|  |  |
| --- | --- |
| **CENTER OPERATING PROCEDURE** | Center Name: |
| **Note:** A center operating procedure (COP) to ensure dental unit waterline quality is not required by Job Corps. However, following the operating procedure will eliminate the risk of adverse health effects to oral health personnel and patients from water that is not appropriately treated. |
| Effective Date: |
| Page No.: **#** of **#** |
| PRH Reference: PRH 2.3, R17(b) |
| For more information, consult: [CDCs Oral Health – Dental Unit Water Quality](https://www.cdc.gov/oralhealth/infectioncontrol/faqs/dental-unit-water-quality.html) |
| Title: **Dental Unit Water Line (DUWL) Safety Operating Procedure** |

# PURPOSE

1. To provide guidance for proper and regular maintenance of dental unit water lines.
2. To help ensure that water from the dental unit waterlines entering patients’ mouths meets the regulatory standard for safe drinking water established by the Environmental Protection Agency and recommended by the CDC.

# PROCEDURES

1. **Regular Maintenance of Dental Unit Water Line Water Safety Steps Throughout the Day**

**Responsible Oral Health Personnel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. At the beginning of each day and after the dental unit waterlines are used, clean and disinfect the dental unit according to its manufacturer’s instructions: \_\_\_\_\_\_
2. Flush the water lines at least 2 minutes at the start of each day before the dental handpieces or dental instrument are placed on the dental unit waterlines.
3. Flush the water and air lines 20-30 seconds in between each patient to remove free-floating bacteria.
4. Purge the waterlines at the end of the day to empty all water in the line to remove as much stagnant water as possible and minimize the wet environment in which bacteria love to grow.
5. Be alert to signs that may indicate biofilm formation including musty odor, cloudiness, or particulates in the water and clogging of lines.
6. For surgical procedures, use sterile irrigating solutions such as sterile or saline water. Use appropriate devices for delivering solutions such as a bulb syringe or single-use disposable products.
7. **Shocking (Cleaning) Waterline Steps**

**Responsible Oral Health Personnel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Shocking is the process of using a strong disinfectant in your dental unit waterlines (not to be confused with evacuation lines) to clean out bacteria and biofilm that has built up over time. Shocking removes what daily treatments cannot. To start, always check the manufacturer’s instructions for your operatory equipment and shock product. Different chair manufacturers may suggest different shock protocols and different treatment products call for different techniques and frequencies.

1. Shocking the waterlines must not be done when there is any patient care taking place because the shocking solutions should never come into contact with patients.
2. Before shocking, remove anything autoclavable (this may include couplers).
3. Select the following shocking solution to run through the lines that is recommended by the dental unit/dental chair manufacturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Follow the dental unit/dental chair manufacturer’s instructions for the shocking product used: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. As long as the same cleansers and disinfectants are used and if the test results indicate < 500 CFU/mL, shocking will be done on a quarterly basis.
6. Shock the water lines after a failing test result with microbial counts of > 500 CFU/mL.
7. **Dental Unit Waterline Treatment/Maintenance Steps**

**Responsible Oral Health Personnel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Use the following daily (or continuous) low-level antimicrobial product recommended by the dental unit manufacturer: [tablets, cartridges, straws, low level liquid antimicrobial and indicate where they are placed, and enter the instructions for their use, frequency of use, and length of effectiveness] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. **Dental Unit Waterline Testing Steps**

**Responsible Oral Health Personnel: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Routine dental waterline testing is a part of a consistent waterline maintenance protocol.

Whenever new products are used to shock the dental unit waterline, test the dental waterlines monthly until the passing test results are consistent. Then test quarterly.

1. Type of test [in-office or mail-in test]: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Steps for the test: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Frequency of tests: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Develop a log containing the signature/classification of the person responsible for testing, the date the test results received, and the test results.
5. Keep the test results filed for at least 5 years.
6. If a line fails a test:

Step 1: Initiate an immediate shock.

Step 2: Confirm that maintenance procedures are being followed.

Step 3: Retest as soon as possible.

Step 4: If the test passes, test monthly until there are passing results for 2 consecutive months.

Step 5: Then, continue to test monthly or reduce to quarterly testing cycles so long as you maintain consistent, passing results.

**References:**

1. [Dental Unit Waterline Fact Sheet](https://www.osap.org/topics-duwl-dental-unit-waterline-fact-sheet) | Organization for Safety, Asepsis and Prevention (OSAP.org)
2. [Complete Guide to Dental Unit Waterline Compliance](https://proedgedental.com/library/dental-unit-waterline-compliance/) | ProEdge (August 23, 2022)
3. [Dental Unit Waterlines](https://www.ada.org/resources/research/science-and-research-institute/oral-health-topics/dental-unit-waterlines) | American Dental Association (ada.org)