

Healthy Homes / Healthy Kids

Training for Families and Professionals

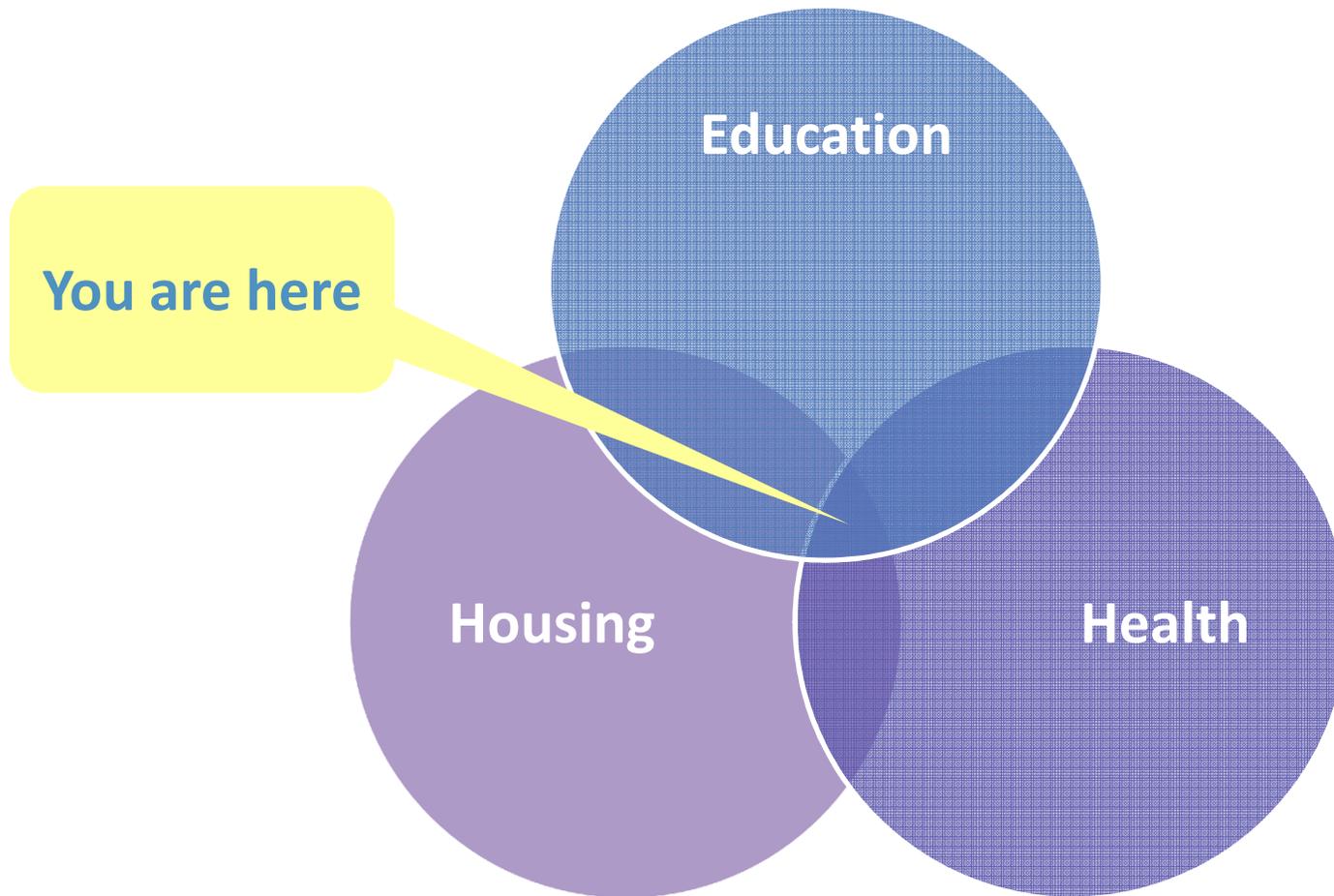


Developed by the Healthy Environments for Children Initiative
Department of Extension, University of Connecticut
in partnership with the LAMPP Project, EASTCONN, and
Bridgeport Neighborhood Trust

What are the goals of this training?

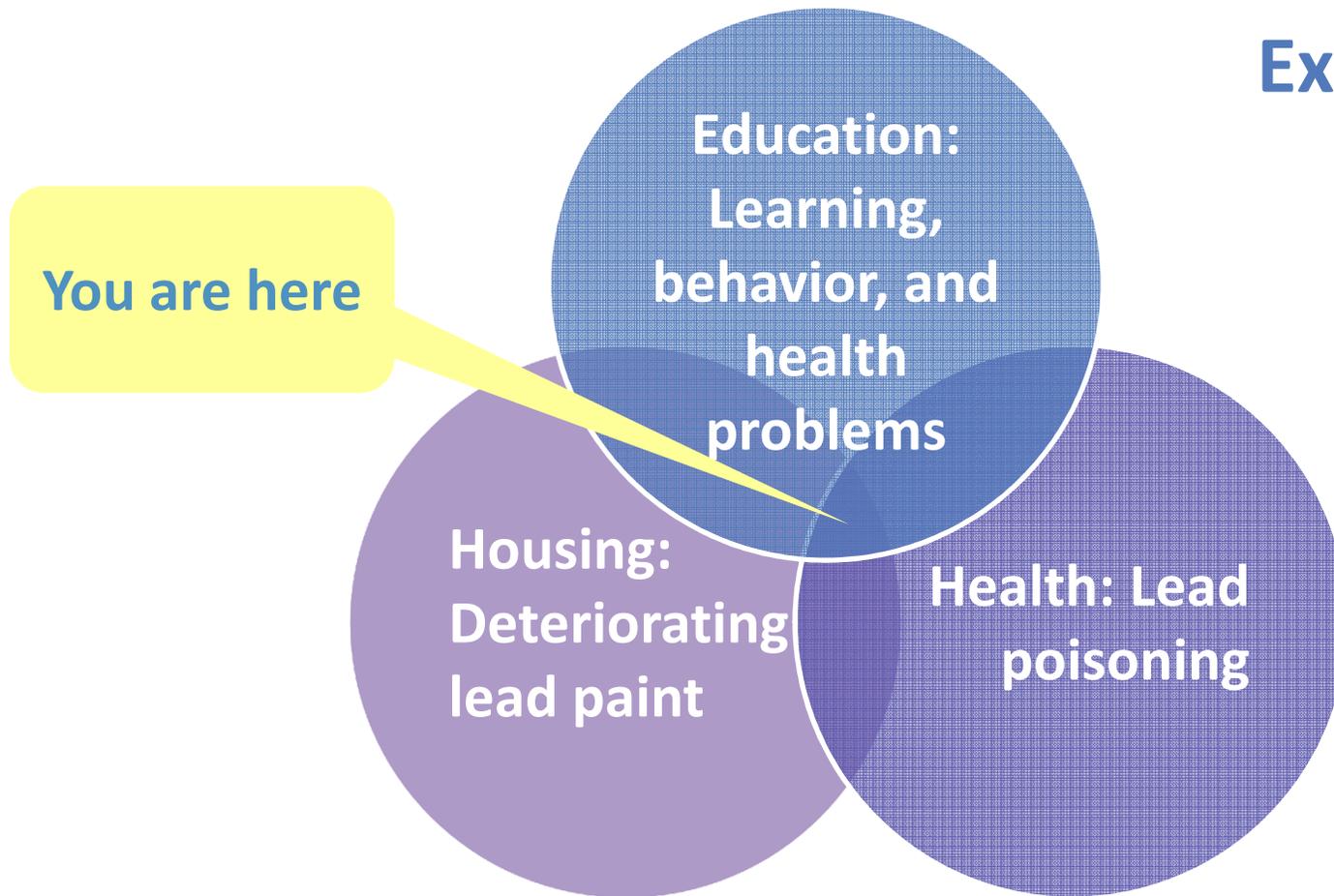
- To help families understand the relationship between housing and health
- To provide practical tools and simple steps to make and keep homes healthy

Why is it important for families?



Why is it important for families?

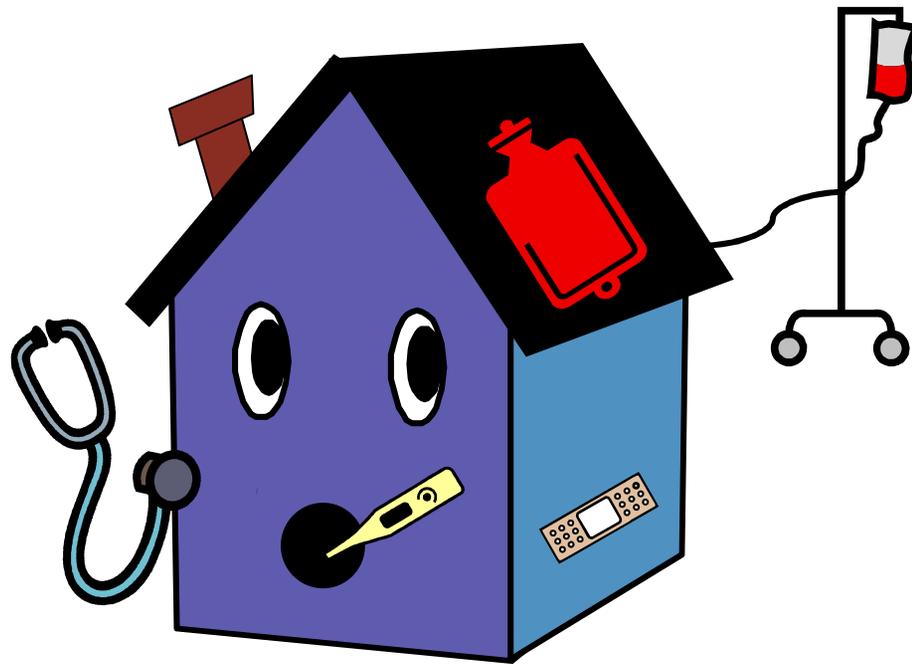
Example



Today's agenda

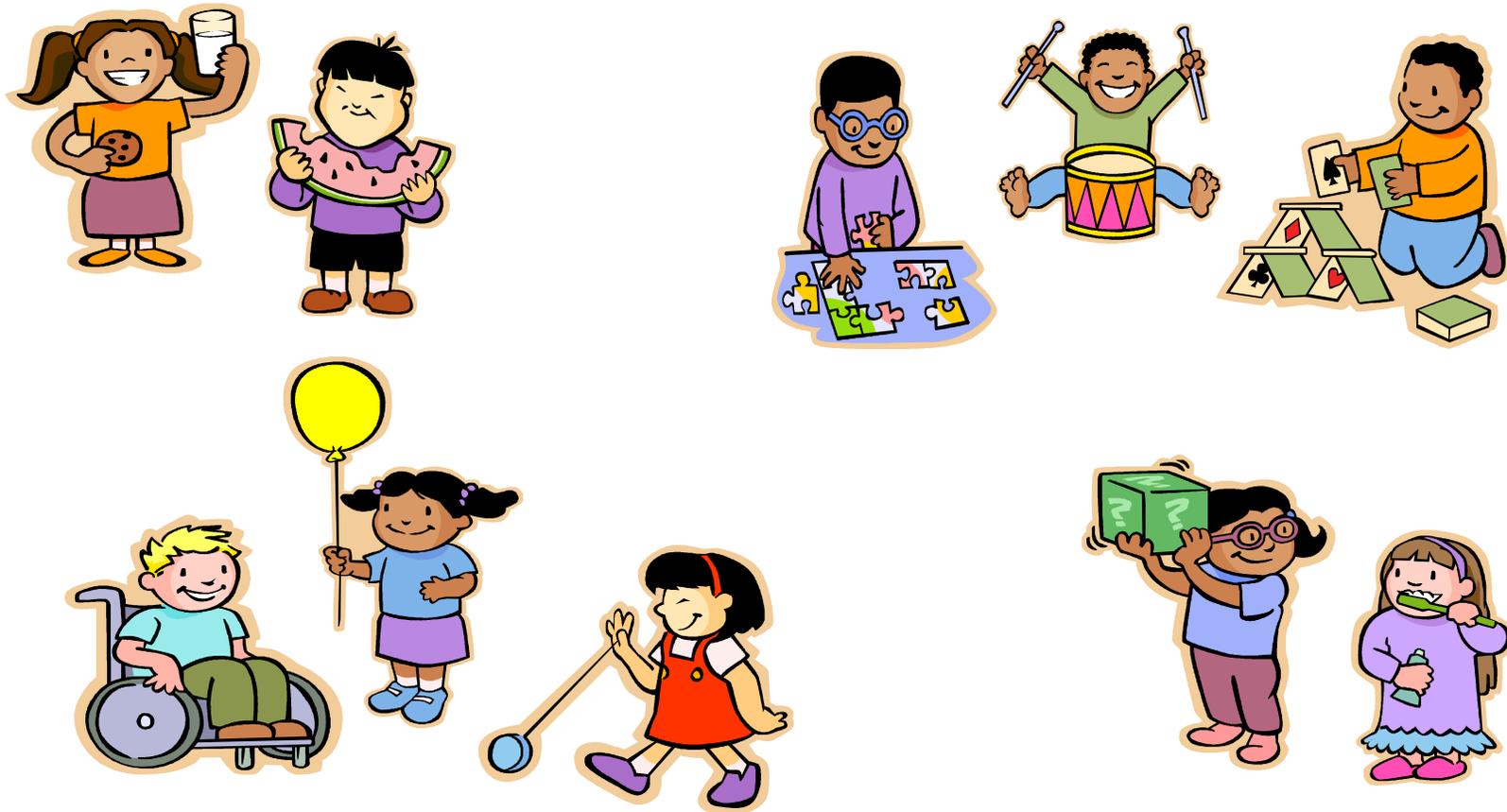
- What is a healthy home?
- What features make a home healthy?
- How can you advocate for a healthy home?

What is a healthy home?



What is a healthy home?

One that supports the health and safety of the people who live there



What features make a home healthy?



Activity

List seven words or phrases to describe a healthy home



What features make a home healthy?

Safe?



Dry?



No pests?

No dangerous chemicals?

In good repair?



Fresh air?

Clean?

A healthy home



Clean



Dry



Safe



Fresh air



**Free of
pests**



**Free of
dangerous
chemicals**



**In good
repair**

Keep it clean

Main idea

Reduce pests, dangerous chemicals, and asthma triggers

- Some dirt—like pollen and soil—can come from outdoors
- Other dirt—like dust, garbage, cigarette butts, and pest droppings—can come from inside home
- Dirty or cluttered home encourages pests and mold
- Dirt may also contain dangerous chemicals, such as lead from old paint and other chemicals from many household products

Keep it clean

Health effects

A dirty home may

- Increase exposure to dangerous chemicals
- Provide food, water, and shelter for pests
- Trigger asthma attacks and set off allergy symptoms
- Increase risk for other breathing problems, like coughing and shortness of breath

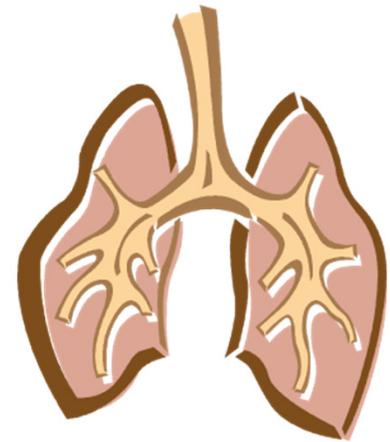
Keep it clean

Health effects

Asthma

Serious lung disease that makes it hard to breathe

- Cannot be cured but can be treated and controlled
- Causes are unknown
- Environmental factors can start (trigger) asthma attacks
 - Triggers vary from person to person
- Only a doctor can tell if someone has asthma or another breathing problem



Keep it clean

Health effects

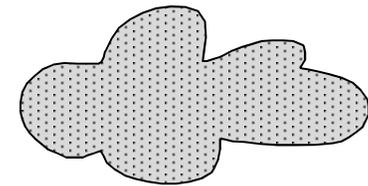
Common asthma triggers include



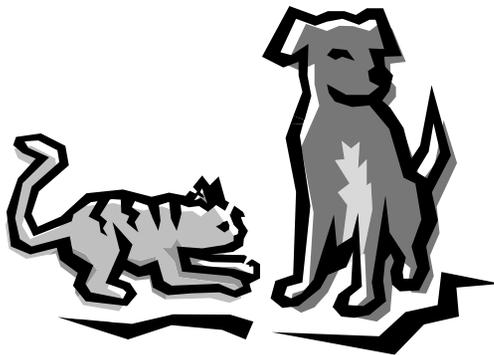
Smoke



Mold



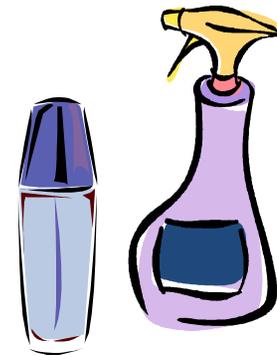
Dust



Furry pets



Cockroaches



Strong smells

Keep it clean

Signs of problem



- Dirt or dust on floors, windows, furniture, or counters
- Grease or dirt on stove or counters
- Old food or food wrappings lying around
- Garbage cans not covered
- Pests or their droppings or urine
- Clutter



Keep it clean

Fix the problem

- Clear away clutter
 - Pick up things that do not belong on the floor, countertops, and furniture
 - Store them where they do belong
- Clean often
- Use safer cleaning and household products



- Use a damp mop and damp dust cloth to clean
- Vacuum carefully and often
 - If possible, use vacuum that has a HEPA filter, which picks up very small particles of dirt

Keep it clean

Fix the problem

Bedrooms

- Wash bedding once a week
 - Use hot water to kill dust mites



- Keep pets off beds and out of bedroom

Floors

- Leave shoes at door to keep dirt out of home



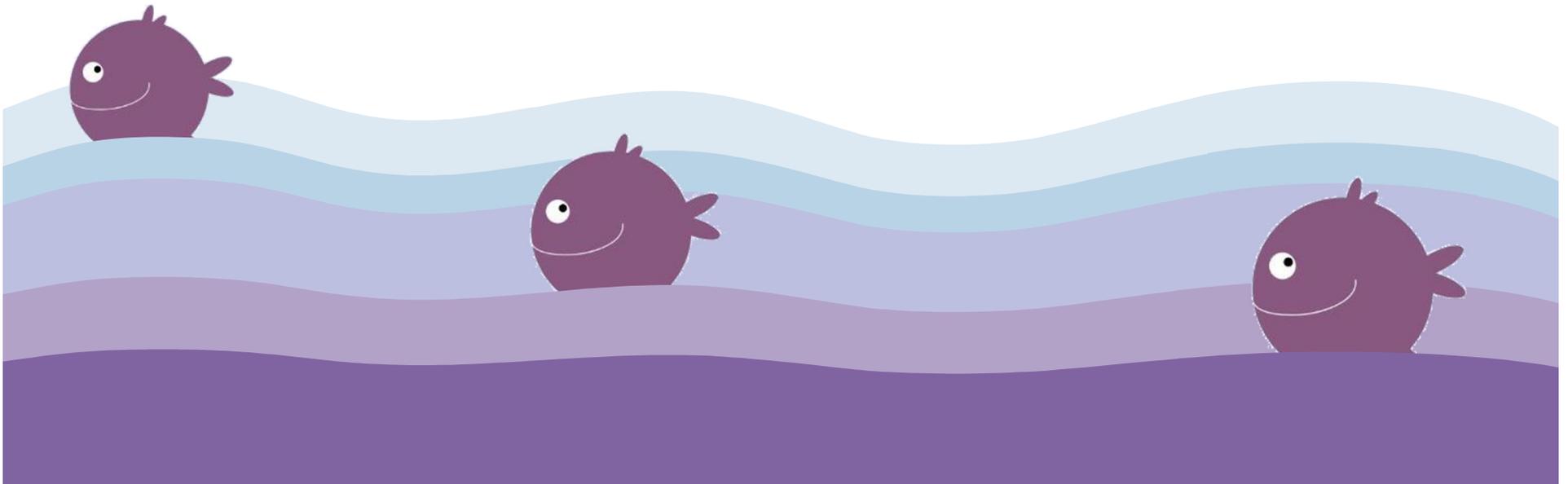
- Put doormats at each door to trap dirt
- If possible, replace materials that are more difficult to clean (like carpets) with materials that are easier to clean (like wood or linoleum floors)

Keep it dry

Main idea

Reduce pests and mold

- A home with too much moisture encourages mold and pests to live and grow
- Both mold and pests can
 - Damage belongings
 - Cause various health problems

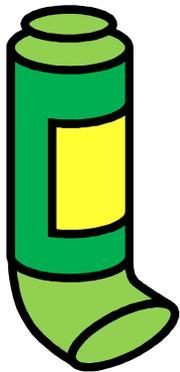


Keep it dry

Health effects

Mold

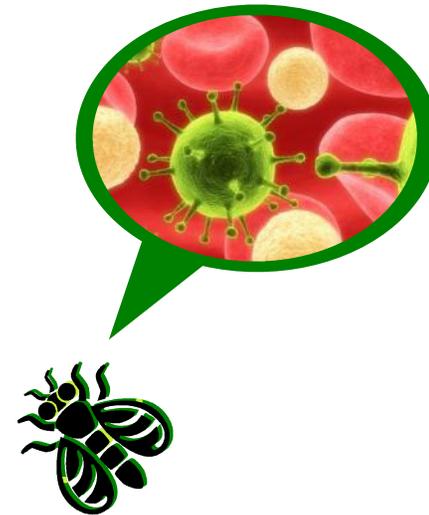
- May make breathing problems worse, especially for people with



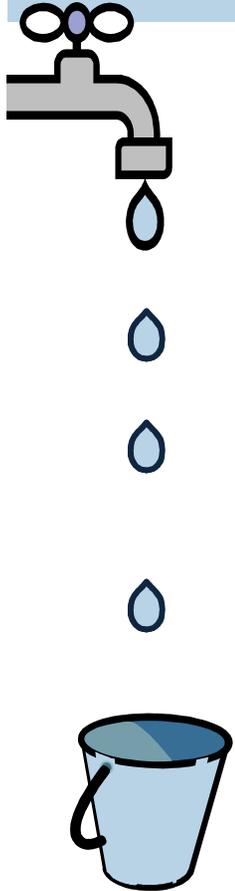
- Asthma
- Allergies to mold
- Respiratory illnesses (such as lung infections)

Pests

- May trigger asthma attacks
- May carry diseases



Keep it dry



- Leaking or dripping pipes
- Water droplets on cold windows
- Water stains or damage
- Warping or rotting wood
- Peeling, blistering, or cracking paint
- Clogged gutters or plugged downspouts
- Cracks in foundation

Signs of problem

- Mold that you see (often as speckled patches, in any color) or smell (musty or earthy), especially in
 - Bathrooms and kitchens
 - Damp basements, closets, and laundry areas
 - Areas where there have been leaks or water damage

Keep it dry

Fix the problem

Reduce moisture

- Find sources of moisture—such as leaks inside and outside home—and repair them
- Clean up water and other spills right away
- Use exhaust fans or open windows
 - In bathroom after showering or bathing
 - In kitchen when cooking and washing dishes
- Clean downspouts and gutters
- Make sure that water drains away from home
- Use dehumidifiers and air-conditioners if available



Keep it dry

Fix the problem

Mold

If you see or smell it, it should be cleaned up promptly

- Usually **not** necessary to test to learn
 - Whether you have mold
 - Type of mold
- Consider hiring trained professional if
 - Moldy area is large
 - Damage was caused by contaminated water (like sewage)
 - Mold is hidden in walls or ceilings
 - You have asthma, severe allergies to mold, or a weak immune system



What's
that
nasty
smell?

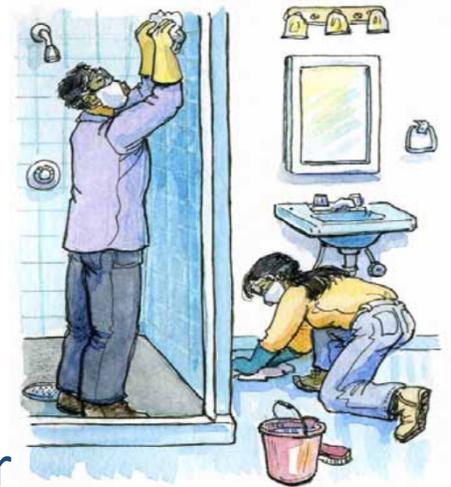
Keep it dry

Fix the problem

Mold

To safely clean hard surfaces (like tile or fiberglass)

- Keep other people away from area where you'll be working
- Close off area: shut door, or put up plastic sheet
- Bring in fresh air (open windows, or blow air **from inside to outside** with exhaust fan)
- Protect yourself
 - Wear long rubber gloves
 - Consider goggles and a face mask
- Scrub well with detergent and water
- Rinse with clean rag or sponge and clean water
- Dry thoroughly with clean rags or paper towels



Keep it dry

Fix the problem

Mold

- If item—like carpet or upholstered furniture—absorbs water, you **may** be able to save it **if**
 - You can dry it **completely** within 24 hours (warm weather) to 48 hours (cold weather) *and*
 - You don't see or smell any mold
- If item has been wet for more than 24-48 hours
 - Throw it out

When in doubt, throw it out



Keep it safe

Main idea

Reduce accidents and injuries

- Common causes of accidental injuries in the home

Falls	Fires	Drowning	Choking	Poisoning
				

- Young children and older adults often the most likely to be injured

Keep it safe

Health effects

Accidental injuries

- Can result in hospitalizations, surgeries, and long-term disabilities
- Are among leading causes of death in the home



Keep it safe

Signs of problem

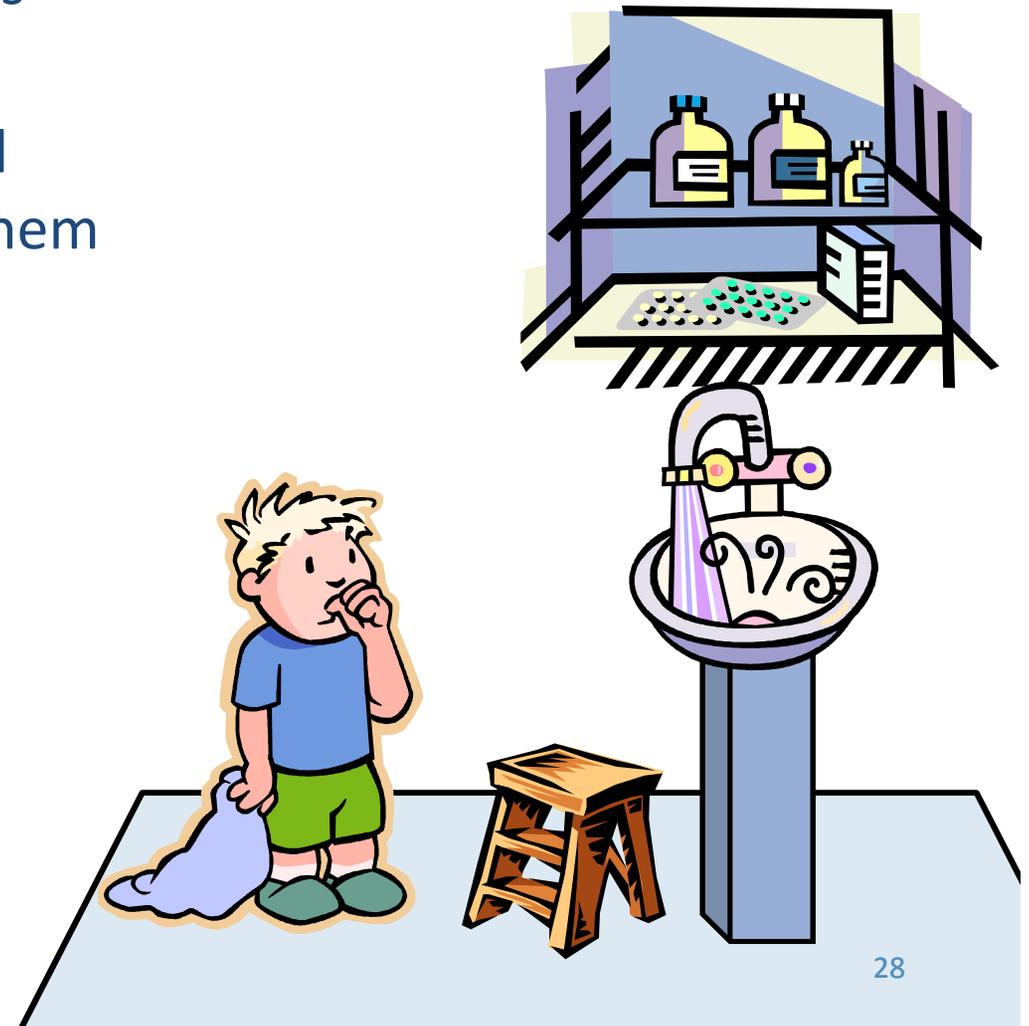
- Clutter—such as clothing, shoes, papers, and toys—creates dangers for slips, trips, and falls
- Smoke detectors and carbon monoxide detectors either not present or not working
- Poor or no lighting in
 - Stairways
 - Doorways
 - Walkways
- Damaged electrical cords



Keep it safe

Signs of problem

- Hot water from the faucet is very hot
- Dangerous items are stored where children can reach them
 - Medicines and vitamins
 - Household cleaning products
 - Matches and lighters
 - Sharp tools

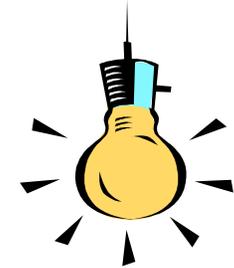


Keep it safe

Fix the problem

Prevent slips, trips, and falls

- Add or fix lighting, especially in
 - Stairways
 - Doorways
 - Walkways
- Clear away things might make you slip, trip, or fall
 - Clutter
 - Loose electrical cords
 - Slippery throw rugs
 - Spilled food

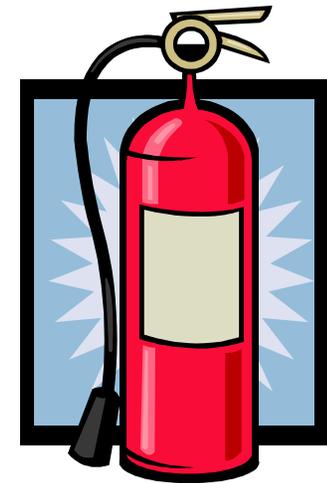


Keep it safe

Fix the problem

Safety equipment

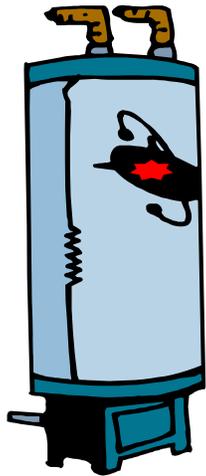
- Install smoke alarms and carbon monoxide detectors on each level
 - Put in fresh batteries every autumn and spring
 - Check that devices are working properly
- Put fire extinguishers in key places, such as the kitchen, bedroom, and basement
 - Replace or recharge when needed



Keep it safe

Prevent burns

- Set temperature of water heater to prevent burns



120°
Fahrenheit
or lower

Prevent electric shocks

- Replace damaged electrical cords

Fix the problem

Prevent poisoning

- Post the phone number for the Poison Control Center next to every phone
- Program cell phones with that number



Free, expert medical advice
24/7/365

Keep it safe

Protect children who live in or visit your home

- Supervise them at all times
- Childproof your home
 - Store all dangerous items out of reach of children
 - Always use safety devices, such as
 - Baby gates
 - Child-proof containers
 - Safety latches on doors, windows, and cabinets

Fix the problem

Do a thorough home safety check

- ✓ Basement
- ✓ Bathroom
- ✓ Bedrooms
- ✓ Family room
- ✓ Garage
- ✓ Kitchen
- ✓ Laundry area
- ✓ Living room
- ✓ Stairs
- ✓ Yard

Keep it safe

Fix the problem

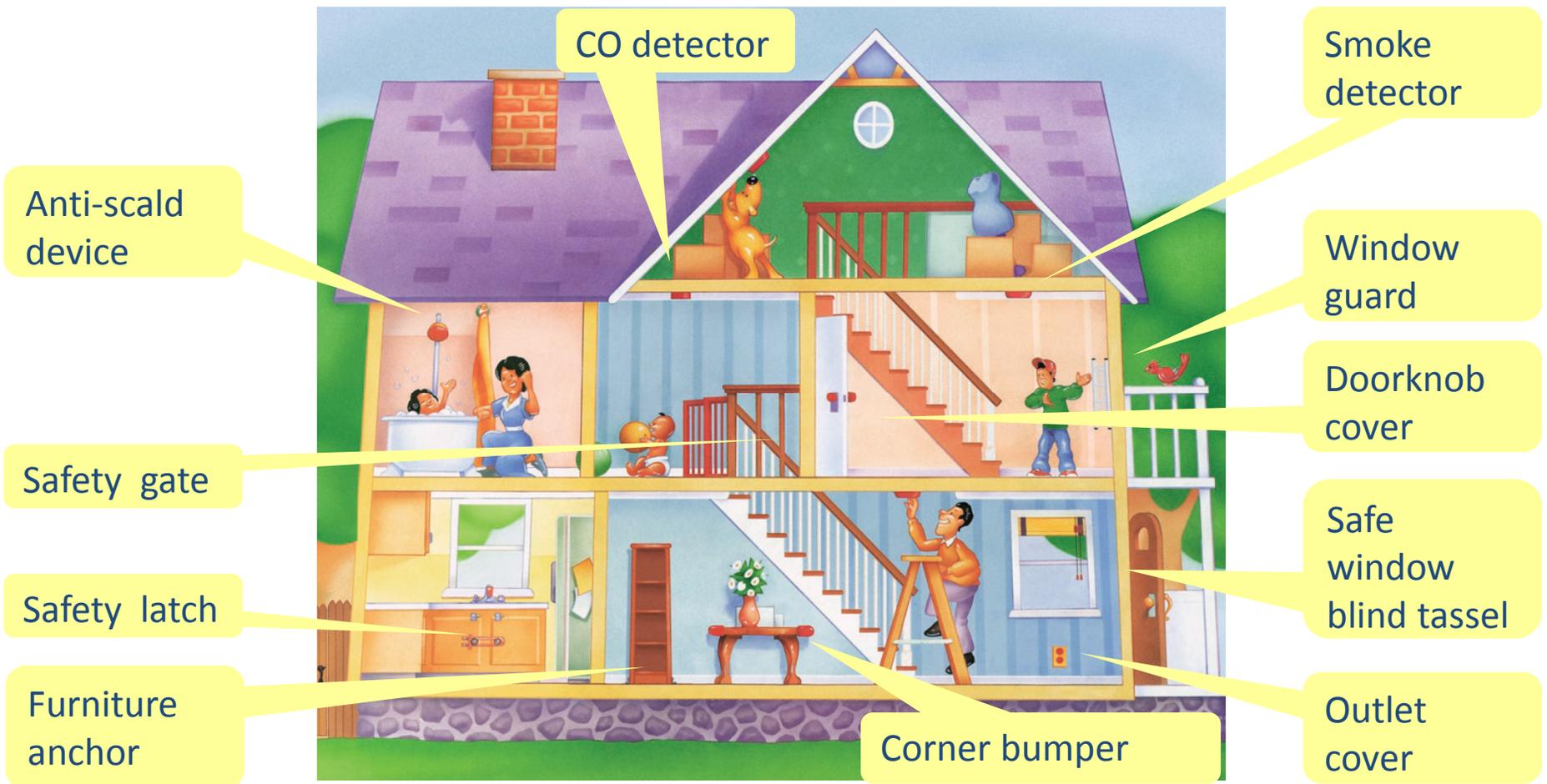
How is this family keeping children safe?



Keep it safe

Fix the problem

Keep in mind: The most important safety device is a watchful adult.

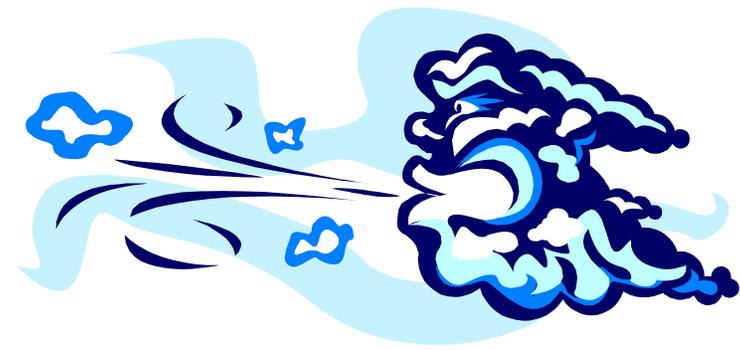


Keep the air fresh

Main idea

Make breathing easier

- Most people spend most of their time indoors
- Indoor air often contains unhealthy chemicals from
 - Household products (such as cleaning supplies)
 - Furnaces
 - Other devices
- Bringing fresh air into home
 - Helps to remove or dilute these chemicals
 - Makes breathing healthier



Keep the air fresh

Health effects

- Chemicals from household products may have various health effects
- In home that is poorly ventilated, poor air quality may

- Make allergy or asthma symptoms worse
- Make your eyes red
- Make your nose and throat burn
- Make you feel tired
- Give you headaches often
- Allow mold to grow



Keep the air fresh

- You see or smell mold, fumes, smoke, or strong or unpleasant smells
- Surfaces are very dusty
- Heating and air conditioner filters and vents are dirty or clogged with dust



Signs of problem

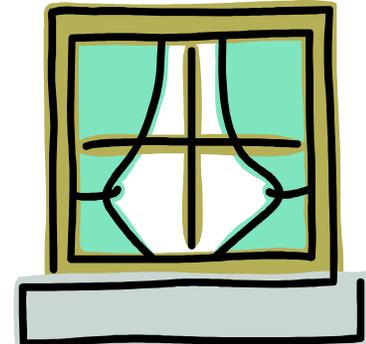
- Clothes dryer is not vented to outside
- Exhaust fans in bathrooms or kitchen are
 - Missing
 - Not working
 - Not vented to outside



Keep the air fresh

Fix the problem

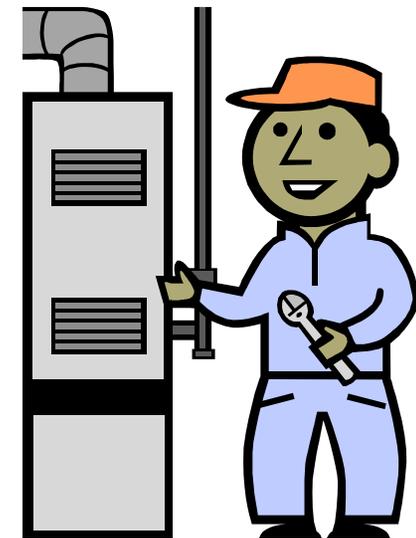
- Bring in fresh air
 - Open windows whenever possible
- Vent air that's not fresh to the outside
 - Use exhaust fans vented to the outside in bathrooms and kitchens
 - Vent all appliances that burn fuel to the outside
- Don't put dangerous chemicals into the air
 - Choose household products—like safer paints, adhesives, and wood items—that do not give off dangerous gases
 - Don't allow smoking in home
 - Don't use aerosol sprays, scented candles, and air fresheners



Keep the air fresh

Fix the problem

- Maintain heating and cooling equipment
 - Clean heating and air conditioner vents regularly
 - Replace filters regularly
 - Have fuel-burning equipment checked every year by qualified professionals
 - Furnace
 - Hot water heater
 - Gas appliances
 - Fireplace or woodstove



Keep the air fresh

- Test for radon, a natural gas that causes lung cancer
 - If needed, install systems to reduce radon



Fix the problem

- Consider indoor air quality if you make your home more energy efficient



Keep it free of pests

Main idea

Reduce diseases and asthma triggers

- A pest is any animal that is somewhere it is not wanted
- Pests may
 - Eat or spoil your food
 - Damage your home or belongings
 - Make you uncomfortable
- Many people apply strong pesticides at first signs of pest problem
 - But pesticides may cause worse problems than pests do
- Pests can be controlled safely



Keep it free of pests

Health effects

Pests

such as rats, mice, cockroaches, mosquitoes, ticks, and bedbugs

- May trigger asthma attacks in some people
- Some pests—such as deer ticks, fleas, cockroaches, and rats—carry diseases
- Although bedbugs do not carry diseases, their bites may itch and irritate the skin

Pesticides

chemicals designed to kill pests



- May trigger asthma attacks, other breathing problems, nausea, and headaches in some people
- May have long-term effects, such as birth defects, learning disabilities, and cancer

Keep it free of pests

Signs of problem

- Seeing or hearing the pest itself—dead or alive—often in
 - Damp areas (like bathrooms and basements)
 - Wherever food is stored
 - At night
- Droppings, hair, or nests
- Damage from gnawing on walls, wires, food, food packages, or newspapers
- Tracks (areas where pests frequently run, usually along walls, where there is no dust or dirt)
- Rows of red bite marks on the skin from bedbugs



Keep it free of pests

Fix the problem

Use integrated pest management (IPM)

- Remove food, water, and places where pests can live
 - Repair moisture problems, such as leaks
 - Store food in strong, covered containers
 - Keep dining and kitchen areas clean and dry
 - Take out trash every day
 - Clear away clutter where pests can live
 - Vacuum well and often



Keep it free of pests

Fix the problem

Use integrated pest management (IPM)

- Keep pests out
 - Seal cracks and openings in floors or walls, using copper mesh, brass wool, or silicone caulk
- Capture or kill without dangerous chemicals
 - Use the least harmful solution to solve pest problems, such as sticky traps or boric acid
- Use pesticides only when other methods fail
 - Read and follow directions very carefully
 - Store pesticides where children cannot reach them



Keep it free of dangerous chemicals

Main idea

Reduce poisonings, injuries, and other harmful effects

- Many commonly used household products contain chemicals that may be harmful
 - Use safer alternatives whenever possible
- Other dangerous chemicals include
 - Lead paint
 - Radon (a natural gas that is radioactive)
 - Smoke from cigarettes, cigars, and pipes
 - Asbestos

Examples of common household products

- Air fresheners
- Bleach
- Carpet shampoos
- Drain cleaners
- Furniture polish
- Laundry and dishwasher detergents

Keep it free of dangerous chemicals

Health effects

If you breathe, swallow, or touch them, various chemicals may

- Cause dizziness, headaches, fatigue, or depression
- Cause nausea, vomiting, or diarrhea
- Irritate the eyes, skin, and lungs
- Damage the liver, lungs, kidneys, or nervous system
- Cause cancer in various parts of the body
- Cause birth defects
- Lead to convulsions, coma, and death

Keep it free of dangerous chemicals

Signs of problem

- Your household products contain strong fragrances and harsh chemicals, with labels that say

- *Caution*

- *Warning*

- *Danger*

- *Poison*

Products labeled *Danger* and *Poison* are the most dangerous

- Smoking in and around your home
- Peeling, flaking, or chalking paint in a home built before 1978 that may contain lead

Keep it free of dangerous chemicals

Fix the problem

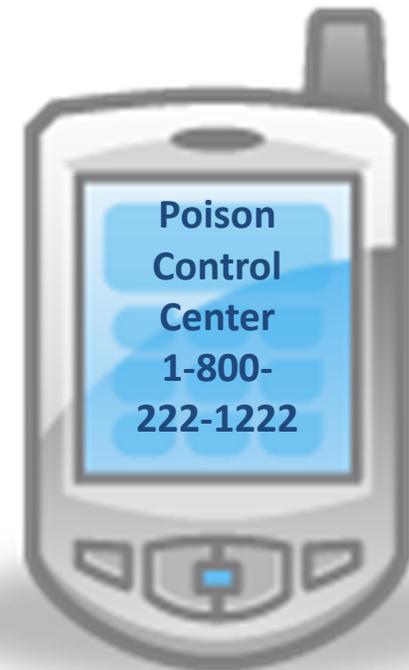
Household products

- Use safest possible products
 - Consider homemade “green” products
 - Safe ingredients include baking soda, vinegar, liquid castile soap, and salt
- Read product warning labels carefully,
 - Follow directions for use, storage, and disposal
- Keep chemicals in their original containers
 - Never remove labels
- Keep dangerous household chemicals out of children’s reach
- Do not use air fresheners, other products with fragrances, or aerosol sprays

Keep it free of dangerous chemicals

Fix the problem

- Post the phone number for the Poison Control Center near every phone, and program the number into cell phones
- Do not allow smoking in or around your home
- If your home was built before 1978, have it tested for lead paint
- Test for radon, and install systems to remove it if necessary

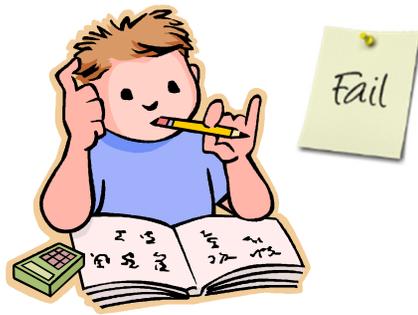


Keep it free of dangerous chemicals

Lead

Main idea

- Lead is a poison
- Damages developing brains and nervous systems of unborn and young children
- Also harms adults



Health effects

- In children
 - Learning disabilities
 - Reduced IQ
 - Attention problems
 - Behavior problems, aggression
 - Hyperactivity
 - Hearing problems
 - Slowed growth
- In adults
 - Brain and nervous system damage
 - Anemia
 - High blood pressure
 - Kidney problems

Keep it free of dangerous chemicals

Lead

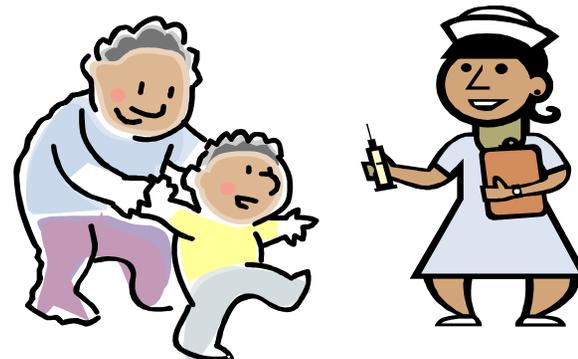
Signs of lead poisoning

Child may

- Seem very tired
- Be hyperactive
- Be cranky
- Lose normal appetite
- Lose weight
- Have shorter attention span
- Have trouble sleeping
- Be constipated

But children with lead poisoning may not look or act sick

- Only way to know is through blood test
- All children should be screened at ages of one and two years



Keep it free of dangerous chemicals

Lead

Signs of problem

- Dust from old lead paint
- Old lead pipes
- Soil contaminated with old paint or old leaded gasoline
- Some old or imported pottery, toys, and novelties



Keep it free of dangerous chemicals

Lead

Fix the problem—lead paint in homes built before 1978

Test for lead paint

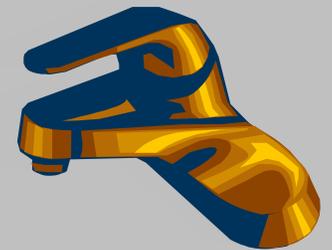
- Have qualified professionals
 - Test
 - Remove lead hazards
- When renovating or repairing
 - Use lead-safe work practices if you do it yourself *or*
 - Hire contractor certified by U.S. Environmental Protection Agency
- Leave shoes at door, to keep lead dust outside
- Keep children away from chewable surfaces
- Wash children's hands often, especially before eating
- Wash toys often
- Wet mop floors and wet wipe other surfaces often
- Keep children from playing in bare soil

Keep it free of dangerous chemicals

Lead

Fix the problem—other sources of lead

- Check www.recalls.gov for products recalled because of lead hazards
- Do not use traditional home remedies or cosmetics that may contain lead
- Do not eat candies imported from Mexico
- Do not use containers, cookware, or tableware that may contain lead to store or cook foods or liquids
- Use only cold water from tap for drinking, cooking, and making baby formula
- Shower and change clothes after working with lead-based products, such as stained glass or bullets



Start with
cold water

Keep it free of dangerous chemicals

Asbestos

Main idea

Mineral fiber used to resist heat and corrosion

- Found in some older construction materials, such as
 - Shingles for roofing and siding
 - Pipe and boiler insulation
 - Floor tiles and ceiling panels

- If asbestos is not disturbed
 - Not harmful
 - Best, cheapest way solution is to leave it alone
- If asbestos is disturbed or broken down
 - Tiny fibers may get into air, where people may breathe them in

Keep it free of dangerous chemicals

Asbestos

Health effects

Fibers get trapped in lungs, causing

- Cancers
 - Lung
 - Mesothelioma (cancer of lining of chest or abdomen)
- Asbestosis (inflammation and scarring of lungs)
- Other lung damage



Smokers at greater risk



Keep it free of dangerous chemicals

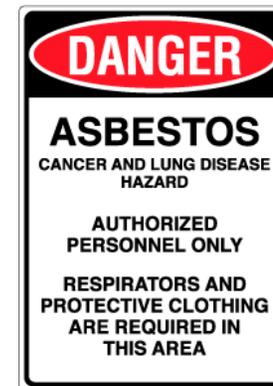
Asbestos

Signs of problem

- Cannot tell by looking, unless it is labeled
- If in doubt
 - Treat material as if it contains asbestos *or*
 - Have it sampled and analyzed by **qualified professional**
 - Do not take samples yourself

Fix the problem

- If material is in good shape and will not be disturbed, do nothing
- If it is a problem, qualified professional should repair or remove



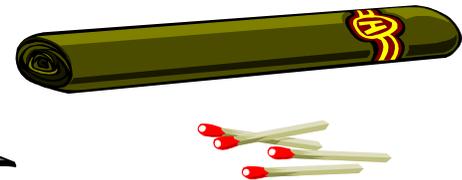
Keep it free of dangerous chemicals

Smoking

Main idea

There is no safe level of exposure to tobacco

- Any exposure is harmful
- No form of tobacco has been shown to be safe
- Damage from
 - First-hand smoke
 - Second-hand smoke
 - Third-hand smoke



Keep it free of dangerous chemicals

Smoking

Health effects

First-hand smoke begins doing damage immediately

Associated with

- Many types of cancer
- Reproductive problems
- Less resistance to colds and flu
- Loss of bone density
- Greater difficulty for diabetics to control blood sugar



Makes people less attractive

- Wrinkled skin
- Yellow teeth
- Bad breath
- Smelly clothing and hair

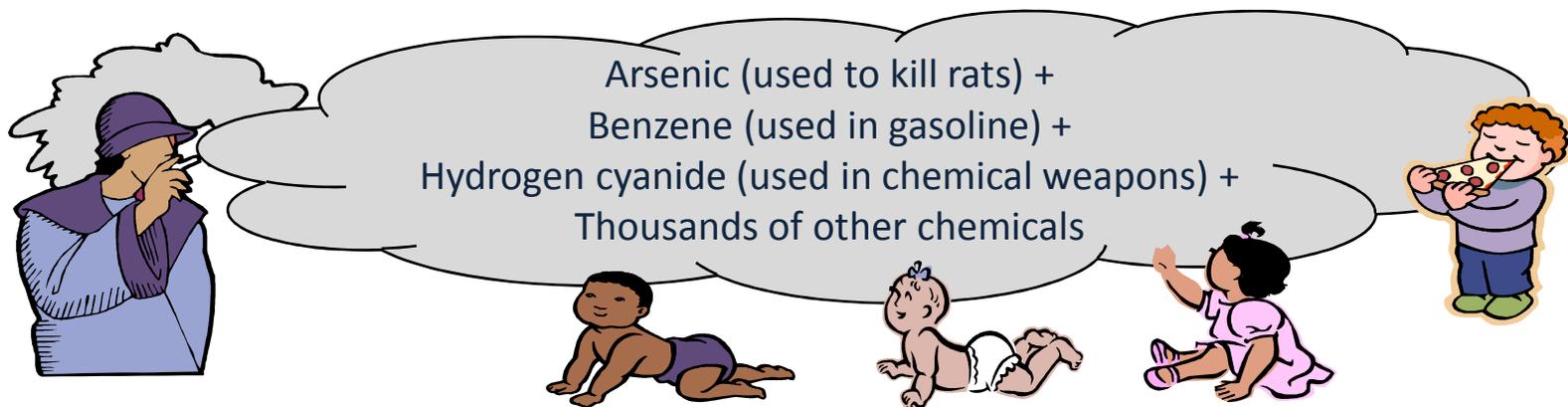
Keep it free of dangerous chemicals

Smoking

Health effects

Second-hand smoke comes from the burning cigarette, cigar, or pipe and the smoker's breath

- Contains same dangerous chemicals as first-hand smoke
- Associated with most of same diseases
- Nonsmokers are exposed whenever they are near someone smoking: in homes, cars, public places



Keep it free of dangerous chemicals

Smoking

Exposure to second-hand smoke increases health risks

- Unborn baby
 - Stillbirth and miscarriage
 - Premature birth
 - Birth defects
- Children
 - Respiratory problems
 - Ear infections
 - Death from Sudden Infant Death Syndrome (SIDS)



- Adults
 - Heart disease
 - Lung cancer
 - Other cancers
 - Stroke

Keep it free of dangerous chemicals

Smoking

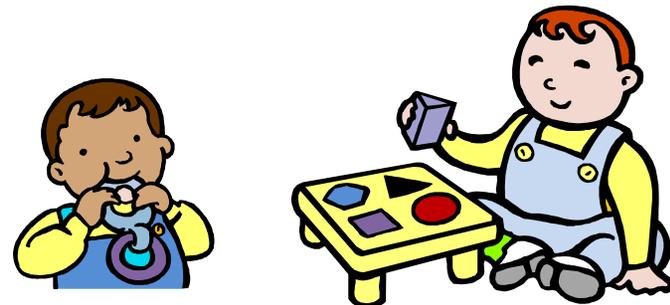
Health effects

Third-hand smoke: chemicals from tobacco smoke that remain on

- Smoker's hair, skin, and clothing
- Surfaces like walls, floors, rugs, furniture, dust, and car interiors

Children may be exposed to dangerous chemicals by

- Putting contaminated objects in mouths
- Touching contaminated surfaces and putting hands in mouths
- Breathing contaminated dust



Keep it free of dangerous chemicals

Carbon monoxide (CO)

Main idea

- Gas that you cannot see, smell, or taste
- Produced when fuels such as gas, oil, kerosene, wood, or charcoal are burned
 - If equipment not working or used properly, dangerous amounts produced



Keep it free of dangerous chemicals

Carbon monoxide (CO)

Health effects

- Shortness of breath
- Nausea
- Headaches
- Dizziness
- Confusion
- Fainting
- Death



Keep it free of dangerous chemicals

Carbon monoxide

Signs of problem

- Soot around equipment that burns fuel
- No upward draft in chimney
- Excess moisture on windows, walls, or other cold surfaces
- Rusty pipes or leaks around equipment
- Orange or yellow flames (should be blue)
- Smoky smells
- Damaged or discolored bricks at top of chimney

Fix the problem

- Vent all fuel-burning equipment
- Have equipment inspected regularly
- Install carbon monoxide alarms
 - Near sleeping areas
 - On every level of home
 - Not directly above or beside fuel-burning equipment

Keep it free of dangerous chemicals

Radon

Main idea

- Radioactive gas in soil and water
- Has no smell, color, or taste
- Can get into home through
 - Cracks in floors or walls
 - Construction joints
 - Gaps around service pipes
 - Water supply

Health effects

- More than 20,000 deaths from lung cancer each year
 - Second leading cause of lung cancer (after smoking)
 - Leading cause of lung cancer in nonsmokers and people who have never smoked

Keep it free of dangerous chemicals

Radon

Signs of problem

- You cannot see, smell, or taste radon
- Cannot predict on basis of state, local, or even neighboring measurements
- Only way to know is through testing your home

Solve the problem

- If necessary, install radon mitigation system



Keep it in good repair

Main idea

Keep small problems from becoming big problems

- Homes that are kept in good repair are less likely to have problems with
 - Moisture
 - Pests
 - Safety
- By checking your home regularly, and maintaining or repairing it when needed, you can take care of small problems before they become big problems

Keep it in good repair

Health effects

A home in poor repair

- Increases the risk of injuries from accidents
- Is more likely to contain things that can cause asthma attacks, allergy symptoms, and other health problems
- If built before 1978, may contain lead paint, increasing the risk of lead poisoning
 - Lead poisoning harms children (damaging their ability to learn, think, and behave) and adults (raising their blood pressure and making them tired or irritable)

Keep it in good repair

Signs of problem

- Moisture or mold, especially in the basement, bathroom, ceiling, or attic
- Leaks, especially from the roof, around windows or doors, and around pipes
- Missing or broken lights or windows
- Missing or broken stair railings or steps
- Worn or damaged electrical wires or cords
- Paint dust or peeling, flaking, or chalking paint, especially in a home built before 1978

Keep it in good repair

- Check your home often
 - Maintain good conditions
 - Repair problems as necessary
- Clean dryer vents, kitchen fans, and bathroom fans often
- Repair or replace broken windows, doors, railings, stairs, gutters, downspouts, and cracks or holes in foundations
- Fix leaks promptly

Fix the problem

- Hire qualified professionals when necessary, such as for plumbing, electrical, and roof repairs
- In homes built before 1978
 - Hire contractors who are certified in lead-safe work practices by the U.S. Environmental Protection Agency, or
 - Learn how to work safely around lead paint

Advocating for a healthy home

- Adults sometimes must act as advocates for family, working with
 - Landlords
 - State and local health, housing, building, and fire officials
 - Nonprofit agencies
 - Other residents in the home
 - Other people or organizations
- If you are a tenant, advocating often starts with landlord
 - Helpful to understand rights and responsibilities of both tenants and landlords



Advocating for a healthy home

Steps for advocating effectively

1. Believe in yourself and your family
 - You have a right to advocate for your family
 - You have a right to a healthy home
 - You also have responsibilities to keep your home healthy
2. Identify what your family needs
 - Be as specific as possible
 - Break complicated problems into smaller pieces
 - Work on most important needs first

Advocating for a healthy home

Steps for advocating effectively

3. Identify resources that can help meet your family's needs
 - Learn about your legal rights and responsibilities
 - Find people and organizations that can answer questions and offer help
 - Work with other people who share your concerns

Advocating for a healthy home

Steps for advocating effectively

4. Explain your needs to people and organizations that can help
 - Explain specific problem and solution you want
 - Be as pleasant, polite, and positive as possible
 - Stay on topic
 - Take notes of conversations
 - Ask for action by specific date, explain that you'll follow up, and end with a thank you
5. Continue advocating as long as necessary

Conclusion

“Where we live is at the very core of our daily lives. For most Americans, home represents a place of safety, security, and shelter, where families come together.... Given its importance, it is not surprising that **factors related to housing have the potential to help—or harm—our health in major ways....**

“When **adequate housing** protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability, and control, it **can make important contributions to health**. In contrast, **poor quality and inadequate housing contributes to health problems** such as infectious and chronic diseases, injuries, and poor childhood development.”

—*Commission to Build a Healthier America, 2008*

Questions?