

Environments impact children's health

Did you know that children are more at risk from exposures to harmful substances than adults? Children drink more water and breathe more air relative to their body size than adults do. Additionally, behaviors that are common in children, such as crawling or hand-to-mouth, can expose them to more chemicals. Because children are still growing and developing, exposures to harmful substances can have long-term impacts.

Many children spend large amounts of time in child care centers, making it important to take action to make these spaces safe from harmful substances.

Four key elements to consider for an environmentally safe child care location

- Former uses of the site that might have left harmful substances: Not all past site use will present a problem for potential child care locations. Identifying sites with a problematic past use that might produce harmful substances is critical to protecting children.
- 2. Migration of harmful substances from nearby properties: Contamination can come from a source nearby, such as a gas station or dry cleaner, and migrate onto the child care site through air, water, or soil.
- 3. Presence of naturally occurring harmful substances: Naturally occurring contamination, such as arsenic or uranium in soil or groundwater, can be as hazardous as contamination from human activities.
- **4. Access to safe drinking water:** Clean drinking water is essential for children's health. Drinking water can get contaminated through various sources and activities, such as old plumbing or use of fertilizers.

What is Choose Safe Places?

The Choose Safe Places (CSP) program is a new initiative to protect children from harmful exposures to chemicals while attending child care centers.

The CSP program works with child care providers to ensure child care centers are located in areas free of harmful substances, such as lead, arsenic, or volatile organic compounds.

To learn more about the CSP program visit bit.ly/choosesafeplaces.

Consider filling out the Property Checklist to make sure you are choosing an environmentally safe location for children!

Completing this checklist will help you identify and address common concerns at or near your proposed child care center.

More information on the four key elements

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• Former uses of the site

Contaminants can stay on a site long after the activities that caused the contamination have stopped.

Knowing what a property was used for in the past will help identify potential contaminants. For example, a building where manufacturing occurred may be contaminated or a property used as a landfill could have chemicals in soil or water. Just because a property was used for something previously does not mean it is not suitable for a child care center, but these situations should be further evaluated.

Lead is a common contaminant in older buildings because lead paint was commonly used until it was banned in 1978.



Helpful Resources

Division of Waste Management Site Locator Tool: The NC Department of Environmental Quality's Site Locator Tool is an interactive map that provides access to currently available information about hazardous waste sites. <u>https://deq.nc.gov/</u> <u>about/divisions/waste-management/</u> waste-management-rules-data/wastemanagement-gis-maps

Local Officials: Local tax or geographic information system (GIS) offices may have property records that may help identify past use of a site. Additionally, local zoning and planning offices may have information on a property's history.

2 Migration of harmful substances from nearby properties

Chemicals can sometimes move through the air, water, and soil to neighboring buildings or properties, therefore it is important to observe nearby sites and activities that might create environmental exposures. Hazardous waste sites, dry cleaners, nail salons, and gas stations are some potential nearby activities to be aware of.

Additionally, sometimes chemicals can travel through groundwater and then volatilize, or become gases, and enter buildings or homes above. This is known as vapor intrusion, and some of these chemical vapors can be harmful when present in indoor air.

Helpful Resources

Division of Waste Management Site Locator Tool: The NC Department of Environmental Quality's Site Locator Tool is an interactive map that provides access to currently available information about hazardous waste sites. <u>https://</u> deq.nc.gov/about/divisions/wastemanagement/waste-management-rulesdata/waste-management-gis-maps

US Environmental Protection Agency:

The US Environmental Protection Agency has information on what vapor intrusion is and how it may impact you at www.epa.gov/vaporintrusion.

3 Presence of naturally occurring harmful substances

Naturally occurring contamination comes from substances already in the environment, rather than from chemicals or other hazardous materials used or manufactured by humans. Radon is one of those naturally occurring contaminants. Radon seeps into homes or businesses from the rock under the building's foundation.

In addition, arsenic and other metals can occur naturally. These metals may be present in soil or groundwater and may require further evaluation.

Helpful Resources

North Carolina Radon Program: The NC Department of Health and Human Services' Radon Program has information on how to test for radon, ordering test kits, how to mitigate radon, and an interactive map of radon testing throughout the state at http://www.ncradon.org.

4 Access to safe drinking water

Drinking water that is piped into your home, school, or office comes from either a public water supply or a private well. Knowing about issues that can affect water quality is important for good health. Lead, nitrate, and bacteria are common water contaminants that can affect children's health.

Public water systems are regulated by state and federal laws to ensure drinking water safety. You can find out more about what's in your water system from your Consumer Confidence Report at <u>www.epa.gov/ccr</u>.

Unlike public water systems, the protection and maintenance of private wells are the responsibility of the owner. We at the Division of Public Health recommend testing for common well concerns, such as nitrate, arsenic, and bacteria. Also make sure you follow the Division of Child Development and Early Education regulations for your facility.

Helpful Resources

DEQ Public Water Supply:

The NC Department of Environmental Quality has information on public water supplies throughout the state at <u>https://deq.nc.gov/about/</u> <u>divisions/water-resources/</u> <u>drinking-water</u>.

NC Division of Public Health: We have information on

maintaining a private well, including testing and potential well water contaminants at https://epi.publichealth.nc.gov/ oee/programs/wellwater.html.

Questions?

If you have questions about completing the checklist, please contact the Occupational & Environmental Epidemiology Branch at (919) 707-5900 or nchace@dhhs.nc.gov.

If you have questions about the child care licensing process, please visit <u>https://ncchildcare.ncdhhs.gov</u> or contact the Division of Child Development and Early Education at (919) 814-6300

What happens next?

After you complete the checklist, return it to the NC Department of Health and Human Services. Our staff will review the information you have provided and contact you^{*} with your personalized response.

If you have any questions, please contact us at (919) 707-5900 or <u>nchace@dhhs.nc.gov</u>.

* Make sure you provide your contact information on the checklist so we are able to respond.

Instructions for filling out the Property Checklist

We can help you evaluate your potential location!

The voluntary checklist collects information about how the property for your potential child care center was used in the past and what is currently near the property. We can use this information to help identify whether harmful substances may be present at this potential location and provide guidance on actions you can take, if needed, to best protect the children you will care for.

The questions cover the four key elements for environmentally safe child care locations. Please answer the questions on the Property Checklist to the best of your ability. The following people may be useful in completing this checklist:

- Current property owner
- Local health department. You can find your local health department information at <u>www.ncdhhs.gov/divisions/</u> public-health/county-health-departments
- City/county planner or zoning office
- · City/county engineer or building department

You may complete the checklist online at: bit.ly/choosesafeplaces

Disclaimer: Responses to this checklist are provided as general guidance only and to increase overall safety awareness. This information is not intended to constitute legal or medical advice and you should use it at your own risk. The North Carolina Department of Health and Human Services (NCDHHS) accepts no responsibility or liability for damages arising from use of this information. If a more thorough investigation of the property is warranted, the user should seek the advice of appropriate professionals.



In North Carolina, about 250,000 children are enrolled in over 4,400 licensed child care centers.





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