

Waterline Workflow

Disclaimer: This document is intended for informational purposes only. It does not replace, override, or supplement the responsibility of each licensed dental professional to understand and comply with the laws and regulations governing their practice. Clinicians must review and follow the Utah Dental Practice Act (or the applicable Practice Act in their state) and ensure that all services provided are within the scope of their license. This resource is not a legal guide and should not be relied upon as such.

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OUTBREAKS

California Case:

- 1,082 children were potentially exposed
- 71 children became infected
- Median symptom onset: 85 days after treatment

Singh J, O'Donnell K, Nieves DJ, Adler-Shohet FC, Arrieta AC, Ashouri N, Ahuja G, Cheung M, Holmes WN, Huoh K, Tran L, Tran MT, Pham N, Zahn M. Invasive *Mycobacterium abscessus* Outbreak at a Pediatric Dental Clinic. *Open Forum Infect Dis*. 2021 Apr 15;8(6):ofab165. doi: 10.1093/ofid/ofab165. PMID: 34113683; PMCID: PMC8186244.

Georgia Case:

- Nontuberculous mycobacteria
- 24 patients at a pediatric office in Georgia
- Ages 4 and 8
- Required hospitalization or surgery
- Permanent tooth loss, hearing loss, facial nerve palsy and incision fibrosis

Hatzenbuehler LA, Tobin-D'Angelo M, Drenzek C, Peralta G, Cranmer LC, Anderson EJ, Milla SS, Abramowicz S, Yi J, Hilinski J, Rajan R, Whitley MK, Gower V, Berkowitz F, Shapiro CA, Williams JK, Harmon P, Shane AL. Pediatric Dental Clinic-Associated Outbreak of *Mycobacterium abscessus* Infection. *J Pediatric Infect Dis Soc*. 2017 Sep 1;6(3):e116-e122. doi: 10.1093/jpids/pix065. PMID: 28903524.

Italy case of legionella 82-year-old woman passed away from legionella contracted from DUWL.
Legionella from water flosser

CDC: Non surgical Procedures

Water must meet the Environmental Protection Agency (EPA) regulatory standards for drinking water (≤ 500 colony forming units [CFU]/mL)

FLUSH

Why: Flushing reduces the bacterial concentration in stagnant water

Procedure: Flush between patients 20-30 seconds and 2 minutes at the beginning of the day

DAILY TREATMENTS

Why: Impeding microbial growth inside the lines every day

Products for Daily Treatment Options:

[A-Dec ICX Renew](#)

[Sterisil straw](#) **

[DentaPure Cartridge](#)

[Citricil maintenance tablets](#)

[BluTab](#)

[Powerscaler filter](#)

TESTING

Why: Test at least quarterly to see if your daily care is working. When you fail, shut down the operatory, treat, retest and reopen when it passes.

Test Options:

[Clear Confirm Hager](#) In office same day, 15 minute results

[Solmetex](#) in office and mail in options

[ProEdge](#) in office and mail in options

[HuFriedy](#) in office and mail in options

[Agenics](#) in office and mail in options

[Dentisafe](#) mail in options

SHOCK

A dental shock treatment is an intensive chemical disinfection of dental unit waterlines (DUWLs) designed to remove or drastically reduce established biofilm. It is not routine daily maintenance, it's a corrective or periodic deep-cleaning procedure.

Products to Shock Your Lines With:

Check with your manufacturer recommendations first. If not recommendation then here are the options below.

[A-Dec ICX Renew](#)

[CleanStream](#)

[VistaTab](#)

[Citrisil](#)

[Liquid Ultra From Crosstex](#)

Diluted Bleach-possibly corrosive, off label usage

*In order to treat your waterlines you must have a water bottle system and not be on straight city water. Your unit can be retrofitted for this.

**If using a treatment straw you'll need a dummy straw to shock

Resources:

<https://www.ada.org/resources/ada-library/oral-health-topics/dental-unit-waterlines?m>

<https://stacks.cdc.gov/view/cdc/6743>

<https://odha.on.ca/wp-content/uploads/2020/01/10.-OSAP-White-Paper-Dental-Water-Quality.pdf>

