

Dental Unit Waterlines

Q. I'm really concerned since I read recently about children getting infections from dental unit waterlines. Does this really happen?

A. There have been two recent outbreaks in which children became ill as a result of contaminated dental water. The dental community knows that if dental water isn't maintained and monitored properly, the health of patients is at risk. Let me tell you what we do in our office to keep our water safe (describe practice's protocol).

Q. I read a while ago that a dental unit waterline infection caused a patient to die. Is that true?

A. The dental unit waterline case you mention happened when an 80-year-old Italian patient acquired Legionnaire's disease after visiting her dentist for surgery. Unfortunately, the infection was traced back to an untreated dental unit waterline.

Q. What exactly is a dental unit waterline?

A. Dental unit waterlines are the long, narrow tubes that run to the dental chair (unit). These waterlines carry water to the dental equipment we use to treat and clean your teeth.

Q. How can the water be bad? Isn't it from the same place as the water we drink at home from the taps?

A. Yes, the water is from the public water supply is treated, usually with chlorine, to control the growth of bacteria. As the tap water passes though the clinic plumbing and into the dental unit, the amount of chlorine present is reduced. The long narrow plastic tubes in dental equipment provide a place where bacteria can easily attach and grow, contaminating the water passing through them which can be discharged into a patient's mouth from dentist drills and water syringes. In most cases, most of these bacteria do not cause disease in healthy people. Rarely however, disease causing bacteria like the ones involved in the recently reported cases in Georgia, California and Italy can be present.

Q. What do you do to stop germs from building up in the dental unit waterline and causing infections?

A. We treat our dental unit waterlines on an ongoing basis with products specially designed for this purpose. We also test the water regularly as recommended by the CDC, to make sure that everything is working and that germs aren't able to build up in the tubing.

Q. What do you use to treat the water? Is it safe to use?

A. We follow the equipment manufacturer's instructions to safely and effectively treat the water. We use only treatment products that have been reviewed and tested, to be sure they are effective at preventing germs from building up in the waterlines but are also safe to be used around patients. These products are also reviewed by the Environmental Protection Agency (EPA) and/or Food and Drug Administration (FDA).

Q. Is it safe to use water from treated dental unit waterlines on me if I'm pregnant?

A. The treatments we use are safe for use for everyone including pregnant women.

Q. What is OSAP?

A. OSAP stands for the Organization for Safety, Asepsis and Prevention. OSAP is a non-profit organization dedicated to infection control in dentistry that's been around for over 30 years, and provides us with educational materials, updates and training.

For more information, please consult the following resources:

Centers for Disease Control and Prevention. Guidelines for Infection Control in Dental Health-Care Settings – 2003. Available at: http://www.cdc.gov/mmwr/PDF/rr/rr5217.pdf.

Centers for Disease Control and Prevention. Notes from the Field: Mycobacterium abscessus Infections Among Patients of a Pediatric Dentistry Practice – Georgia, 2015. Available at: http://www.cdc.gov/mmwr/volumes/65/wr/mm6513a5.htm.

Centers for Disease Control and Prevention. Recommendations from the Guidelines for Infection Control in Dental Health-Care Settings – 2003. Available at: http://www.cdc.gov/oralhealth/infectioncontrol/pdf/

Centers for Disease Control and Prevention. Summary of Infection Prevention Practices in Dental Settings. Basic Expectations for Safe Care. Available at: http://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care.pdf.

Organization for Safety, Asepsis and Prevention. DUWLToolkit available at www.osap.org/?page=Issues_DUWL. Other information at www.osap.org

 $American \ Dental \ Association. \ DUWL \ information \ available \ at \ www. ada. or g/en/member-center/or al-health-topics/dental-unit-waterlines$

US Air Force Dental Evaluation and Investigation Service. Information available at http://www.airforcemedicine.af.mil/DECS/

Ricci, ML, Fontana, S, Pinci, F, Fiumana E, Pedna MF, Farolfi P, Sabattini MA, Scaturro M. Pneumonia associated with a dental unit waterline. The Lancet. 2012;379(9816):684.



