

Dental Unit Water Quality

What is biofilm?

What can be done to ensure dental unit water quality?

Dental health care personnel should use water that meets environmental protection agency regulatory standards for drinking water (i.e., ≤ 500 colony forming units (CFU)/mL of heterotrophic water bacteria) for non-surgical dental treatment output water. Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the quality of dental water. Commercial devices and procedures designed for this purpose include:

- Self-contained water systems (e.g., independent water reservoir) combined with chemical treatment (e.g., periodic or continuous chemical germicide treatment protocols).
- Systems designed for single-chair or entire-practice waterlines that purify or treat incoming water to remove or inactivate microorganisms.
- Combinations of these methods.

For surgical procedures, sterile saline or sterile water should be used as a coolant/irrigant. Conventional dental units cannot reliably deliver sterile water even when equipped with independent water reservoirs containing sterile water because the water-bearing pathway cannot be reliably sterilized. Appropriate delivery devices (e.g., bulb syringe; sterile, single-use disposable products; or sterile water delivery systems that bypass the dental unit by using sterile single-use disposable or sterilizable tubing) should be used to deliver sterile water during surgery.

Should dental unit water quality be monitored?

Can contaminated dental unit waterlines transmit disease?

What is a boil-water advisory?

References

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