



DRINKING WATER IN CHILD CARE CENTERS & SCHOOLS

NORTH CAROLINA

State Policy Profile

Access to safe and appealing drinking water in child care and schools is a key strategy to build healthy habits that children will use for life to maintain a healthy body weight and to support overall health.

RESEARCH METHODS: This issue brief summarizes state-level policies that govern drinking water access and quality in licensed child care centers and public school buildings. Findings reflect laws and regulations in effect as of June 2017. The following state-level policies were reviewed for relevant provisions:

- Child care licensing regulations
- School building standards
- School nutrition standards
- School sanitation standards
- School facilities inventory requirements
- School joint purchasing provisions
- Food safety codes
- Plumbing codes
- Childhood lead poisoning prevention program regulations

CHILD CARE CENTERS

Access to Drinking Water

Is there a general state policy requiring that children be provided drinking water?

Yes. Licensed child care centers must make drinking water “freely available to children of all ages.”¹ Drinking water is to be provided via “drinking fountains or individual drinking utensils.”² The NC Division of Child Development’s Child Care Center Handbook further states:

- Water must be easily accessible for children who can drink by themselves. Children who cannot drink without help must be offered water regularly throughout the day.
- Water should be offered to all children more frequently in hot weather and after and during vigorous play.
- Make sure water is available indoors and outdoors.³

How many drinking fountains are required?

Child care centers must comply with the North Carolina Plumbing Code.⁴ The current version of the North Carolina Plumbing Code (2012) requires 1 drinking fountain per 500 children.⁵

Are there requirements for drinking fountain maintenance and cleanliness?

Yes. Sanitation regulations for child care centers require that all drinking fountains shall be “kept clean” and have adequate pressure “so that an individual's mouth does not come in contact with the nozzle and so that water does not splash on the floor.”⁶ Outdoor drinking fountains must be “constructed to protect the spout from contamination.”⁷

Water Quality

Is routine water quality testing of taps and fountains used to supply drinking water required?

No

How is water quality from a private water supply, e.g. a well, monitored?

Child care centers using a private water supply must test their water in order to obtain a child care center license and annually as part of their sanitation inspection.

For child care centers with a private water supply, e.g. a well, in order to obtain a child care center license their water supply “must be tested by and meet the requirements of the Commission for Public Health.”⁸

Private water supplies are subject to ongoing oversight through the sanitation inspection process.⁹ Annual testing of a private water supply is required: “A water sample shall be collected...and submitted to a state certified laboratory for bacteriological analysis annually if the child care center is not served by a community water supply.”¹⁰ In addition, “[o]ther tests of water quality, as indicated by possible sources of contamination, may be collected by the Department [of Environment and Natural Resources].”¹¹

How is water quality addressed in food safety provisions applicable to child care centers?

Solder used in food service equipment must be non-toxic and corrosion resistant. North Carolina regulates food safety at child care centers under its sanitary code.¹² To protect children from water contaminants, any solder used in food service equipment “shall be comprised of approved, non-toxic; corrosion resistant materials.”¹³

Are there any provisions relevant to water filters?

Yes. The sanitary code requires that water filters and water conditioning devices used for food service “shall be cleaned and maintained in accordance with the manufacturer's instructions.”¹⁴

How does the NC Childhood Lead Poisoning Prevention Program address potential exposure to lead in drinking water?

Child-occupied facilities, such as child care centers, can be subject to investigation and water samples may be taken to determine if there is a lead poisoning hazard (lead equal to or in excess of 15 ppb). The Childhood Lead Poisoning Prevention Program responds to cases of children under six years of

age with elevated blood lead levels and can conduct an investigation when it “reasonably suspects” that a lead poisoning hazard exists.¹⁵ Drinking water containing lead equal to or in excess of 15 ppb is considered a lead poisoning hazard.¹⁶ The primary focus of the program is on private residences, but child-occupied facilities such as child care centers and schools in structures built prior to 1978 can be subject to water testing and investigation. Remediation of lead poisoning hazards is required.¹⁷

SCHOOLS

Access to Drinking Water

How does state school nutrition policy address access to drinking water?

There is no standalone nutrition requirement that drinking water be made available to students free of charge. Bottled water is required in schools with beverage vending. The state school nutrition law requires that “[b]ottled water products are available in every school that has beverage vending.”¹⁸

Are cups for drinking water required in food service areas?

No

Can school food service purchase drinking water supplies like cups through a purchasing collaborative?

Yes. North Carolina law permits units of local government like local boards of education to enter into joint purchasing contracts with one or more other units of local government in North Carolina or any other state.¹⁹

What are the requirements for drinking fountains in schools?

Schools are required to follow the North Carolina Plumbing Code requirements for drinking fountains.²⁰ The current version of the North Carolina Plumbing

Code (2012) provides the following requirements for drinking fountains in school buildings:

Setting	No. of drinking fountains required per occupant²¹	Additional requirements
K-12 School Buildings	1-100	
K-12 Theaters, Cafeterias, Gymnasiums	1-500 occupants	Fixtures used to satisfy the general school building requirement may be used for these settings so long as they are within 200 ft. of the entrance of the theater cafeteria or gym, and cannot be locked off during afterschool use of the theater, cafeteria or gym. ²²
K-12 Outdoor stadiums and bleachers	1-1000	

Water Quality

Is routine water quality testing of taps and fountains that convey drinking water required?

No

Is plumbing system maintenance in general regulated?

Yes. The sanitary code for schools requires that “fountains shall be provided with adequate water pressure, properly regulated, kept clean and in good repair.”²³

The food code requires that plumbing systems in food service areas be “maintained in good repair.”²⁴

How is the school water supply addressed?

The sanitary code for schools and the state food code require that schools get their water from an approved source, meaning a public water supplier or a private water supply that meets water quality standards. The sanitary code for schools requires that all schools have a water supply from “an approved source and shall be adequate and of a safe, sanitary quality.”²⁵ For schools that use a private water supply, e.g. a well, “a sample of water from a private or public non-community water supply serving a school shall be collected by the sanitarian and submitted at least once a year to the Division of Laboratory Services or other laboratory certified by the Department to perform bacteriological examination.”²⁶

School food service areas also must comply with the North Carolina Food Code (modeled after the 2009 FDA Food Code). Drinking water must be from an approved source that is a public water system or a nonpublic water system, e.g. a well, that is “constructed, maintained, and operated according to law.”²⁷ All drinking water must meet “National Primary Drinking Water Regulations and state drinking water quality standards.”²⁸ Nonpublic water systems must be sampled and tested for safety annually.²⁹

Are there any provisions relevant to water filters?

Yes, in food service areas. The food code requires that water treatment devices used in food service areas such as water filters “shall be scheduled for inspection and service, in accordance with manufacturer's instructions and as necessary to prevent device failure based on local water conditions.”³⁰

How does the NC Childhood Lead Poisoning Prevention Program address potential exposure to lead in drinking water at schools?

Child-occupied facilities, such as schools, can be subject to investigation and water samples may be taken to determine if there is a lead poisoning hazard (lead equal to or in excess of 15 parts per billion). The Childhood Lead Poisoning

Prevention Program responds to cases of children under six years of age with elevated blood lead levels and can conduct an investigation when it “reasonably suspects” that a lead poisoning hazard exists.³¹ Drinking water containing lead equal to or in excess of 15 parts per billion is considered a lead poisoning hazard.³² The primary focus of the program is on private residences, but child-occupied facilities such as child care centers and schools in structures built prior to 1978 can be subject to water testing and investigation. Remediation of lead poisoning hazards is required.³³

Information Gathering Systems

Does North Carolina conduct a statewide school facilities inventory?

Yes, every five years. State law requires that every five years, local boards of education submit a Facility Needs Assessment (long range plan) to the State Board of Education.³⁴ These long range plans estimate funds needed for all aspects of school facilities including on-site wells and plumbing systems.³⁵

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For additional information please visit www.phaionline.org for the summary report: **Developing State Policy Recommendations for Safe Drinking Water Procurement in Child Care Centers and Schools**

¹ 10A N.C. Admin. Code 9.0901(d) (2017).

² Id.

³ N.C. Dept. of Health & Human Services, Div. of Child Development, Child Care Center Handbook (Chapter 10) 10 (Oct. 2009), http://ncchildcare.nc.gov/providers/pv_childcarehandbook.asp (last accessed July 19, 2017).

⁴ 15A N.C. Admin. Code 18A.2815(b), (f) (2017).

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- ⁵ N.C. Plumbing Code, Table 403.1 (2012).
- ⁶ 15A N.C. Admin. Code 18A.2815(f), (g) (2017).
- ⁷ 15A N.C. Admin. Code 18A.2815(g) (2017).
- ⁸ 10A N.C. Admin. Code 9.0901(d) (2017).
- ⁹ 15A N.C. Admin. Code 18A.2834 (2017).
- ¹⁰ 15A N.C. Admin. Code 18A.2801 (2017).
- ¹¹ 15A N.C. Admin. Code 18A.2815 (2017).
- ¹² 15A N.C. Admin. Code. 18A.2800 (2017).
- ¹³ 15A N.C. Admin. Code 18A.2809 (4) (2017).
- ¹⁴ 15A N.C. Admin. Code 18A.2809 (13) (2017).
- ¹⁵ N.C. Gen. Stat. § 130A-131.9A (2017).
- ¹⁶ N.C. Gen. Stat. § 130A-131.7 (2017).
- ¹⁷ N.C. Gen. Stat. § 130A-131.9C (2017).
- ¹⁸ N.C. Gen. Stat. § 115C-264.2(a)(5) (2017).
- ¹⁹ N.C. Gen. Stat. § 160A-461 (2017).
- ²⁰ 15A N.C. Admin. Code 18A .2406(a) (2017); N.C. State Bd. of Educ. & Dept. of Pub. Instruction, Public Schools of N.C. Facilities Guidelines (rev. Sept. 2014).
- ²¹ N.C. Plumbing Code, Table 403.1 (2012).
- ²² NC Plumbing Code, § 403.9.4. (2012).
- ²³ 15A NCAC 18A .2406(b) (2017).
- ²⁴ N.C. Dept. of Health & Human Servs., N.C. Food Code Manual § **5-205.15 (2012)**.
- ²⁵ 15A N.C. Admin. Code 18A .2405(a) (2017).
- ²⁶ 15A N.C. Admin. Code 18A .2405(b) (2017).
- ²⁷ N.C. Dept. of Health & Human Servs., N.C. Food Code Manual § 5-101.11(2012).
- ²⁸ *Id.*
- ²⁹ N.C. Dept. of Health & Human Servs., N.C. Food Code Manual § 5-102.13 (2012).
- ³⁰ *Id.*
- ³¹ N.C. Gen. Stat. § 130A-131.9A (2017).
- ³² N.C. Gen. Stat. § 130A-131.7 (2017).
- ³³ N.C. Gen. Stat. § 130A-131.9C (2017).
- ³⁴ N.C. Gen. Stat. § 115C-521(a) (2017).
- ³⁵ N.C. Dept. of Publ. Instruction, School Planning Section, 2015-2016 DPI Facilities Needs Survey, <http://www.schoolclearinghouse.org/> (last accessed July 19, 2017).