

**Erie County General Health District  
Construction Programs Division,  
Plumbing Inspection Program**

**Subject: Public Information Article**

Public health officials have long been concerned about cross-connections and backflow connections in plumbing systems and in public drinking water supply distribution systems. Such cross-connections, which make possible the contamination of potable water, are ever-present dangers. One example of what can happen is an epidemic that occurred in Chicago. Old, defective, and improperly designed plumbing and fixtures permitted the contamination of drinking water. As a result, 1,409 people contracted amebic dysentery; there were 98 deaths. This epidemic and others resulting from contamination introduced into a water supply through improper plumbing, made clear the responsibility of public health officials and water purveyors for exercising control over public water distribution systems and all plumbing systems connected to them. This responsibility includes advising and instructing plumbing installers in the recognition and elimination of cross-connections. Cross-connections are the links through which it is possible for contaminating materials to enter a potable water supply. The contaminant enters the potable water system when the pressure of the polluted source exceeds the pressure of the potable source. This action may be called backsiphonage or backflow. The most common cross-connection found in residential homes is the garden hose. When not protected by a hose bibb vacuum breaker it can be extremely hazardous. They are left submerged in swimming pools, lay in elevated locations (above the sill cock) watering shrubs, chemical sprayers are often attached to hoses for weed-killing, etc., hoses are often left laying on the ground which may be contaminated with fertilizer, cesspools, and garden chemicals. For more information on cross-connections and backflow, visit our web site at [www.eriecohealthohio.org](http://www.eriecohealthohio.org) or for a no cost residential cross-connection and backflow survey of your home call the **Erie County General Health District at 419-626-5623 ext.206.**