

Note on hot water systems in health care

by Lynita Docken, former S&B Plumbing Program Manager.

I have recently been asked, "When additions are planned for an existing hospital, is it necessary to heat or chemically treat the hospital's entire hot water supply?" The answer is, "No." May 1, 2003, code revisions put into place requirements that hot water distribution systems be installed and maintained for bacterial control, Comm 82.50(3)6. The plumbing code is not retroactive, so only the installation of "hot water distribution systems" after May 1, 2003, are required to comply. A "hot water distribution system" is that portion of the water distribution system from a water heater to the connection of a fixture supply connector, plumbing fixture, plumbing appliance, water-using equipment, or other piping system. If a hospital is planning on adding fixtures, rooms, or floors without adding a heater to create a complete hot water distribution system, no disinfection requirements apply. Similarly, if a water heater is being replaced, these rules would not apply unless the water distribution system downstream was also being replaced. By the way, when the new hot water temperature or treatment requirements are called for, there are a good number of options for a facility to comply, including these:

- Increasing the water temperature at the heater and relying on thermostatic mixers to protect patients from scalding,
- Adding a liquid chlorine injection system,
- Adding an ultraviolet light,
- Treating the system with another approved method of disinfection,
- Developing a periodic maintenance plan for heat or chemical eradication, or
- An option may be as simple as contacting the water purveyor to ascertain whether the residual chlorine in the public water supply is at or above two mg./L. Questions regarding hot water distribution systems in hospitals, community based residential facilities, inpatient hospices, or nursing homes may be directed to the plumbing plan reviewers.