Heterotrophic Plate Count
For Dental Offices

SHL is able to provide sample collection containers for heterotrophic plate count testing to help evaluate your water quality. After discussions with the University of Iowa College of Dentistry, we recommend a minimum of three (3) samples at the following times and locations: baseline building sample (not in patient area, e.g., sink in restroom), dental line sample after 2 minute flush, and dental line sample after first patient and after 20 second flush. The dental hand piece should be removed from the line when flushing.

Collection and Handling
- Freeze the ice pack provided in cooler THE DAY BEFORE COLLECTION.
- Remove any aeration devices from the spigot of the faucet.
- Run water for a minimum of 2 minutes to flush the line.
- Reduce flow in order to fill container without splashing.
- Open and handle bottle aseptically so as to not contaminate inside bottle or lid.
- Fill bottle with water up to the shoulder (within ½ inch of top) of the container.
- Seal and label bottle correctly with NAME and SITE LOCATION.
- Fill out the sampling information form provided.

Shipping Instructions
- Samples must arrive at the laboratory within 24 hours of collection and cool (< 10 °C). Ship samples immediately after collection, and avoid Friday, weekend, and holiday mailings. UPS and Fed Ex (ground) are examples of acceptable shipment options to ensure rapid delivery within Iowa borders.
- Do not send payment with sample; you will be billed.

Interpretation
The recommended heterotrophic plate count result for public drinking water quality is <500 colony-forming units per milliliter. Most chlorinated public water supplies should be able to provide this level of water quality. The American Dental Association has suggested a guideline for heterotrophic plate count of <200 colony-forming units per milliliter. If your numbers are higher than these recommendations, you may wish to evaluate your preventive maintenance practices, overall distribution water quality (e.g., any contaminated treatment device in the line, back-siphoning events), and dental unit sterilization practices, etc. A good discussion of issues surrounding dental unit waterline quality is listed below: Guidelines for Infection Control in Dental Health Care Settings. I

Contact Information
- Environmental Microbiology section for technical questions: 319/335-4500
- Client Services staff for bottle orders: 319/335-4500
- Guidelines for Infection Control in Dental Health Care Settings, CDC, 12/19/2003, MMWR 52 (RR-17)