ" Dryer, MA, CP-12, CSP
Safety and Occupational Health Program Manager
Division of Facilities and Safety Management, Central Office
Branch of Safety Management
1101 Indian School Rd.
Albuquerque, NM
Cell Phone: (505) 362-6864 – quickest way to contact Mr. Dryer
Office Phone: (505)563-5217
Email: donald.dryer@bie.edu

You can also contact your school's assigned Safety Inspector

ASBESTOS MANAGEMENT PLAN

EMERGENCY RESPONSE

Major and minor fiber-release episodes must be documented and included in the management plan regardless of whether the LEA uses in-house staff or an outside asbestos abatement contractor to implement an appropriate response action. If an outside contractor is used, be sure that the contractor's crew has been properly trained or certified before signing a contract.

COMMON QUESTIONS FOR DISCUSSION

- Will stripping and waxing vinyl asbestos tile (VAT) cause a release of asbestos fibers?
- Will performing general maintenance around ACBM cause an exposure?
- If I think I have been exposed, what are the next steps?

WHAT DOES ASBESTOS ABATEMENT LOOK LIKE?

- Wet methods (dust control)
- Barriers
- HEPA filtration

WHAT DOES ASBESTOS ABATEMENT LOOK LIKE?

WHAT DOES ASBESTOS ABATEMENT LOOK LIKE?

WHAT DOES ASBESTOS ABATEMENT LOOK LIKE?

WHAT CAN BE DONE TO REDUCE THE HAZARDS OF ASBESTOS?

- Ensure an updated and maintained AMP is in place.
- Facility Managers and custodians should not remove damaged ACBM to reduce risk and hazards to workers and occupants.
- Ensure only trained and certified personnel conduct sampling, repairs, and removal while using proper personal protective equipment (PPE).
- Utilize trained and licensed contractors during major activities that may involve disturbance or removal of ACBM, such as, during improvement or repairs to buildings.
- Understand there is no "safe" level of asbestos exposure for any type of asbestos fiber. Asbestos exposures as short in duration as a few days have caused mesothelioma in humans.
- Contact BIE Safety immediately if the school believes they have had a fiber release episode.

IF NO IS ASBESTOS FOUND

If no asbestos is present:

- Maintain an Exclusion letter or an Asbestos-free inspection report.
- Maintain an AHERA Designated Person at each school.
- Maintain an AMP.
- Annually notify the parent, teacher, and employee organizations about the availability of the AMP.
- School must document all new materials installed, after construction, is asbestos free (e.g., via SDS). Otherwise, the school should assume ACBM and trigger all applicable requirements.

ASBESTOS

QUESTIONS?

QUIZ QUESTION

If you find that a large amount of asbestos-containing ceiling plaster has fallen to the floor in an office, you should:

A. Keep people away, notify your AHERA Designated Person, and wait for further instructions
B. Ignore the problem and hope that nobody will notice
C. Begin a clean up procedure immediately
D. Immediately call in the HAZMAT team

QUIZ QUESTION

The Asbestos Hazard Emergency Response Act (AHERA) applies to all public and private schools and Local Education Agencies (LEA) and:

A. Requires inspections, management plan, training, notifications, labels, and a Designated Person
B. Establishes the “no visible emissions” standard
C. Extends the OSHA standards to state and local employees who might not otherwise be covered
D. Requires schools to remove all ACBM from their buildings

CONCLUSION

AHERA regulations require public school districts and non-profit schools to:

- Perform an original inspection to determine whether ABCM are present
- Re-inspect ACBM and assumed ACBM in each school every three years
- Develop, maintain, and update an AMP and keep a copy at the school
- Provide yearly notification to parent, teacher, and employee organizations on the availability of the school's AMP and any asbestos-related actions taken or planned in the school
- Designate a contact person to ensure the responsibilities of the school are properly implemented
- Perform periodic (6 mos.) surveillance of known or suspected ACBM
- Ensure that properly trained staff and licensed contractors perform inspections and take response actions.
- Provide staff with asbestos-awareness training (annual) and any additional training needed to complete their duties.

CONCLUSION

- Asbestos can still be found in many products and materials in our facilities
- Due diligence is needed to maintain asbestos in a non-friable state to protect our health
- Following our O&M plans and keeping accurate records is essential to maintaining compliance
- If you have any doubt a material contains asbestos, assume that it does and seek guidance from a supervisor, your DP, or LEA

NEARLY ENDLESS RESOURCES…

If you have general questions about OSHA requirements, contact BIE Branch of Safety Mgt.

OSHA

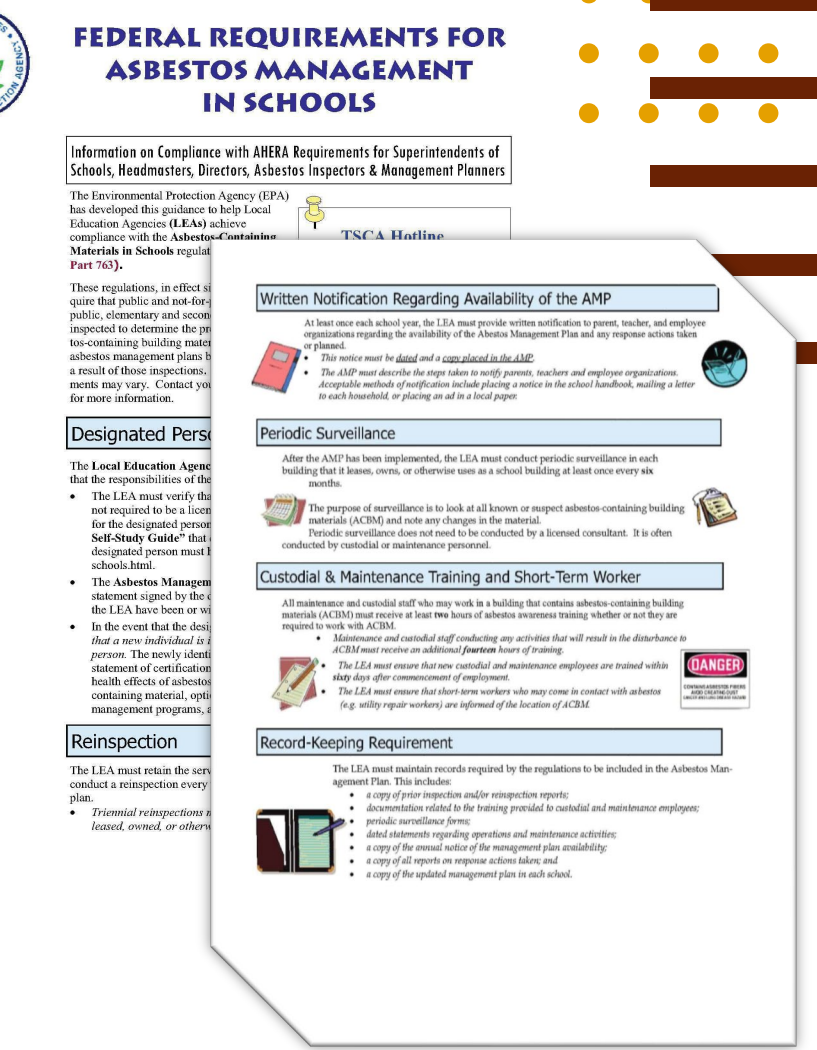
- Asbestos

Fact Sheets

START HERE

USEPA

- Asbestos and School Buildings
- Asbestos Management Plan Guidance and Templates (AMPs)
- Resources for Schools and Parents
- The ABCs of Asbestos in Schools
- Designated Person Study Guide
- Link to accredited laboratories for sample analysis (NVLAP)



FEDERAL REQUIREMENTS FOR ASBESTOS MANAGEMENT IN SCHOOLS

Information on Compliance with AHERA Requirements for Superintendents of Schools, Headmasters, Directors, Asbestos Inspectors & Management Planners

TSCA Hotline

Written Notification Regarding Availability of the AMP

Periodic Surveillance

Custodial & Maintenance Training and Short-Term Worker

Reinspection

Record-Keeping Requirement

If you have general questions about AHERA, contact BIE Branch of Environmental Management.

SCHOOL-SPECIFIC DISCUSSION

- Who is the Designated Person?
  - Is it in writing?
- Does your school require the 14 hours of additional training?
  - BIE BEM cannot provide this training - seek out an approved training vendor
- Does your school have any needs or concerns?

SCHOOL-SPECIFIC DISCUSSION

- Does your school have any ACBM?
  - If not, do you have “asbestos-free” documentation from architect or accredited building inspector?
- Do you know where ACBM is located?
- Do you know where your AMP is located?
  - All schools must have an AMP.
- Have you had a reinspection in the last 3 years?
  - Do you know where the report is?

BIE BEM PROGRAM CONTACTS

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Mvto
HiyHiy
LemLmts
Wado
Wopila
DaWaEh
Miigwech
Wawaenon
Pinangigi
Wimblahoho
Quyana
Baasee
Ahéhee
AnaaBasee
HiriweTudahe
Pilamiya
Nya:Weh Aho
Tansi
Thank You