Please note that this resource has been provided for informational purposes only and is not intended to be legal advice. If you have additional legal questions, you should contact the risk management department of your malpractice carrier and/or consult with a private attorney.

What do the Georgia Board of Dentistry's rules say about infection control?

Rule 150-8-.01 Unprofessional Conduct Defined

(a), Failing to conform to current recommendations of the Centers for Disease Control and Prevention (C.D.C.) for preventing transmission of bloodborne pathogens, and all other communicable diseases to patients. It is the responsibility of all currently licensed dentists and dental hygienists to maintain familiarity with these recommendations, which are considered by the Board to be minimum standards of acceptable and prevailing dental practice.

Rule 150-8-.05 [Effective 7/20/2025] Dental Unit Water Quality

(1) A licensed dentist shall use water for nonsurgical procedures that meets United States Environmental Protection Agency regulatory standards for drinking water of five hundred or less colony-forming units or CFUs/mL.

(2) A Licensed dentist shall be responsible that staff are following dental equipment manufacturer's instructions for use when testing the water delivery system for acceptable water quality. If manufacturer's instructions for use are unavailable, a licensed dentist shall be responsible to ensure that the water delivery system is at acceptable water quality quarterly. A licensed dentist shall be responsible for testing the water delivery system within 30 days of repair or changes to plumbing.

(a) Effective January 1, 2025, all dental unit water lines must be tested quarterly.[1]

1. All water lines for each operatory or dental unit can be pooled as one single sample.
   i. A pooled sample must use an equal amount of water from each water line.
   ii. A pooled sample can have up to ten water lines included.
   iii. The number of water lines pooled into one sample must be documented.
2. All water lines for each operatory or dental unit can be tested individually.

[1] Georgia's administrative procedure act (O.C.G.A. § 50-13-6) indicates that a rule's effective date is 20 days after filing with the secretary of state's office, or a date contained in the rule, whichever is later. The rule's official effective date is July 20th, 2025.

(b) In the event of an unacceptable level of colony-forming units or CFUs, a licensed dentist shall take immediate remedial action. For the purposes of this section, remedial action means any action necessary to reduce the CFUs to five hundred or a lesser number currently recognized by the United States Environmental Protection Agency as acceptable for drinking water.

(c) A licensed dentist shall be responsible for recording the water delivery system testing and maintenance in the form of a log reflecting dates and person or persons conducting the test and reports from an independent testing entity. A licensed dentist shall maintain this documentation for a period of five years.

Rule 150-3-.09 Continuing Education for Dentists

(d), Effective on and after January 1, 2024, two (2) hours of the minimum requirement shall include education and training regarding infection control in the practice of dentistry, which shall include education and training regarding dental unit water lines;

Key documents to gather before beginning to test

- Manufacturer's instructions for use for your specific dental unit
- CDC's Guidelines for Infection Control in Dental Health-Care Settings — 2003
- Organization for Safety, Asepsis and Prevention's (OSAP) White Paper on Dental Unit Water Quality[2]
- GDA's article in the September 2024 edition of Action Magazine
- ADA's Resources on Dental Unit Waterlines
- Wisconsin Department of Health Services: Dental Unit Waterlines Toolkit

What tests should be used?

The rule leaves the type of test up to the discretion of the dental office.

Figure 1. A High-Level summary of CDC Guidance

[2] OSAP is now the Association for Dental Safety. Other sections of this resource will make reference to OSAP for the sake of consistency with the white paper being referenced here.

DENTAL UNIT WATERLINE INFECTION CONTROL

A GUIDE TO DENTAL WATER INFECTION CONTROL FROM:

ADA HuFriedyGroup

Every practice should have a designated **infection control coordinator**

Water used in dental units should have **less than 500 CFU/mL**

Every practice should have a policy & procedure manual for maintaining dental unit waterlines.

Where should they come from?

- CDC, state, and local guidance ✓
- Dental waterline treatment products ✓
- Dental unit manufacturer instructions ✓
- Secondhand knowledge ✗

What should be included?

- Frequency of dental waterlines testing ✓
- Remediation protocol following failed testing (results >500 CFU/ml) ✓
- What to do in the event of a water boil advisory ✓
- Special circumstance protocol (boil-water, extended office closure) ✓

WHICH LINES SHOULD BE REGULARLY TESTED?

- High-speed handpiece(s) lines ✓
- Air/water syringe(s) lines ✓
- Ultrasonic scaler(s) lines ✓
- Unused waterlines ✓

*If these dental unit waterlines have been shocked and a contamination problem persists, source water or reservoirs should be tested

WHEN SHOULD DENTAL UNIT WATERLINES BE FLUSHED?

- According to manufacturers' instructions ✓
- 20-30 seconds after each patient ✓
- 2 minutes at the end of each day ✓
- After the final patient of the day ✓

Additionally, **waterlines should be emptied and dried overnight** to remove as much water as possible.

WHAT TO DOCUMENT WHEN TESTING DENTAL UNIT WATERLINES

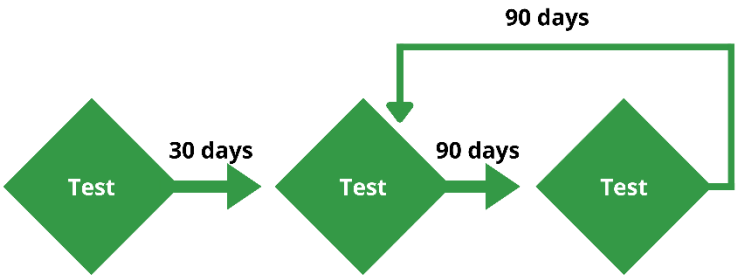
- Test date ✓
- Location (i.e. , chair/operatory #) ✓
- Water source ✓
- Test results ✓
- Waterline maintenance/shock product name ✓
- Waterline maintenance/shock product lot # ✓
- Pooling details* (if samples pooled) ✓
- Name of team member sampling ✓

*Pooling: Sampling from multiple waterlines that is then combined for testing

Source: Centers for Disease Control and Prevention: Dental unit waterline infection control guidance

How often should I test?

Georgia's rule directs dentists and their staff to follow manufacturer's instructions for use, and it requires quarterly testing. Testing must also be done within 30 days of changes to plumbing. Recommended protocols may vary. In the absence of clear direction from manufacturers' instructions for use, OSAP recommends following the directions for use provided by the treatment product manufacturer. OSAP recommends testing every 30 days after device installation or the establishment of new protocols. *After several months of consecutive successful tests, OSAP suggests testing every 3 months is acceptable*.



How do I take a sample and test?

Manufacturers of water tests typically provide detailed instructions for how to perform the test as well as helpful videos and other media with step-by-step demonstrations. Many companies also offer helplines to allow offices to call in and ask questions specific to their situation. Other groups also provide sample protocols and step-by-step guides. A sample of these resources can be found below.

The University of North Carolina: Infection Control Manual – Dental Unit Water Lines

Solmetex: 1-877-207-1551 | https://solmetex.com/education/

ProEdge: 1-888-843-3343 | https://proedgedental.com/learning-center/

Dentisafe: 1-366-688-1400 | https://dentisafe.com/resources/

What steps should I follow to get started?

1. **Review** manufacturers' instructions for use and be sure to follow their recommendations.
2. **Shock First-** Before beginning a new protocol or when changing treatment products, prepare the lines with an appropriate antimicrobial agent. It is commonly recommended that practices shock their lines regularly, particularly when tests exceed 200 CFU / mL.
3. **Treat-** Following a shock, establishing an appropriate treatment protocol helps to maintain the lines.
4. **Test-** Regular monitoring helps ensure water quality problems can be detected and addressed.

My test failed, now what?

Following a failed test, check the manufacturer's instructions. Most manufacturers suggest shocking the waterlines with an appropriate antimicrobial agent and then retesting. If tests continue to fail, further shocks and other troubleshooting may be required. Most testing companies offer a helpline to assist with troubleshooting and other questions.

Commonly recommended troubleshooting steps:

- If working from a pooled sample, check lines individually to isolate the problem.
- Check to be sure office protocols for maintaining water quality and all manufacturer's instructions are being followed.
- Confirm source water is not contaminated and check the unit's water bottle for biofilm accumulation.
- Consider shocking with a different antimicrobial agent.
- If the waterlines remain resistant to treatment over time, the CDC says, "it may be necessary to replace waterlines or other water-bearing components."