Water Management and Compliance in the Dental Office





DentaPure™ Bottle and Municipal Cartridges



Dental Waterline 24-Hour In-Office Test Kit & Mail-In Test Service



VistaTab™ Dental Waterline Cleaner Tablets



Liquid Ultra™ Solution

HuFriedyGroup
The Best In Practice

DUWL Compliance

Protecting your patients, staff and practice

Water flowing through long and narrow dental unit waterlines (DUWLs) can harbor dangerous bacteria. When untreated, or improperly maintained, these contaminated DUWLs can potentially harm your patients, your staff and your practice's reputation.

Effective dental unit waterline maintenance is a key component of an infection control program. Understanding the risk involved with biofilms and contaminated aerosols compels us to remain compliant with treatment protocols.

Criteria for choosing a dental unit waterline treatment system includes ability to control microorganisms and biofilm at required standards, product and labor costs, safety to equipment and the environment, and most importantly, compliance to provide safe, clean dental unit water during treatment.



U.S. CDC (Centers for Disease Control) dental unit waterlines, biofilm, and water quality — general recommendations:

- Use water that meets EPA regulatory standards for drinking water (i.e., <500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water.
- Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the recommended quality of dental water.
- Follow recommendations for monitoring water quality provided by the manufacturer of the unit or waterline treatment product.
- Discharge water and air for a minimum of 20–30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g., handpieces, ultrasonic scalers, and air/water syringes).
- Consult with the dental unit manufacturer on the need for periodic maintenance of anti-retraction mechanisms

Refer to the full guidance here.

Dental Unit Water Quality and the New Georgia State Rule



The new Rule 150.8-.05 goes into effect on **July 20, 2025**.

Here's what the regulation says:

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.

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.

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.

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.

Effective January 1, 2025, all water lines must be tested quarterly.

All water lines for each operatory or dental unit can be pooled as one single sample.

- A pooled sample must use an equal amount of water from each water line.
- A pooled sample can have up to ten water lines included.
- The number of water lines pooled into one sample must be documented.

All water lines for each operatory or dental unit can be tested individually.



Dental Unit Water Quality and the New Georgia State Rule

It's a lot to take in. Partner with HuFriedyGroup to make certain that you remain compliant with the new rule!

A few Important things to note:

Head off the growth of microbial contamination inside your waterlines

- Ensure that you are using a chemical germicide to treat your procedural water. Per the CDC, using "good quality" water alone will do nothing to reduce microbial contamination inside your dental waterlines. HuFriedyGroup has many great DUWL treatment options available.
- Already treating your waterline with a chemical germicide – great! Ensure that you are following the protocol outlined in your product's Instructions for Use (IFU).

Waterline Testing

- Your water sampling technique can make all the difference. Following an aseptic technique during the sampling process brings you one step closer to ensuring the most accurate test results. Need a quick refresher? Refer to our step-by-step **Technique for Obtaining a Water Sample for all dental Treatment water testing** (or see pages 6 and 7).
- Test your waterline utilizing an outside laboratory, or in-office method (see page 5 for HuFriedyGroup waterline testing options).

Remediate failing results

- Shock your waterlines with an EPA registered treatment such as Liquid Ultra™ Solution or VistaTab™ Dental Waterline Treatment Tablets. Plan ahead! Read and understand the shock product Instructions for Use before proceeding with the treatment. Some products require an overnight application or use over the course of a few days.
- Review the Instructions for Use that accompanied your continuous or daily DUWL treatment to ensure that the proper protocols are being followed.
  - If you aren't currently treating your waterlines with a germicide, now is the time to start.

Retest your waterlines following initial remediation

- Ensure that microbial counts are now in line with the Georgia state Rule and CDC guidelines with microbial counts meeting ≤500 CFU/mL.
- If testing failure persists, reach out to HuFriedyGroup Customer Care to speak with our dedicated water support team.

Create and follow a dental waterline maintenance protocol that includes:

- Ensuring that all staff responsible for waterline maintenance are trained on all treatment and test method protocols.
- Documentation of waterline maintenance procedures and test results.

Dental Waterline Testing



The steps you take for infection prevention are important, and that extends to the safety of your dental unit waterlines.

The narrow tubing can be a breeding ground for a variety of dangerous bacteria, and the consequences of inaction can be dire for your patients and your practice. But treatment alone can't provide you the assurance you need. To be confident, you need to know your water is safe and compliant.

HuFriedyGroup offers both mail-in and in-office waterline testing options. Use these test methods in combination as part of a holistic protocol for waterline maintenance.

COMPREHENSIVE SUPPORT

We provide knowledgeable, professional resources and guidance to help you understand your testing results and support your overall water program.

24-Hour In-Office Dental Waterline Test Kit



FEATURES AND BENEFITS

- **Quick Results**—Detects microbial levels that exceed 500 CFU/mL within 24 hours at room temperature.
- **Simple Process**—Collect water samples directly into provided vials, then just seal and shake.
- **Immediate Neutralization**—Agent inside the vial stops action of any antimicrobial used to treat water, ensuring a more accurate result.
- **Easy-to-Read**—Determine pass/fail with clearly identifiable color change results.

In-Office	
24-Hour In-Office Dental Waterline Test Kit - 4 Vials	IMS-1004

The 24-Hour In-Office Dental Waterline Test Kit is for use as a screening tool to provide a pass/fail indication based upon the current EPA standard of ≤500 CFU/mL. If exact bacteria counts are needed, we recommend testing with our Mail-in Dental Waterline Test Service. Reach out to HuFriedyGroup water support with questions.

Dental Waterline Test Service



FEATURES AND BENEFITS

- **Third-Party ISO-Certified Lab**—Testing is conducted by an ISO 17025:2017 accredited laboratory with unbiased results for external validation.
- **Exclusive Platform**—Online member portal provides a single location to track your water samples; retrieve and historically track test results.
- **Simple Process**—Everything that you need – test vials, shipping materials and pre-paid shipping – is included with the kit. Simply collect water samples from your facility and send to the lab.

Mail-In	
Dental Waterline Test Kit, HPC Lab Test - 4 vials	IMS-2004
Dental Waterline Test Kit, HPC Lab Test - 8 vials	IMS-2008
Dental Waterline Test Kit, HPC Lab Test - 16 vials	IMS-2016

Request Your Sample

For a limited time, request your sample of the **24-Hour In-Office Dental Waterline Test Kit.**

Scan for Sample

GET ONE SAMPLE VIAL AT NO COST!



HuFriedyGroup
The Best In Practice

Technique for Obtaining a Water Sample

For all dental treatment water testing

1 Pre-Sampling Preparation

- Read Instructions for Use (IFU) for the product being used.If using an outside lab, remove and freeze ice pack for safe, chilled transport (Length of freezing time dependent on product IFU).

- Select appropriate number of vials/tests based on number of operatories and specific lines in each operatory to be tested.

Label each vial/test using a wet pen (or indelible ink marker) with the treatment room # and specific line to be tested (or label and document per product IFU).

- It is recommended to use one vial/test per line, per treatment room (e.g., 3 vials: one each for AWS, ultrasonic scaler and a waterline handpiece.

If pooling lines:

- A pooled sample must use equal amounts of water from each waterline.
- Should not include more than 10 lines.
- Pooling samples from units in different operatories into one sample is not acceptable.
- Ensure to document which lines are being pooled.

If CFU Counts exceed recommended levels, a pooled sample will not allow identification of line-specific contamination.

Please note: Pooling samples can result in a passing CFU count as samples are diluted when pooled. I.e.: if three lines are under 500 CFU/mL and one line is over 500 CFU/mL, the pooling of these samples may dilute the failing line and provide a passing result.



Perform hand hygiene.

- If using soap and water, follow CDC guidelines.
- If using alcohol-based hand rub, follow product manufacturer IFUs.
- Don disposable treatment gloves.

2 Treatment Room Preparation

- Remove dynamic instruments attached to the dental unit lines to be tested. Follow CDC guidelines for sterilization prior to patient use.
- Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.

If using a metal AWS Tip:

- Remove tip.
- Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.
- DO NOT replace with a metal tip. Draw sample directly from the port.

If using disposable AWS tips (such as the Sparkle™ AWS Tip):

- Remove tip. Wipe contact areas with disinfectant wipe allowing appropriate dwell/contact time per manufacturer IFU.
- Place a new disposable AWS tip on the AWS.

Flush all lines connected to water on the system for two-minutes into a sink or separate container.

- This is necessary as water may become stagnant in the lines - CFU count may not be accurate.
- Compliance with ongoing flushing protocols or continuous waterline treatments (e.g., DentaPure™ Cartridges) will promote more accurate test results.
- It is especially important to flush waterlines that are infrequently used, unused or extra, such as low-speed handpieces, air-water syringes, and ultrasonic scaler ports. These lines create stagnant water (dead legs) and can harbor biofilm and continuously re-contaminate the water system.

Note:

Always follow CDC Infection Control Guidelines for Dental Healthcare Settings.

Technique for Obtaining a Water Sample

For all dental treatment water testing *(continued)*

3 Continue with the water sampling technique that applies to the type of testing you are using (general details provided below). Always defer to your product's Instructions for Use (IFU).

Lab

- Organize UNOPENED vials on clean surface.
- Select vial for first test line.

Remove the cap from the vial. Cap and vial MUST remain in your hand.

- If you are unable to maintain aseptic technique in your hand, the cap may be placed open side up on a clean surface.
- Only remove cap from the vial that you are sampling. To avoid contamination, test tubes should be open for the shortest amount of time possible.
- DO NOT touch the outlet of the waterline or the interior of the collection vial while collecting sample.

Begin filling vials to recommended volume (avg is ⅔ to ¾ full per sampling).

- Best to flow/trickle water down the side of the vial rather than squirting it directly into the bottom of the vial. Follow manufacturer IFU.
- Disruption of the dehydrated neutralizer (if used) by a forceful flow of water can skew the test results.

Repeat above steps for remaining vials.

Ship water samples.

- Place filled and labeled vials into the shipping container provided by the testing laboratory.
- Apply frozen ice pack as directed.
- Complete shipping label information appropriately.
- Arrange for pick-up/shipment with the recommended time limits as directed by the IFU.

4 Record Keeping

Maintain a log that includes the following:

- Sample date
- Treatment rooms/chairs
- Line identification
- Clinician name
- Pass/fail
- CFU count

For in-office testing, include an Image of the test post-incubation (pre-incubation image is also recommended with a vial-style in-office test).

Consult your state dental board for the required retention of dental unit waterline testing records.

Note: In the event of a failed CFU test (e.g., Count >500 CFU mL), consult your waterline treatment manufacturer or HuFriedyGroup for remediation assistance.

In-office (paddle or vial style)

- Organize UNOPENED tests on clean surface.
- Select test for first line to be tested.

Separate paddle from plastic sampler case or remove the cap from the first vial to be filled. Hold the paddle by the handle, or vial cap in your hand.

- If you are unable to maintain aseptic technique by holding the vial cap in your hand, you may place it open side up on a clean surface.
- Only remove paddle or vial cap from the test being sampled. To avoid contamination, paddle or open vial should be exposed for the shortest amount of time possible.
- DO NOT touch the outlet of the waterline or the interior of the sampler case, or vial while collecting sample.

Begin filling sampler case, or vial to volume recommended per the IFU.

- Best to flow/trickle water down the side of the sampler case/vial rather than squirting it directly into the bottom of the sampler case/vial. Follow manufacturer IFU.
- Disruption of a neutralization solution (if present) may be caused by a forceful flow of water and can potentially skew the test results.

If using a Paddle-style Test:

- Firmly place the paddle back into the plastic case and place the case down horizontally (filter side down) for time specified per the IFU.
- Remove the paddle from the water sample and shake the excess water from the paddle. Empty the sampler case and firmly replace paddle.
- Incubate the water test sampler filter side down at room temperature 68-77°F (20-25°C) for time period specified in the IFU.
- Examine the filter to perform colony counts and record results.
- Compare the paddle with the instruction sheet that accompanied the water test kit to determine if action is required.

If using a Vial-Style Test:

- Place the cap onto the vial to seal.
- Shake the vial to incorporate any media deposited at the bottom of the vial.
- Incubate the water test at room temperature in an upright position for time specified by the IFU.
- Examine the vial and compare the water color against the provided color chart to determine if action is required.

Repeat above steps for remaining test kits.

What Does a Successful Waterline Maintenance Protocol Look Like?

PREPARATION

Set Testing Interval

Follow guidance provided by the equipment manufacturer; the DUWL treatment manufacturer; or in the absence of guidance, follow Organization for Safety, Asepsis and Prevention (OSAP) guidance.

Educate

Ensure staff has researched and selected testing/ treatment products that contain protocols that staff can comply with prior to implementation.

IMPLEMENTATION

Test

Follow selected test product Instructions for Use (IFU). Contact product manufacturer with questions.

Follow an aseptic technique for water sampling to avoid contamination.



HuFriedyGroup Waterline Testing Solutions

Re-test failed lines a few days after shocking

Re-read the IFU accompanying the selected test method prior to re-testing (even if this method for testing had been used previously)

Pass?

Yes

No

Shock

Follow selected shock product IFU. Contact product manufacturer with questions.

Shock failed lines ASAP.

Run shock through every line connected to water on the unit, including infrequently, or unused lines.



HuFriedyGroup Waterline Shock Solutions

Treat

Utilize a waterline maintenance treatment.

Follow selected product IFU. Contact product manufacturer with questions.

If passing test was the result of shocking with no regular waterline maintenance treatment currently in place, begin use of selected waterline maintenance product following that product IFU



HuFriedyGroup Waterline Treatement Solutions

CONTINUATION

Document

Document maintenance, test results/remediation, and training.



HuFriedyGroup Documentation Solution

Educate

Ensure that all staff responsible for waterline testing and treatment are regularly trained/re-trained on protocols.All staff should be aware of protocol documentation location.

Set training schedule:
Who is being trained and how • Frequency • New hire; temporary staff; rotating staff • Re-fresher for staff currently performing tasks

For more information call **1-800-Hu-Friedy** or contact your authorized **HuFriedyGroup representative.**
For question or concerns, contact **the water team at** WaterSupport@Hu-Friedy.com.
For question or concerns, contact **DUWL Technical Support 1-800-hu-friedy** | Care@hu-friedy.com

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