

Bone grafts from human or animal origin	(Titanium) implant bodies	Dental restorations
Membranes from human or animal origin	Cover screws	Pins
	Synthetic bone grafts	Posts
	Synthetic membranes	Implant abutments

### **How Do All Personnel Know It's Clean/Sterile?**

There have been cases of dental personnel inadvertently using dental instruments that didn't go through sterilization. The instruments were wrapped for sterilization, but never entered the autoclave. Although dental personnel are supposed to check the physical monitors (external tape and internal chemical monitor), it isn't difficult to imagine overlooking these monitors. One means to help personnel verify sterility is for the assistant to leave the internal monitor in plain view, so the dentist, upon entering the room, can see the monitor. After cleaning a treatment room, some indicator of cleaning is helpful to prevent a patient being seated in an unclean room. Among ideas to demonstrate the room is ready...place a clean, folded patient napkin on the patient chair.

### **Waterlines:**

The Environmental Protection Agency (EPA), American Public Health Association and the American Water Works Association have defined the standard for US potable water – not to exceed 500 colony forming units (cfu) per milliliter of water. The Centers for Disease Control and Prevention (CDC) and the American Dental Association (ADA) have recommended dental unit water line (DUWL) deliver water should meet the U.S. potable water standard – not to exceed 500 cfu/ml of water. Dental services should routinely test water coming out of the DUWLs to meet this standard, have an action plan to meet this standard and to address a DUWL that exceeds this standard.

Waterline testing is to be accomplished by a laboratory certified (EPA or state) to perform environmental testing. VA Microbiology Laboratories perform clinical tests, and have not been approved for environmental testing.

**The following is the recommended waterline protocol for VA Dental Services:**

1. Dental unit water lines (DUWL) must be accessible for treatment – daily and for shocking, as needed. That requires a water bottle (reservoir) on the unit or some means to access the DUWLs.
  - a. Replace/change any units with direct connection to municipal water.
2. Provide an ongoing water treatment program. There are multiple choices. Among the most common are those that involve placing a tablet in the reservoir and those that have a reservoir draw-tube which treats the water.

### Testing protocol

- a. Test each line separately
- b. Remove all handpieces and any other equipment reprocessed by SPS before drawing samples from the lines. Air-water syringe tips should be removed. The air-water syringe itself, if not changed between patients (e.g., if barrier + disinfection is accomplished by dental personnel), should remain on the line while drawing the sample.
- c. Quarterly
- d. Use a lab certified to do water testing
- e. Report results to the Infection Control Committee

### Action Levels

- f. If >200 cfu but <500 cfu
  - i. Shock all lines in the unit (i.e., the dental treatment room)
    1. Leave the air-water syringe on the line if not reprocessed by SPS
  - ii. Line can stay in service
  - iii. No retest needed after shocking
    1. Maintain the unit's place in the quarterly testing sequence
- g. If >500 cfu
  - i. Take line out of service (the >500 cfu line only – other sub-500 cfu lines may stay in service)
  - ii. Shock all lines to unit per manufacturer's instructions
    1. Leave the air-water syringe on the line if not reprocessed by SPS
  - iii. Retest the >500 cfu line before returning it to service
- h. If shocking and retesting again yields >500 cfu
  - i. Line remains out of service
  - ii. Contact dental equipment manufacturer and waterline treatment manufacturer for recommendations on options, such as repeat shocking or line replacement

### Feed Water (water supplied to the reservoir)

- i. Generally tap, distilled, de-ionized or sterile water is acceptable (see manufacturer's recommendations). Also, at least one manufacturer has a sequential cartridge system which produces treated water for the reservoir.