# Safety and Environment



Protecting Kids from Hidden Hazards



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In this e-book we'll discuss a variety of topics to keep children safety and healthy, from choosing a safe child care site to protecting children's health and development.

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Reducing the Use of Toxic Chemicals



Keeping child care facilities clean and free of pests is one of the most important things we can do to prevent diseases from spreading. The challenge is that chemicals that providers use for cleaning and pest control are often toxic. And while that might be common knowledge for some, not everyone knows about the risks some cleaners can cause. Also, many of the cleaners that are more toxic are inexpensive, making them fast and easy choices for businesses and low-income families.

The Child Care and Development Block Grant has requirements around handing and storing hazardous materials. If providers are using ammonia to clean or rat poison to keep pests away, they need to make sure those chemicals are locked away and out of reach.

### But what if we also helped providers reduce their use of chemicals overall?

Below are several ideas to incorporate into trainings or even tip sheets. These ideas explain how programs can meet sanitation and hazardous material safety requirements while minimizing the health risks of chemical exposure.

#### PROBLEM #1

Everyday household cleaners can harm children's health. Ingesting these cleaners can lead to poisoning and touching them can result in chemical burns. The rules around safe chemical storage exist to prevent such injuries. But many household cleaners can affect children's health even if there's no direct exposure. The lingering presence of aerosol sprays like carpet cleaner and furniture polish can trigger allergies and asthma attacks. Some fragrances that are added to detergents, bleach and all-purpose cleaners can affect children's developing brains and endocrine systems.

#### **SOLUTION #1**

Child care providers can choose safer cleaning products. For everyday cleaning, providers should choose products that are certified as environmentally-friendly. These products clean just as well, but are less likely to irritate children's sensitive skin, eyes and lungs.

For sanitizing and disinfecting surfaces, diluted bleach solutions are often the safest way to go. Providers should use low-concentration, unscented household bleach that is registered with the U.S. Environmental Protection Agency (EPA). They should also handle bleach away from children and make sure that the final concentration is not too high, since strong bleach fumes can affect children's breathing.

#### PROBLEM #2

Many pest control chemicals, like rat poison, can be deadly if children ingest them. Breathing in and touching insect repellants or pesticide residue can also affect children's health. Family child care providers and centers that are in older building may have more risk for more pests.

#### **SOLUTION #2**

Providers should use safer chemicals to control pests, or stop using chemicals altogether if possible. Thankfully there are a lot of non-chemical pest control options. Integrated Pest Management (IPM) is an approach that minimizes the use of toxic pesticides. The IPM approach keeps pests away by making it more difficult for them to live in the places you want to keep pest-free. Removing standing water to discourage mosquitos and tightly covering garbage cans to stop rats are both examples of IPM strategies.

#### So, what can CCR&Rs do?

- 1. Add questions about cleaning products and pest management to your checklist for families to take along on visits to child care facilities. Explain why these topics matter and what parents should look for when it comes to hazardous material safety.
- 2. **Have resources for programs on healthier cleaning options** at the ready during trainings and on your website. That way providers can make the best choice for their program without having to search around on their own.
- 3. Include information on IPM and environmentally-friendly cleaning practices for child care providers. Or, if your state is ready, develop a separate training on the topics. Training on this topic could fit well at higher levels in your state's professional development ladder. Make sure you offer trainings to those programs who may need additional support because of the age of their building.
- 4. Advocate for including environmentally-friendly standards in your state's Quality Rating and Improvement System. The Children's Environmental Health Network has standards and technical assistance resources that CCR&Rs can promote and use to support providers in reaching higher quality levels.

Location Matters: Tips for Choosing a Safe Child Care Site



When we think about health and safety in child care, it's often related to hazards we can see. For instance, are providers and children washing their hands properly? Have cleaners and medications been locked away? Are smoke and carbon monoxide detectors present and functional? These are things that can affect children's wellbeing right now.

At Child Care Aware® of America (CCAoA), we've been thinking about health and safety in a new way. To create safe and healthy child care programs, we need to consider both hazards we can see and those we cannot. That means thinking about children's health and wellness right now and in the future.

In the first post of this blog series, we gave you tips to reduce the use of toxic chemicals in child care programs. All April, we will be exploring environmental health— hazardous materials, parking lot safety, safe facilities — from this new point of view. And we offer new ideas about how to avoid hidden hazards and promote children's lifelong health.

#### Why Location Matters

Child care providers have a lot to consider when choosing a site for their program. There's cost, location, suitable indoor and outdoor space, and so on. The issue of environmental contamination may not occur to them. There may be no visible problem or telltale smell, so it's easy to overlook. But children deserve safe spaces to learn and play. Child care providers must make sure their facilities are free of environmental hazards.

#### Here's why:

Contaminants in the air, soil and water can harm child and staff health. Young children often play on the ground, which makes exposure to environmental hazards more likely and more dangerous. Many environmental hazards, including lead and pesticides, are bad for children's growing brains and bodies. Exposure to these toxins can set children up for a lifetime of health problems. Child care staff are also at risk. Particularly those who are pregnant, have chronic health conditions or live in a family child care home with high levels of contamination.

**Safe siting** in child care means thinking about environmental hazards before choosing to open a facility on a certain site. Experts in safe siting recommend that child care providers ask four important questions before selecting a child care site:

- 1. What was the site used for in the past?
- 2. How close is the site to other sources of harmful chemicals and can those substances spread to affect the site?
- 3. Are naturally-occurring harmful chemicals present?
- 4. Is the water in sinks and drinking fountains safe and clean?

When thinking about safe siting, remember that environmental hazards are not distributed evenly. Communities with low incomes and communities of color are disproportionately located in areas with high rates of environmental contamination. These communities often have limited political power or access to resources for hazard removal. We need ensure that the communities most at risk, have funding to make their neighborhoods and facilities safer for children.

#### What can CCR&Rs do?

- 1. Convene a diverse group of stakeholders. Include state departments of education, public health, environmental safety, housing and child care. Identify opportunities for stakeholders to coordinate and align messaging around the importance of limiting exposure to environmental hazards wherever children live, learn and play. CCAoA can support your coalition-building by helping you get the right people in the room. We can also help you use research to make community-informed decisions about how to promote safe siting.
- 2. Build safe siting into pre-licensure training for new child care providers. Also add the "Choose Safe Places checklist" to pre-licensure health and safety inspections. Caring for Our Children Basics recommends an environmental assessment of a child care site before it opens. Connecticut, for example, has built environmental screening into its pre-licensing and licensing renewal systems. CCAoA can conduct policy scans and analysis to help you learn what other states are doing and think through how to adapt or replicate in your state.
- 3. Partner with state or local health departments to provide training and technical assistance to providers about how to choose a new site or minimize exposure in their current facility. Include information about:
  - Who in your area does environmental testing
  - What can be done toward remediation of hazards or to limit exposure
  - Whether there are programs available to help offset any costs
- 4. **Subscribe to CCAoA's monthly Health Round-Up newsletter** to stay current on the latest scientific research and what it means for child care practice and policy.
- 5. Advocate for funding to clean up environmental contamination in local communities. This is especially needed for neighborhoods with limited access to resources and political power. Work with CCAoA to build a story map showing environmental hazards in your state and their proximity to child care programs. The map can build a compelling case for policy solutions.

Minimizing Lead Exposure in Child Care



When the Flint, MI water crisis hit the news in 2015, people around the world took notice. Hundreds of children across Flint had alarmingly high blood lead levels. Many still do. The problem was quickly traced back to lead contamination in the city's water supply. The water that Flint's families and caregivers used to cook, drink and bathe in was poisoning their children.

The Flint crisis highlights a problem that impacts millions of children in the United States. Children's blood lead levels in places like Milwaukee, Baltimore and Philadelphia are actually much higher than in Flint. The poisoning happens because of lead in water, but also because of lead dust in buildings. And the children most in danger are children from families with low incomes and children of color.

Children in families with low incomes and non-Hispanic black children are twice as likely to have high blood lead levels. Lead poisoning has life-long health consequences, including cognitive and behavior problems, delayed puberty and organ damage. If we want all children to grow up healthy and ready to succeed, we need to protect them from lead exposure wherever they live, learn and play.

#### How Does Lead Exposure Happen?

When we hear the term "lead exposure," we often think about paint in older homes. About half the states in this country require child care facilities to be free of chipped and peeling paint. That's an important step for preventing lead exposure. But what about lead where we can't see it? If providers think only of chipping paint, they risk exposing children to lead in other ways.

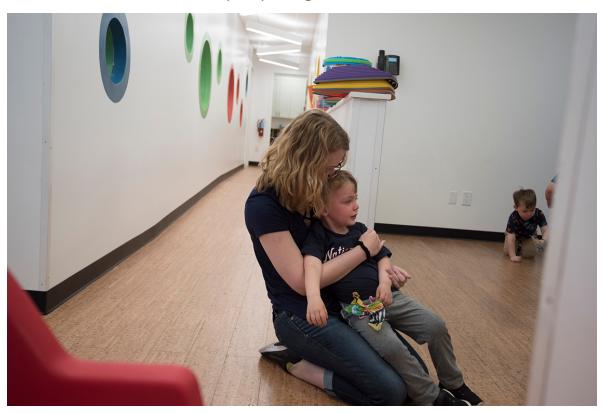
Like Flint, many communities have old lead water lines. If the water is not properly treated, it can corrode the pipes and cause lead to leach into the water. It's important that children stay hydrated. Yet, when preschoolers gulp down water on the playground or infants drink formula prepared with water, lead contamination can put their little brains and bodies at risk.

Lead dust may also lurk in older buildings, even if they are free of chipped and peeling paint. Opening and closing old painted windows can generate fine, often invisible lead dust. Children breathe in the dust or ingest it when they put toys or fingers in their mouths. While regular mopping and vacuuming helps, lead dust can remain behind baseboards and in the cracks and crevices that little hands love to explore.

It is easy to miss lead contamination in soil. Dust and paint chips from a building's exterior can mix into the surrounding soil. Lead from demolished buildings or exhaust from leaded gasoline can remain in the soil for decades. That makes soil contamination a risk even in newly-constructed child care facilities. As we promote outdoor play and activities like gardening, we need to make sure the soil we play in is safe.

#### What can CCR&Rs do?

- 1. Include information about lead in your consumer education materials. Highlight the dangers of lead exposure and what families should look for and ask about when they visit child care facilities. Take a look at our checklists for selecting a child care program. They ask some questions about environment.
- 2. Build information about lead in paint, water and soil into pre-licensure resources for all new child care providers. Tell providers how they can access lead testing and remediation services so providers can make sure their facilities are safe and lead-free.
- 3. Incorporate lead exposure prevention into quality coaching and quality improvement initiatives. If you are working with providers to build fruit and vegetable, advise them to get their soil tested. Or, they can plaint in raised beds or containers with safe soil.
- 4. Advocate for funding to support lead testing and abatement in child care facilities, especially in communities with low incomes and communities of color. Providers may be hesitant to test for lead in their homes or buildings because of concerns about the cost of fixing the problem. Work with CCAoA to build a story map that illustrates lead exposure risks for providers in your state and makes the case for policy change.



Keeping Kids Safe in Parking Lots and Driveways



Most child care providers have an on-site parking lot or driveway. This is a huge benefit for families and staff, making drop-off and pick-up a lot easier. But that benefit comes with some potentially big costs. Parking lots and driveways can present some serious risks to children's health.

The biggest danger is keeping children away from moving vehicles. About 95,000 children under 14 years old are treated in the emergency room every year for not-intraffic vehicle crash injuries. About 37 children under age 14 die every year in driveway or parking lot accidents. With lots of children and adults moving around at drop-off and pick-up, it's hard for even the most careful driver or pedestrian to navigate safely through the parking lot.

The other big health concern about parking lots is air pollution. Exhaust from driving in and out or idling while waiting can degrade air quality outside and inside the building. This is particularly dangerous for children or staff who have asthma or other chronic breathing problems. The chemicals in vehicle exhaust can damage the lungs of otherwise healthy children. We know how quickly coughs, colds and respiratory viruses spread in child care. Poor air quality from traffic or idling cars can make those illnesses even worse.

Providers may need help changing their drop-off and pick-up procedures and thinking through how to make their parking lots and driveways safer. They may also need support implementing "no idling" policies. It can be hard to get staff and families on board with those policies, especially in cold climates where people want to warm up their cars before getting in them. CCR&Rs can help and Child Care Aware® of America is here to give CCR&Rs the technical assistance needed on this issue. Some ideas are below. *Contact us to receive TA on how to take these ideas into reality.* 

#### What can CCR&Rs do?

- Add parking lot and driveway safety to your child care visit checklist for families. Encourage families to ask questions about drop-off and pick-up procedures, whether children have access to parking lots and driveways and how the provider keeps kids safe from vehicle exhaust.
- 2. Work with your Child Care Development Fund (CCDF) state agency to include parking lot and driveway safety in health and safety inspections of all child care providers. Provide training and technical assistance to ensure safe drop-off and pick-up procedures are in place in all regulated child care facilities.
- 3. Embed information from the American Academy of Pediatrics' (AAP) Safety and Injury Prevention Curriculum into the pre-service, orientation, and ongoing health and safety training. AAP has a full module addressing safety in and around cars.
- 4. **Develop a sample "no idling" policy** and support child care providers in adopting and implementing the policies. Share resources such as an information sheet for parents and staff about why no idling policies are important.
- 5. Get the word out to families, providers and policymakers about why parking lot safety matters. CCAoA can help you gather personal stories like this one to bring attention to the issue and gather support for policy change.



### **LEARN MORE**

Find out steps what we think about health and safety in child care and how providers can take necessary steps to providing a safe environment for children.

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