

Handling, Storing, and Disposing of Hazardous Materials and Biological Contaminants

The Child Care and Development Block Grant (CCDBG) Act of 2014¹ and the Child Care and Development Fund (CCDF) Program final rule (2016)² require states and territories to have health and safety requirements in 11 different topic areas, as well as preservice and ongoing training on those topics, for all providers that receive payments from the CCDF subsidy program.³ This brief provides an overview of **handling, storing, and disposing of hazardous materials and biological contaminants**.

A series of briefs about CCDF health and safety requirements was first released in July 2016 by the National Center on Early Childhood Quality Assurance (ECQA Center) in response to the CCDBG Act of 2014. A summary of findings about the topic from the [2017 Child Care Licensing Study](#) is a feature of this July 2020 update to those briefs. Data for the study were compiled from state child care licensing regulations in effect as of December 31, 2017 (ECQA Center, 2020a, 2020b, 2020c).

Licensing and CCDF Administrators may find the brief helpful as they consider revisions to state standards for both licensed and license-exempt providers. It may also be of value to early childhood and school-age care programs and family child care providers, helping them understand and improve the health and safety of their learning environments.

What Are the Basic Requirements?

[Caring for Our Children Basics: Health and Safety Foundation for Early Care and Education](#) (CFOCB) represents the minimum health and safety standards experts believe should be in place where children are cared for outside their homes. The following list contains CFOCB links to the basic requirements for handling and storing hazardous materials:

- ◆ [Situations that Require Hand Hygiene](#)
- ◆ [Prevention of Exposure to Blood and Bodily Fluids](#)
- ◆ [Routine Cleaning, Sanitizing and Disinfecting](#)

Best practices, which exceed CCDF requirements, are found in [Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, CFOC Standards Online Database](#) (CFOC). You can learn more about best practice recommendations for handling and storing hazardous materials by exploring the following CFOC links:

- ◆ [3.2.2.1: Situations that Require Hand Hygiene](#)
- ◆ [3.2.3.4: Prevention of Exposure to Blood and Bodily Fluids](#)
- ◆ [3.3.0.1: Routine Cleaning, Sanitizing and Disinfecting](#)

¹ 42 U.S.C. § 9858c(c)(2)(I) (2015).

² Child Care and Development Fund, 45 C.F.R. § 98.41 (2016).

³ Child Care and Development Fund, 45 C.F.R. § 98.44 (2016).

- ◆ [5.1.1.5: Assessment of the Environment at the Site Location](#)
- ◆ [5.2.1.1: Ensuring Access to Fresh Air Indoors](#)
- ◆ [5.2.8.1: Integrated Pest Management](#)
- ◆ [5.2.9: Prevention and Management of Toxic Substances](#)
 - [5.2.9.1: Use and Storage of Toxic Substances](#)
 - [5.2.9.2: Use of a Poison Center](#)
 - [5.2.9.3: Informing Staff Regarding Presence of Toxic Substances](#)
 - [5.2.9.4: Radon Concentrations](#)
 - [5.2.9.5: Carbon Monoxide Detectors](#)
 - [5.2.9.6 Preventing Exposure to Asbestos or other Friable Materials](#)
 - [5.2.9.7: Proper Use of Art and Craft Materials](#)
 - [5.2.9.8: Use of Play Dough and Other Manipulative Art or Sensory Materials](#)
 - [5.2.9.9: Plastic Containers and Toys](#)
 - [5.2.9.10: Prohibition of Poisonous Plants](#)
 - [5.2.9.11: Chemicals Used to Control Odors](#)
 - [5.2.9.12: Treatment of CCA \[Chromate Copper Arsenate\] Pressure-Treated Wood](#)
 - [5.2.9.13: Testing for Lead](#)
 - [5.2.9.14: Shoes in Infant Play Areas](#)
 - [5.2.9.15: Construction and Remodeling](#)
- ◆ [6.2.1.1: Play Equipment Requirements](#)

Why Is It Important to Children?

Children are much more vulnerable than adults to exposures of hazardous materials because their bodies are developing; they eat more, drink more, and breathe more in proportion to their body size; and their behavior, such as crawling and hand-to-mouth activity, can expose them more to chemicals and infectious diseases (U.S. Environmental Protection Agency, n.d.). Many types of infectious germs may be contained in human waste (urine, feces) and body fluids (saliva, nasal discharge, tissue and injury discharges, eye discharges, blood, and vomit) (American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care and Early Education, 2019a)

There are more than two million human poison exposures reported to poison centers every year. Children younger than 6 years account for more than half of those potential poisonings. The substances commonly involved in children's poison exposures are cosmetics and personal care products, cleaning substances, and medications (American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care and Early Education, 2019a). Exposure to a toxic substance can occur if certain chemicals are inhaled or ingested or contact the skin. The phone number 800-222-1222, the universal

number for all 55 poison control centers in the United States, should be clearly posted near telephones and added to teachers' cell phones in the event an accidental poisoning occurs.

Carbon monoxide is a deadly, colorless, odorless, poisonous gas; you cannot see, taste, or smell it. Young children are especially vulnerable to the effects of carbon monoxide because of their smaller bodies. Children process carbon monoxide differently than adults, may be more severely affected by it, and may show signs of poisoning sooner. In 2017, poison control centers reported 3,248 cases of carbon monoxide exposure in children 19 and under. (Safe Kids Worldwide, n.d.). Carbon monoxide is produced by the incomplete burning of various fuels, including coal, wood, charcoal, oil, kerosene, propane, and natural gas. Using a carbon monoxide detector is the only way to identify whether this substance is at a dangerous level. (American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care and Early Education, 2019b).

Lead is a neurotoxin. Even at low levels of exposure, lead can cause reduction in a child's IQ and attention span, and result in reading and learning disabilities, hyperactivity, and behavioral difficulties. Lead poisoning has no cure. These effects cannot be reversed once the damage is done, affecting a child's ability to learn, succeed in school, and function later in life. Other symptoms of low levels of lead in a child's body are subtle behavioral changes, irritability, low appetite, weight loss, sleep disturbances, and shortened attention span (Advisory Committee on Childhood Lead Poisoning Prevention, U.S. Centers for Disease Control and Prevention, 2012; U.S. Environmental Protection Agency, 2011). The sources of lead can be any of the following: water impacted by pipes that are made of lead or copper, soil, flaking paint chips, and toys.

How Do States Establish Requirements?

Key Findings from the 2017 Child Care Licensing Study

Findings from the [2017 Child Care Licensing Study](#), a large-scale research study of child care licensing requirements for child care centers, family child care homes (FCCHs), and group child care homes (GCCHs), show commonly found requirements related to hazardous materials (ECQA Center, 2020a, 2020b, 2020c). "Percent of states" and "states" refer to data from all 50 states and the District of Columbia.

- ◆ Eighty percent of states require **hazardous materials** be stored out of the reach of children in licensed child care centers. Ninety-one percent of states have the same requirement for FCCHs; and 92 percent of states have it for GCCHs.
- ◆ Twenty-five percent of states require child care centers to conduct **environmental tests** in for toxic substances, such as lead, carbon monoxide, and asbestos. More states have these requirements for FCCHs (34 percent) and GCCHs (29 percent).

Examples of State Licensed Child Care Requirements

The following tables provide links to state licensing requirements from **North Carolina, Washington, Florida, and Oklahoma** related to handling and storing of hazardous materials. These examples do not include all states that have these requirements but are meant to represent a range of approaches states have taken in their regulations.

Links to the full text of state and territory licensing regulations for child care centers, FCCH, and GCCHs are found in the [National Database of Child Care Licensing Regulations](#).

Child Care Center Requirements

North Carolina

Chapter 9 – *Child Care Rules* (September 2019)

https://ncchildcare.ncdhhs.gov/Portals/0/documents/pdf/D/DCDEE_Rulebook.pdf

10A NCAC 09 .0509 Learning Environment

10A NCAC 09 .0604 Safety Requirements for Child Care Centers

Washington

Chapter 110-300, *Washington Administrative Code, Foundational Quality Standards for Early Learning Programs* (November 2019)

<https://apps.leg.wa.gov/WAC/default.aspx?cite=110-300>

110-300-0165 Safety requirements.

110-300-0250 Private septic systems.

110-300-0260 Storage of hazardous and maintenance supplies.

Family Child Care Home Requirements

Florida

Family Day Care Home and Large Family Child Care Home Handbook (May 2019)

<https://www.myflfamilies.com/service-programs/child-care/docs/FamilyChildCareHomeLicensingHandbook.pdf?d=2020-3-25>

7.2 Toxic Substances, Hazardous Materials and Poisonous Items

Oklahoma

Licensing Requirements for Family Child Care Homes and Large Child Care Homes (January 2018)

<http://www.okdhs.org/OKDHS%20Publication%20Library/86-104.pdf>

Section 86. Home environment

Section 97. Fire safety

Examples of State License-Exempt Child Care Requirements

States have exemptions in law or regulation that define the types of center-based facilities and home-based providers that are not required to obtain a state license to operate legally. Most states allow some exempt providers to receive CCDF funding. And while exempt providers are not subject to the regulatory requirements set forth by the licensing agency, the CCDF final rule⁴ requires states and territories to have health and safety requirements in 11 different topic areas for all providers participating in the CCDF subsidy program, as well as preservice and ongoing training on those topics.⁵

The following table provides examples from **Arizona** and **New Mexico** of requirements for license-exempt programs about the handling and storing hazardous materials. These examples do not include all states that have these requirements but are meant to represent a range of approaches states have taken in establishing requirements for license-exempt programs.

⁴ Child Care and Development Fund, 45 C.F.R. § 98.41 (2016).

⁵ Child Care and Development Fund, 45 C.F.R. § 98.44 (2016).

License-Exempt Child Care Requirements

Arizona

Article 52. Certification and Supervision of Family Child Care Home Providers (March 2019)

http://apps.azsos.gov/public_services/Title_06/6-05.pdf

R6-5-5203. Initial Certification: The Home Facility

New Mexico

Part 2 Requirements Governing Registration of Non-Licensed Family Child Care Homes, Chapter 17 Non-Licensed Child Care (October 2016)

<http://164.64.110.134/parts/title08/08.017.0002.pdf>

8.17.2.22 Health and Safety Requirements

Where Can I Find More Information?

2017 Child Care Licensing Study

The ECQA Center, in partnership with the National Association for Regulatory Administration, has conducted a large-scale research study of child care licensing provider and facility requirements and licensing agency policies every three years since 2005. The [2017 Child Care Licensing Study](#) looks at licensing requirements for child care centers, family child care homes, and group child care homes and licensing agency policies in all 50 states and the District of Columbia for 2017. The ECQA Center (2020a, 2020b, 2020c) released three research briefs about trends in child care licensing that describe changes in licensing requirements and policies by comparing the findings from the 2017 study with findings from previous child care licensing studies.

- ◆ [Trends in Child Care Center Licensing Requirements and Policies for 2017: Research Brief #1](#)
- ◆ [Trends in Family Child Care Home Licensing Requirements and Policies for 2017: Research Brief #2](#)
- ◆ [Trends in Group Child Care Home Licensing Requirements and Policies of 2017: Research Brief #3](#)

Healthy States: Health and Safety Training Toolkit

The [Healthy States: Health and Safety Training Toolkit](#), by the National Center on Early Childhood Health and Wellness, provides up-to-date research and science-informed resources, including online modules, webinars, and other materials. Its purpose is to inform and train program-level staff in all early childhood education settings.

The toolkit also gives a summary of the health and safety requirements in the CCDBG Act of 2014 and provides links to CFOCB and CFOC.

Additional Resources

- ◆ [Caring for Our Children Basics Health and Safety Standards Alignment Tool for Child Care Centers and Family Child Care Homes](#) (2016), by the National Center on Early Childhood Quality Assurance, provides a simple format for states and territories to compare their current early childhood program requirements and standards against the recommended health and safety standards in CFOCB.

- ◆ [Developing and Revising Child Care Licensing Requirements](#) (2017), by the National Center on Early Childhood Quality Assurance, presents steps for developing and revising child care licensing requirements based on several states' successful practices.
- ◆ [Child Care Licensing Tools and Resources](#) (n.d.), a page of the [Early Childhood Training and Technical Assistance System](#) website with tools and resources about child care licensing designed to help states and territories improve their practices, strengthen provider requirements, and develop the skills of licensing staff.

References

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- National Center on Early Childhood Quality Assurance. (2020c). Trends in group child care home licensing requirements and policies for 2017: Research brief #3. <https://childcareta.acf.hhs.gov/resource/trends-group-child-care-home-licensing-requirements-and-policies-2017-research-brief-3>
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