



## **CROSS CONNECTION CONTROL PROGRAM**

### **Medical Facilities Backflow Prevention Requirements**

#### **BACKGROUND**

Medical facilities such as hospitals, medical offices, dental offices, veterinary offices, medical/biotech laboratories, convalescent/long-term care hospitals and kidney dialysis centers often utilize water in ways that could potentially contaminate both the internal and public drinking water systems in the event of a backflow incident. Backflow is the undesirable reversal of flow of non-potable water or other liquids, gases or substances into the potable water distribution system through a cross-connection.

#### **COMMON POTENTIAL CROSS-CONNECTION HAZARDS IN MEDICAL AND DENTAL CLINICS**

These types of equipment items are associated with medical facilities:

- Autoclaves, sterilizers and other types of cleaning equipment
- X-ray and imaging machines
- Dental chair/hand-piece units
- Central vacuum pumps
- Autopsy and surgical extraction units
- Specimen tanks
- Laboratory sinks
- Kidney dialysis machines
- Physical therapy or whirlpool tubs
- Bed pan washing units
- Deionized water systems
- Laundry machines
- Fire sprinkler systems
- Landscape irrigation systems
- Building heating and cooling systems (e.g. cooling towers, heat exchangers, boilers)

In some cases, these equipment items are stand-alone and do not have direct connections to the potable water supply. An example would be a table-top autoclave that is manually filled with water. In other cases, however, equipment items have direct connections to a potable water line. During a backflow incident, contaminants such as blood, urine, sewage, chemicals can flow back into the potable water supply system and subject both patients, employees, and the public at risk.

#### **WHERE AND WHEN BACKFLOW PREVENTION ASSEMBLIES ARE REQUIRED**

To prevent contamination of the potable water supply from these cross connection hazards, backflow prevention assemblies (BPAs) are installed on the water line supplying water to the equipment item. BPAs are required to be tested annually by San Mateo County certified Backflow Prevention Assembly Testers.



SAN MATEO COUNTY HEALTH  
**ENVIRONMENTAL  
HEALTH SERVICES**

**Environmental Health Services**  
**Groundwater Protection Program**  
2000 Alameda de las Pulgas, Suite #100  
San Mateo, CA 94403  
Phone:(650) 372-6200 | Fax: (650) 627-8244  
[smchealth.org/gpp](http://smchealth.org/gpp)

## **SAN MATEO COUNTY CROSS CONNECTION CONTROL PROGRAM**

The San Mateo County Environmental Health Division works with a number of water purveyors within the County to implement and enforce a cross connection control program as required by the State Water Resources Control Board, Division of Drinking Water. As a part of the San Mateo County Cross Connection Control Program, surveys and/or inspections are conducted at facilities or services that may pose a threat to public health and safety. To eliminate the cross connection or threat to public health, BPAs may be required to be installed at the water service connection as well as internally in order to abate health hazards.

If a medical facility has equipment items that have connections to the potable water supply, Environmental Health will require a BPA at each water meter service in order to protect the public water supply. Internal BPA protection may be required by Environmental Health depending upon the hazard and population served.

For more information about the San Mateo County Cross Connection Control Program, please call (650) 372-6200 or visit [smchealth.org/crossconnection](http://smchealth.org/crossconnection)