Module Four: Creating a Healthy Environment for Infants and Toddlers in Early Childhood Settings

Alabama Department of Public Health

A Series of Six Best Practice Training Modules
Based on Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, Third Edition

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Creating a Healthy Environment for Infants and Toddlers in Early Childhood Settings

INTRODUCTION
Learning Outcomes

At the end of this session, participants will be able to:

• Identify sources of airborne contaminants.
• List ways to reduce airborne contaminants in the child care environment.
• Recognize sources of surface contaminants.
• List ways to reduce surface contaminants in the child care environment.
Pre-Test

Please complete the pre-test questions at this time.
Caring for Our Children

*Caring For Our Children: National Health And Safety Performance Standards*, Third Edition (CFOC3), are evidence-based and have expert consensus.

Available at [www.nrckids.org](http://www.nrckids.org)
Standards, Guidelines, and Regulations

**Standard:** A statement that defines a goal of practice
- Based usually on scientific or epidemiological data
- Set as the strongest criterion for practice
  Example: CFOC3

**Guideline:** A statement of advice or instruction
- Originates from an organization with acknowledged standing
- Developed often in response to a request or need
  Example: “Choose My Plate” campaign

**Regulation:** A standard or guideline that becomes a requirement for legal operation
- Originates in an agency with governmental/official authority
- Accompanied by enforcement activity
  Examples: Minimum Standards, Health Department food safety regulations
Standards, Guidelines, and Regulations Related to Environmental Health in Early Care

- *Caring For Our Children, 3rd edition (CFOC3)*
- Child care licensing regulations
- Local health department regulations for child care
- Head Start Program Performance Standards
- Child care accreditation standards
- Environmental Protection Agency (EPA) standards
- American Academy of Pediatrics (AAP) guidelines
Creating a Healthy Environment for Infants and Toddlers in Early Childhood Settings

PART 1: OVERVIEW
Environmental Health in Early Childhood Settings

Environmental health is the field that studies how substances or other environmental factors have an impact on human health.

The environment includes air, water, surfaces, and items with which infants and toddlers come in contact.
The Environment

The infant/toddler environment in an early childhood program includes these areas:

- **Indoors**—nursery, classroom, bathrooms, kitchen, etc.
- **Outdoors**—playground, lawn, sand and water play areas
- **Vehicles**—vans or buses used to transport children
- **Storage areas**—closets, basements, garages
Environmental Factors

Substances and factors that can impact the health and well-being of infants and toddlers include, but are not limited to:

- Dust, dirt, and irritants.
- Fragrances and airborne particles.
- Chemicals and toxins.
- Mold.
- Pests.
Environmental Factors...

Environmental factors can cause, trigger, or exacerbate child health conditions, such as:

- Asthma.
- Allergic reactions.
- Respiratory illness.
- Poisoning.
Infant and Toddler Vulnerabilities

**Anatomic:**
Their body size and surface area increase the danger of exposure. Their skin is thinner than adult skin, making it easier to absorb harmful chemicals and toxins.

**Developmental:**
They are curious and touch everything; often by mouthing. They crawl, sit, and scoot along the floor and ground where chemicals, toxins, and irritants can collect.

**Physiologic:**
The brain, immune system, and other physiologic functions are developing. They breathe more air for their size (compared to adults) and are more likely to be affected by air-borne chemicals, mold, and irritants.
Creating a Healthy Environment for Infants and Toddlers in Early Childhood Settings

PART 2: AIR QUALITY
What is Air Quality?

The term “air quality” means the state of the air around us.

“Air pollution” occurs when the air contains gases, dust, fumes, or odors in amounts that could be harmful to children’s health or comfort.
Indoor Air Quality

Indoor air pollution levels are often greater than outdoor levels.

- Outdoor air pollutants may enter the facility.
- Indoor environments may lack adequate air filtration and ventilation to remove air pollutants.
- The presence of dirt, contaminants, moisture, and warmth can encourage the growth of mold.
Infant and Toddler Vulnerabilities

- Infants and toddlers have a high respiratory rate and a larger lung surface area in relation to their body weight. They breathe more air per kilogram of body weight.
- Their lungs, immune system, and brain are immature and rapidly developing. The cell layer lining the inside of the respiratory tract is particularly permeable during this age period. Infants who were born prematurely or with low birthweight may be particularly vulnerable.
- Their height and play habits (e.g., crawling) may expose them to pollutants or aerosols that are heavier than air and more concentrated near ground level.
Air Quality and Children’s Health

Good air quality is essential to the health and well-being of infants and toddlers.

Airborne contaminants—such as tobacco smoke, dust, fragrance, and chemicals—can cause, trigger, or exacerbate asthma and asthma episodes, allergic reactions, and respiratory illness.
Prohibit Tobacco Products

Secondhand smoke is the smoke and other airborne products from burning tobacco products, such as cigarettes.

- Exposure to smoke and residue from tobacco products can lead to asthma, sinus and ear infections, allergies, and respiratory problems.
- Exposure to smoke increases the risk of sudden infant death syndrome (SIDS).
- Tobacco smoke is harmful to unborn infants.
Prohibit Tobacco Products. . .

Thirdhand smoke is the smell, nicotine, and other chemicals that remain on surfaces and in dust after tobacco is smoked.

Tobacco residue can stay on the hair, skin, and clothes of individuals who use tobacco products or who are around tobacco smoke. This residue also collects on furniture, carpets, and other surfaces.

Thirdhand smoke can linger for months, long after secondhand smoke clears. It is difficult to remove, and requires deep cleaning and/or replacement of items.

Fabric refreshers do not remove odor or tobacco residue.
Prohibit Tobacco Products...

• Every tobacco product, including smokeless tobacco, contains nicotine, odor, and other potentially harmful chemicals.

• The use of all forms of tobacco should be prohibited in early childhood settings.

• Tobacco products are toxic if ingested. Tobacco products must be out of children’s sight and out of children’s reach.
Prohibit Tobacco Products.

The prohibition of all smoking and tobacco use in early childhood settings:

- Includes all areas—indoors, outdoors, and in vehicles.
- Applies to volunteers and visitors.
- Covers all work hours, including during lunch and breaks.

Staff who are smokers or who live with someone who smokes should wear clean tunics over clothing each day. Tunics should be laundered frequently, and stored at the early childhood program.
Electronic Cigarettes

- Electronic cigarettes generally include nicotine, chemicals, additives, and flavoring. When used, they produce a vapor containing nicotine, formaldehyde, metals, and other particles. This process is called “vaping.”
- Poisoning cases in young children have been reported. The nicotine liquid can be ingested, inhaled, or absorbed through the skin and eyes.
- The use and storage of e-cigarettes should be prohibited in and around early childhood settings.
Maintain Easy-to-Clean Surfaces

- Maintain floors, walls, and ceilings in good repair.
- Have easy-to-clean flooring (e.g., vinyl, hardwood).
- Place non-slip rugs at entrances to catch dirt. Carpet and rugs should be clean, nonflammable, and nontoxic.
- Have smooth, nonporous surfaces in hand washing, toileting, and diapering areas.
- Have smooth, nonporous surfaces in food preparation areas.
Reduce Dust and Irritants

Dust and irritants can accumulate on surfaces, such as furniture, shelving, window coverings, floors, and carpets.

- Eliminate clutter.
- Clean tables, counters, and other surfaces daily.
- Dust and clean surfaces—such as shelving, furniture, and storage units—regularly.
- Clean floors and vacuum carpet and rugs daily.
- Remove dust from ceiling fans, light fixtures, and electronic equipment regularly.
Use Effective Cleaning Tools

• Utilize microfiber cloths and mops to effectively pick up dirt, oils, and germs while requiring less detergent. Launder microfiber cloths only with other microfiber cloths, and without bleach or softener.

• Clean surfaces with disposable wipes.

• Avoid sponges, which can provide a breeding ground for germs.

• Use a vacuum with a HEPA filter to clean floors, carpet, and upholstered furniture.
Cleaning Products

Use the least-toxic cleaning and sanitizing products. Choose products that are:
• Fragrance-free, and with no strong chemical smell.
• Dye-free.
• Non-aerosol.

_The smell of clean is no smell at all!_
Cleaning Products.

Read the product label:

- **Danger** means the product is highly toxic if eaten, absorbed through skin, splashed in eyes, or inhaled. Danger is also used on products that could explode if exposed to heat.
- **Warning** is less strong, but the product could cause illness or injury. Warning also identifies products that could easily catch on fire.
- **Caution** is used on less harmful products. However, products could irritate skin and eyes, and cause illness if inhaled.

Always use and store products according to manufacturers’ instructions.
Cleaning Products.

Look for products with independent third-party certification:

- Green Seal
- EcoLogo
- The EPA’s Design for the Environment

The words “natural,” “nontoxic,” and “green” are not regulated and do not assure product safety.
Reduce Fragrance

• Avoid air fresheners, room sprays, plug-ins, candles, potpourri, “odor eliminators,” and other scented products that mask odors.

• Do not use powder or spray cleaners and fresheners on rugs, upholstered furniture, and curtains.
Reduce Fragrance. . .

• Avoid use of perfumes, colognes, and other scented body products when coming to work.

• Avoid scented laundry products.

• If staff members use scented laundry products on personal clothing, then provide clean tunics to cover clothing.
Reduce Chemicals and Odors

• Air out products that emit odors, such as foam floor matting.
• When purchasing furniture, avoid products of pressed wood (plywood and particle-board).
• When painting, use products labeled “low-VOC” (volatile organic compounds), “no-VOC,” or “odorless.” Allow 24 hours of ventilation before re-entering the area.
Ventilate

Adequate ventilation helps remove formaldehyde and other chemicals.

Increase ventilation naturally by opening screened windows and using fans.

Windows can be opened if:
- Weather permits.
- Windows have screens and barriers to prevent falls.
- Outside air quality index is good.
Maintain HVAC System

Ensure that the heating, ventilation, and air conditioning (HVAC) system is properly maintained and meets legal standards.

- Use high-efficiency (HEPA) filters.
- Check filters monthly.
- Clean or replace filters as needed or as recommended by the manufacturer.
Air Cleaners

There are no national standards on air cleaner performance.

Questions to ask if purchasing:
• What substances will the cleaner remove?
• What is the efficiency rating compared to “true HEPA” standard?
• Will it clean the air in the room (square footage)?
• Are filters easy to change? Are filters readily available and affordable?
• How much noise does it make?
## Air Quality Index

<table>
<thead>
<tr>
<th>Index value</th>
<th>Name</th>
<th>Color</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 50</td>
<td>Good</td>
<td>Green</td>
<td>None</td>
</tr>
<tr>
<td>51 to 100</td>
<td>Moderate</td>
<td>Yellow</td>
<td>Unusually sensitive individuals should consider limiting prolonged outdoor exertion</td>
</tr>
<tr>
<td>101 to 150</td>
<td>Unhealthy for Sensitive Groups</td>
<td>Orange</td>
<td>Children, active adults, and people with respiratory disease should limit prolonged outdoor exertion</td>
</tr>
<tr>
<td>151 to 200</td>
<td>Unhealthy</td>
<td>Red</td>
<td>Children, active adults, and people with respiratory disease should avoid prolonged outdoor exertion</td>
</tr>
<tr>
<td>201 to 300</td>
<td>Very Unhealthy</td>
<td>Purple</td>
<td>Children, active adults, and people with respiratory disease should avoid outdoor exertion</td>
</tr>
<tr>
<td>301 to 500</td>
<td>Hazardous</td>
<td>Maroon</td>
<td>Everyone should avoid all physical activity outdoors</td>
</tr>
</tbody>
</table>
Outdoor Air Quality

• Check your local daily air quality index (AQI).
  – Local weather forecast
  – Visit [www.airnow.gov](http://www.airnow.gov)
  – Visit [www.enviroflash.info](http://www.enviroflash.info) for air quality notifications

• If the forecast is for Code Orange or above, limit outside activities and keep windows closed.

<table>
<thead>
<tr>
<th>Air Quality Index (AQI) Values</th>
<th>Levels of Health Concern</th>
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<tbody>
<tr>
<td>0 to 50</td>
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</table>
Outdoor Air Quality.

Outdoor air quality can be affected by both natural and man-made products and activities.

- Transportation sources (vehicles, trains, planes, and ships) can release chemicals that may be harmful in gasoline and diesel exhaust. Early childhood facilities are at higher risk if they are located within 500 feet of major roadways or heavy bus traffic.

- Adopt a “no-idling” policy. All vehicles must be turned off when parked near the early childhood facility.
Outdoor Air Quality. . .

- Air quality can vary seasonally due to dust and pollen.

- Wildfire and other incidents can produce smoke and irritants.

- Industry—such as factories, power plants, and smelters—may release particles and irritants.

- Farming activities may produce airborne chemicals, including fertilizers, herbicides, and insecticides.
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PART 3: MOLD
Molds (fungi) can grow on any organic substance, such as wood, paper, carpet, food, and insulation. Molds produce microscopic cells called "spores" that spread easily through the air. Live spores form new mold colonies when they find the right conditions.

If mold is permitted to grow and multiply indoors, building materials, goods, and furnishings may be damaged.
Mold. . .

People are exposed to mold by breathing spores or other tiny fragments. People can also be exposed through skin contact with mold contaminants and by swallowing them.

All types of mold have the potential to affect human health. Molds produce allergens, irritants, and in some cases, toxins that may cause reactions in humans.
Allergic reactions to mold are common; these reactions can be immediate or delayed.

Mold can trigger a variety of health problems, such as:

• Headaches.
• Cough, wheezing, and breathing difficulties.
• Runny nose, sinus congestion, and upper respiratory infection.
• Skin irritation.
• Eye irritation.
• Aggravated asthma symptoms.
Signs of Mold Problem

Mold often appears as discoloration, staining, or fuzzy growth on the surface of building materials or furnishings.

• Search areas with noticeable mold odors.

• Look for signs of excess moisture or water damage.

• Search behind and underneath furniture and stored items, especially items placed near outside walls or on cold floors.

• Search underneath carpet and pad, wallpaper, vinyl flooring, and sink cabinets.
Control Moisture

It is impossible to eliminate all molds and mold spores in the indoor environment. Controlling excess moisture is the key to preventing and stopping indoor mold growth.

- Remove standing water. Check appliances, such as hot water heaters and refrigerators, which have overflow trays.
- Remove unused appliances, such as dishwashers and washing machines.
- Fix leaks promptly, including faucets.
- Use ventilation fans in kitchen and bathroom areas.
Control Moisture. . .

• If carpets or rugs are steam-cleaned or shampooed, be sure they dry completely. Consider removing carpet if it has been wet longer than 48 hours.

• Launder wet towels and items daily.

• Clean hand washing and toileting areas daily. Clean spills immediately.
Control Moisture. . .

Moisture that starts outdoors can create mold and mildew issues indoors.

• Eliminate standing waters.
• Make sure rain and ground water flows away from building.
• Remove items that could hold water, such as tires and buckets.
• Check plumbing and water lines entering the building.
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PART 4: CARBON MONOXIDE
Carbon Monoxide (CO)

CO is called the “Invisible Killer.” It is an colorless, odorless, poisonous gas. You can't smell it, see it, or taste it—but CO can kill you and your children.

CO enters the lungs and is transported by the bloodstream. It prevents the blood from carrying oxygen.

Symptom severity is related to both the CO level in the blood and the duration of exposure. High level CO exposure may quickly cause mental confusion, vomiting, loss of muscular coordination, loss of consciousness, and ultimately death.
Carbon Monoxide (CO). . .

CO is produced by the incomplete burning of various fuels, including coal, wood, charcoal, oil, kerosene, propane, and natural gas.

CO can be produced by malfunctioning fuel-burning appliances, such as furnaces, water heaters, or portable room heaters.

- Have appliances installed and serviced by professionals, according to manufacturer’s instructions.
- Have the heating system inspected and serviced annually.
Carbon Monoxide (CO) . . .

Gas stoves and ovens can be a significant source of CO.

• Install and always use a stove hood that vents to the outdoors to ensure adequate ventilation.

• Do not cover the bottom of a gas oven with aluminum foil. Foil blocks the combustion air flow through the appliance and can produce CO.

• Never use fuel-burning camping equipment or burn charcoal in an enclosed area.

• Never use a gas oven or dryer to heat a room.
Carbon Monoxide (CO) . . .

• Avoid open flames when children are present, such as fireplaces, wood stoves, gas logs, kerosene burners, and oil lamps. If these products are used, ventilate before children enter the room.

• **Never** use unvented gas-burning appliances (e.g., gas logs) in a closed room.

• Clean chimneys and wood stoves each year. Prevent blockages (e.g., bird nests) in the chimney.
Carbon Monoxide (CO)...

CO is produced by internal combustion engines, such vehicles, trains, planes, and boats. Early childhood facilities are at higher risk if they are located within 500 feet of major roadways or heavy bus traffic.

- **Never** leave a vehicle running in a garage or where exhaust is blocked or can enter breathing space.

- Adopt a “no-idling” policy. **All** vehicles must be turned off when near the early childhood facility.
Carbon Monoxide (CO)...

CO is also produced by equipment, such as portable generators, lawn equipment (e.g., mowers, blowers), or power washers.

- Never operate gasoline or diesel engines (such as portable generators) inside the facility or in an enclosed area.
- Avoid use of such equipment where exhaust can enter the facility.
- Avoid use of such equipment when children are present.
Carbon Monoxide (CO) Detector

Facilities must meet state or local laws regarding CO detectors. In addition, CO detector(s) should be installed if:

• The program uses coal, wood, charcoal, oil, kerosene, propane, or natural gas either indoors or in an attached garage.
• Vehicles are kept in an attached garage.
• Fuel-powered equipment (e.g., lawn mowers, blowers) is stored in an attached garage or storage unit.
Carbon Monoxide (CO) Detector.

Both CO detectors or combination smoke/CO detectors are available. Be familiar with the different alarm sounds. Detectors may be battery operated, hard wired, or plug-in. Hard wired and plug-in detectors should have battery backup.

- Test CO detectors weekly.
- Replace batteries as recommended by manufacturer.
- Replace CO detectors as recommended. Some CO detectors have a 10-year life and sealed lithium battery.
Carbon Monoxide (CO) Detector.

Install CO detectors:

- In the hallway near each separate sleeping area (or nursery/classroom).
- On every floor of the early childhood facility.

Do not install CO detectors in garages, attics, or kitchens.
Carbon Monoxide (CO) Detector Placement

• Combination smoke/CO detectors should be wall-mounted, 4 to 12 inches below the ceiling.
• CO disperses evenly in air; a stand-alone CO detector can be placed lower on the wall (e.g., plug-in receptacle).
• Avoid locations that are near heating/air conditioning vents, fans, or ceiling fans.
• Avoid locations that may be covered by furniture or draperies.
• Remove dust from CO detectors; dust particles can cause false alarms.
Carbon Monoxide (CO) Alarm Sounds

Know the alarm sound of the CO detector!!!

If the CO detector alarm sounds:
• Immediately move outside to fresh air.
• Call 911.
• Do not reenter the facility until first responders give permission.
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PART 5: CHILDHOOD LEAD POISONING
Lead Poisoning...

Lead is a neurotoxin. When inhaled or swallowed, it can act as a poison. Effects may include:

- Decreased bone and muscle growth.
- Damage to the nervous system, kidneys, and hearing.
- Speech and language problems.
- Developmental delays.
- Shortened attention span, learning difficulties, and behavioral problems.

Lead poisoning has no cure. The effects cannot be reversed once the damage is done.
Infant and Toddler Vulnerabilities

- Infants and toddlers put unwashed hands, toys, and other objects in their mouths.
- They crawl, sit, and scoot along the floor and ground where dust and soil can collect. They play outside in dirt which may be contaminated.
- They mouth and chew surfaces.
- Infants and toddlers are small, so exposure results in higher doses of contaminants in relation to body weight.
Lead Sources

Lead paint is the most widespread source of lead exposure. Lead paint may be found on:
• Kitchen and bathroom walls, doors and windows, and wooden trim in homes and facilities built before 1980.
• Painted toys and furniture made before 1978.
• Newer such items made outside the United States.

Exposure occurs when:
• Children mouth or chew painted items and surfaces.
• Painted surfaces are sanded, releasing fine dust into the air.
Lead Sources...

Prevent exposure to lead paint by:

- Maintaining paint on walls, window sills, and other painted surfaces.
- Taking precautions when sanding painted surfaces.
- Disposing of painted toys and furniture made before 1978.
- Being sure all toys and art supplies are labeled “non-toxic.”
Lead Sources. . .

Lead from paint, gasoline, and hobbies may be found in soil and dust.

Prevent exposure to lead in soil:
• Washing children’s hands after outdoor play and before eating.
• Placing non-slip rugs at entrances to catch dirt.
• Damp-mopping floors. Wet-wipe windows and other surfaces.
• Planting grass or other ground cover in children’s play areas.
• Regularly washing outdoor toys.
Lead Sources...

Very old buildings (before 1920) may have lead pipes, and facilities built before 1990 may have copper pipes with lead-soldered joints. Water standing in these pipes may become contaminated with lead.

Prevent exposure to lead in water:
- Using only cold tap water for drinking and cooking.
- Running tap water for a few seconds to flush pipes before using water for making formula, drinking, and cooking.
Lead may be found in other items. Keep items, such as the following, out of children’s sight and out of their reach:

- Bullets and ammunition supplies, fishing sinkers, and curtain weights.
- Supplies for soldering, pottery glazing, and making stained glass and jewelry.
- Pewter pitchers, china dinnerware, and leaded glassware.
- Pottery and ceramic items made outside the United States.
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PART 6: INTEGRATED PEST MANAGEMENT
Integrated Pest Management

The term “pest” includes:

• Spiders and insects, such as fleas, mosquitoes, wasps, fire ants, cockroaches, and bed bugs.

• Rats, mice, and other rodents.

• Weeds, such as poison ivy and poison oak.
Integrated Pest Management.

Some pests can spread disease. For example, ticks can transmit Lyme disease and mosquitoes can carry West Nile virus. Flea, mosquito, and bed bug bites cause itching; and scratching can lead to skin infection.

Pest bites, feces, and residue can cause allergic reactions. For example cockroaches are allergens and asthma triggers for some individuals. Severe allergic reactions to fire ants, wasps, and bees can cause life-threatening anaphylaxis.
Integrated Pest Management (IPM).

IPM works primarily by reducing or eliminating pests’ access to water, food, and shelter.

IPM minimizes use of pesticides—herbicides, insecticides, and fungicides. Pesticides can cause, trigger, or exacerbate child health conditions, such as asthma, allergic reactions, and respiratory illness.

As pesticides are toxic, ingestion, inhalation, or absorption through skin and eyes can be harmful.
Steps in IPM

• Determine the pest problem.
• Keep pests out of the building.
• Eliminate food sources.
• Eliminate moisture.
• Eliminate hiding areas.
• Kill pests.
Determine the Pest Problem

• Use your eyes. Look for dead bugs, pest droppings, and evidence of nesting or gnawing.

• Use your nose. Rodents give off the smell of urine or ammonia. A musty smell may indicate moisture that attracts pests.

• Use your ears. Listen for the pattering of rodents as they scratch, gnaw, or run.
Keep Pests Out of the Building

- Caulk cracks, holes, and crevices (e.g., where water pipes and electrical cables enter the building).
- Install door and window seals, window screens, and attic screens.
- Inspect boxes, bags, and foods for pests before they are brought into the building.
Eliminate Food Sources

• Clean up crumbs and spills quickly.
• Clean food preparation and meal service areas after use.
• Store food products properly.
• Dispose of trash in tightly closed containers.
Eliminate Moisture

- Check for and repair leaks, including dripping faucets.
- Inspect and maintain appliances, such as dishwashers, washers, and refrigerators.
- Quickly clean up spills and leaks.
Eliminate Hiding Areas

• Reduce clutter inside the building.
• Rake leaves and organic debris away from the building.
• Clean under bushes and trim branches so they do not touch the building.
• Store firewood, stacked lumber, and similar materials well away from the building.
Kill Pests

• Use traps and physical elimination devices.
• When necessary, select appropriate pesticides.

If pesticides are required, use a licensed pest control operator. Require an IPM plan prior to pest control treatment.

Never apply pesticides when children are present.
IPM for Outdoor Areas

Grass and ground cover can enhance the outdoor early childhood environment.

• Reduce exposure to lead and other contaminants in the soil.
• Help prevent tracking of dirt and dust into the facility.
• Provide a softer surface for children’s play.
• Provide different textures for exploration and learning.
• Improve the appearance of the facility and play area.
IPM for Outdoor Areas.

If possible, physically remove potentially harmful plants.

- Poison ivy, poison oak, and poison sumac
- Grass and weeds in loose-fill (e.g., sand) under playground equipment
- Plants with thorns and stickers
- Toxic plants and fungi (mushrooms)
- Tall grass and vegetation that promote breeding and nesting of pests
IPM for Outdoor Areas. . .

If chemicals (herbicides) are required to kill vegetation, choose products specific to your needs.

- Choose the least toxic product. Products with Caution on the label are the least toxic. The signal word Warning on the label indicates the material is moderately toxic. Products with the word Danger indicate they are highly toxic.

- Follow manufacturer’s instructions or use a licensed qualified lawn service.

- Never apply chemicals when children are present. Do not let children in the area until safe (e.g., after watering in chemicals, and lawn is thoroughly dry).
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PART 7: POISONING PREVENTION
Poisoning Prevention

• All toys, art supplies, and other items used in the nursery and classroom must be “non-toxic.”
• Be sure indoor plants are non-toxic.
• Do not use potentially harmful products, such as cleaning supplies, when children are present. Ventilate the room before reentry.
• Do not have medications, cosmetics, and personal care products in children’s areas.
Poisoning Prevention

- Products should be sealed tightly and stored in original, labeled containers.
- Immediately return products to storage after use.
- Never store toxic products near food items and supplies.

Keep potentially harmful products out of children’s sight, out of children's reach, and locked as necessary.
Poison Control Center
1-800-222-1222

Call this number from anywhere in the United States. Post this number in every nursery and classroom.
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CONCLUSION
Post-Test and Evaluation

Please complete the post-test questions and evaluation form at this time.

The training module team may follow up with you in three months to see how you used this information.
Thank You

Thank you for your participation in this training session.

This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number H25MC00238 Early Childhood Comprehensive Systems for $140,000, 0% financed with nongovernmental sources. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.