

Study finds: Bib Chain Potential Source of Cross-Contamination

Surveys show that bib chains and clips are on the radar as potential sources of contamination. A bib chain can 'grab' onto hair or accumulate patient's sweat, make-up, hair products, neck acne, dermatitis, etc in the crevices and inaccessible areas of the holder. Yet not many dental offices have taken steps to protect their patients. Separate studies have concluded that dental bib chains and clips do carry a cross-contamination risk and that risk should not be ignored.

The University of North Carolina at Chapel Hill School of Dentistry found¹ that possibly dangerous, opportunistic pathogens do exist on patient bib chains. 1 out of 5 bib clips in the study showed a measurable presence of staphylococci, streptococci, pseudomonas, and the enteric bacteria, E.coli. Microorganisms found on the bib clips in the UNC study were not just from skin but also from saliva and plaque. Further, bib chains tested in the hygiene environment were found to have equal growth as those in an operative, perio endo environment.

Noel Kelsh RDH was alerted to the potential issue when she noticed her colleagues swirling bib chains in their hands as they chatted in the office lunch room and also used their clips for makeshift lunch bibs. Noel was concerned enough to try and find out exactly what risks she was taking using that bib chain. She gathered bib chains that were reported to be disinfected with hospital grade sterilizer, cultured them and plated them out to see what kind of growth occurred². Noel's conclusion was that bib clips can be sources for cross-contamination especially clips that have many hidden reservoirs or inaccessible areas.

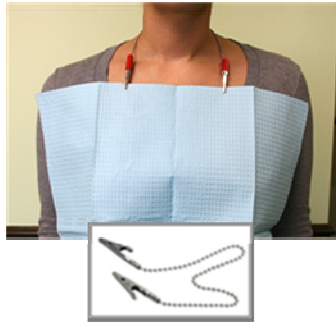
Although the high "yuck" factor of bib chains by itself should be reason enough to re-think bib chains, the potential risk of cross contamination should be an important concern for a dental office. There are probably three options an office can consider to reduce the risk. The first option is to disinfect, however, crevices and hidden areas would be difficult to reach plus the process could be messy, cumbersome and not to mention you'd be handling the chain. The second option is to sterilize the chain between patients. This would take care of the contamination risk but it takes a lot of time and additional product is needed. Another option is a disposable bib holder. They could be discarded with the paper bib and no cleaning would be necessary.

Studies prove that pathogens exist on chains. You have no way to predict which patient or which chain is harboring the bacteria. There is a need to be more diligent when handling and cleaning bib chains. Three solutions exist that will reduce the risk. When weighing the best solution you should ask yourself two questions: 1) which solution reduces the risk the most and 2) which option is practical and efficient?

¹ UNC at Chapel Hill School of Dentistry Oral Microbiology Lab. Data summary and Analyses on file with DUX Dental.

² N. Kelsch RDH. *Don't Clip that Crud on Me*. RDH. January 2010.

A Used Patient Bib Chain

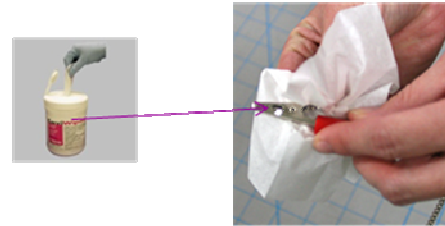


Sterilization:
ultrasonic, pouch,
auto/Chemclave

Cleaning Options



Disinfectant:
meticulously wipe
clip/chain. Be sure to
get hidden areas



Bib-Eze: single use
discard with bib
into trash



When choosing an option you should consider these 2 things:

1. Which option is easiest/most efficient for me to perform?
2. Which option gives me the best chance at avoiding contamination?