Environmental Safety Technologies, Inc.



Dr. Miller's 1-5-5 Faucet and Showerhead Flushing Procedure to Reduce *Legionella* (or other Pathogens)

Patient room hand sinks and showers can experience pathogen proliferation, including *Legionella*), (especially if the temperature of the hot water is not sufficiently hot), leading to disease transmission to patients. For *Legionella* control, temperatures at the faucets and showerheads are **recommended to be 124 F**, or as close as possible depending on code for scald protection. One action that is often helpful in reducing biofilm accumulation (and *Legionella* persistence), is an increased flushing of these hand sink faucets and showerheads, in order to take advantage of:

• **Increased physical flushing** of the biofilm, physically reducing the loosely adhered outer layer of the biofilm organic material and bacteria.

• Maximum hot temperatures (as close to 124 F as possible), which may be lethal (or at least unfavorable) for bacterial growth and survival.

• **Maximum free chlorine** disinfectant that has remained available from the city water as it enters the building. The **cold water** will be the source of highest free chlorine levels.

Dr. Miller's 1-5-5 Site Flushing Procedure:

Step 1- The Hot Water (HW) faucet or showerhead should be turned on so that maximum temperature hot water (measure the temperature) is blasting as forcefully as possible for <u>one</u> (1) minute

Step 2- The HW faucet or showerhead should then be turned down to a slower pencil-thick flow, but maintaining the hot temperature for an <u>additional five (5) minutes</u>.

Step 3- Next, the **HW should be turned** <u>off</u>, and the <u>cold water</u> (CW) should be turned on to a **pencil thick flow**, exposing the remaining biofilm to chlorine (measure the free chlorine, if strips are available) for <u>five (5) minutes</u>.

Step 4- Finally, the **CW faucet** or **showerhead should be turned off**, leaving the residual free chlorine remaining in the water of the faucet or showerhead plumbing and fixture when leaving the room.

<u>Note</u>: The same **1-5-5** Flushing Procedure can be used for other potable water sites (eyewashes, drinking fountains, etc.) as well.