“What is your system doing to minimize the dangers associated with cross connections and backflow?”

We enacted a very strict “Cross-Connection Control Ordinance” several years ago. It is very important to get all new construction and renovation work up to the new code. With regard to the pre-ordinance establishments, the city required businesses with the highest hazard potential to come into compliance within a specified period of time. City engineers help with the design of systems, making compliance more affordable. We are now looking into establishing a revolving loan program to help establishments afford the more expensive installations. The program will lend money set aside in a special fund and collect the payment over a five year term, with modest interest. The payments are billed with taxes. Within a few years, the fund will replenish itself with payments from earlier borrowers and self-fund itself.

Frank DeOrio  
Director of Municipal Utilities  
City of Auburn, New York

For small systems, Washington’s Drinking Water Program focuses on technical assistance and training, as well as review and approval of cross connection control programs as part of Small Water System Management Programs. The state is also poised to distribute Cross Connection Control Guidance for Small Water Systems, a detailed reference manual.

As a state approved satellite management agency and an owner/operator of multiple small systems, education has been a valuable tool in teaching our customers about the potential health risks associated with cross connection. Many of our customers and non-customers alike come to us for installation and testing due to our focus on cross-connection awareness. We have managed to economically justify the training and certification of our three operators as either cross-connection specialist and/or backflow assembly testers by offering our services outside our customer base.

Lisa Raysby, P.E.  
Water Department  
Peninsula Light Company  
Gig Harbor, Washington

The Kansas City Board of Public Utilities (BPU) provides a manual titled Rules and Regulations Pertaining to Water Service, which has the required backflow prevention method. Sections of the manual include: ordinance, approved backflow prevention assemblies, a list of certified testers, and approved water meter and backflow drawings.

BPU issues two types of permits: one for new services and one for the maintenance of existing services. Architects and engineers (plumbers for existing services) must submit plans in accordance with the general rules and regulations to obtain a permit. When performing emergency work, the plumber must notify the Water Operations Department by telephone prior to starting any work and secure the permit on the next regular working day. Permits must be returned to the BPU no later than 10 days after inspections are made, with a complete report of all work done, the date the work was completed, and the signature of an inspector. Inspections are required on all work performed under a permit.

Dennis Mason  
Water Operations Specialist  
Board of Public Utilities  
Kansas City, Kansas

Most states have cross-connection control regulations in place. If a system discovers a cross connection, it is required to remove it, or install a control device, usually at the expense of the user. In Colorado, for example, each system is required to have a cross-connection control plan in place, and be checking commercial and industrial users for cross connections and controls. Annual testing of devices is required. The state usually checks to see if such a plan is in place during routine sanitary surveys, or only about once every five years. Training of operators and testers is routinely given each year.

Jerry Biberstine  
Principal Engineer  
National Rural Water Association  
Duncan, Oklahoma