

Partial List of Plumbing Hazards

Fixtures with Direct Connections

Description

- Air conditioning, air washer
- Air conditioning, chilled water
- Air conditioning, condenser water
- Air line
- Aspirator, laboratory
- Aspirator, medical
- Aspirator, weedicide and fertilizer sprayer
- Autoclave and sterilizer
- Auxiliary system, industrial
- Auxiliary system, surface water
- Auxiliary system, unapproved well supply
- Boiler system
- Chemical feeder, pot-type
- Chlorinator
- Coffee urn
- Cooling system
- Dishwasher
- Fire standpipe or sprinkler system
- Fountain, ornamental
- Hydraulic equipment
- Laboratory equipment
- Lubrication, pump bearings
- Photostat equipment
- Plumber's friend, pneumatic
- Pump, pneumatic ejector
- Pump, prime line
- Pump, water operated ejector

- Sewer, sanitary
- Sewer, storm
- Swimming pool

Fixtures with Submerged Inlets

Description

- Baptismal fount
- Bathtub
- Bedpan washer, flushing rim
- Bidet
- Brine tank
- Cooling tower
- Cuspidor
- Drinking fountain
- Floor drain, flushing rim
- Garbage can washer
- Ice maker
- Laboratory sink, serrated nozzle
- Laundry machine
- Lavatory
- Lawn sprinkler system
- Photo laboratory sink
- Sewer flushing manhole
- Slop sink, flushing rim
- Slop sink, threaded supply
- Steam table
- Urinal, siphon jet blowout
- Vegetable peeler
- Water closet, flush tank, ball cock
- Water closet, flush valve, siphon jet

Illustrations of Backsiphonage

The following illustrates typical plumbing installations where backsiphonage is possible.

Backsiphonage

Case I (Fig. 44)

A. Contact Point: A rubber hose is submerged in a bedpan wash sink.

B. Causes of Reversed Flow: (1) A sterilizer connected to the water supply is allowed to cool without opening the air vent. As it cools, the pressure within the sealed sterilizer drops below atmospheric producing a vacuum which draws the polluted water into the sterilizer contaminating its contents. (2) The flushing of several flush valve toilets on a lower floor which are connected to an

undersized water service line reduces the pressure at the water closets to atmospheric producing a reversal of the flow. **C. Suggested Correction:** The water connection at the bedpan wash sink and the sterilizer should be provided with properly installed backflow preventers.

Backsiphonage

Case 2 (Fig. 45)

A. Contact Point: A rubber hose is submerged in a laboratory sink.

B. Cause of Reversed Flow: Two opposite multi-story buildings are connected to the same water main, which often lacks adequate pressure. The building on the right has installed a booster pump.

FIGURE 44. Backsiphonage (Case 1).

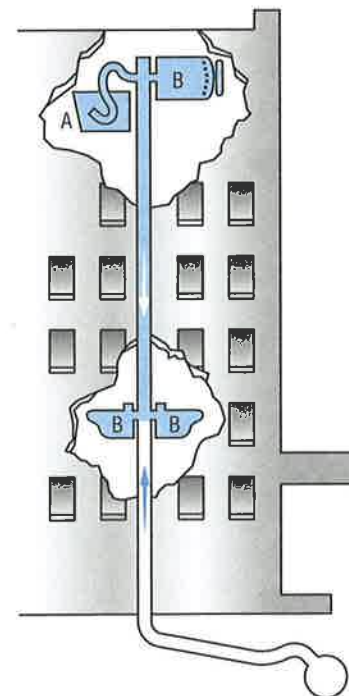


FIGURE 45. Backsiphonage (Case 2).

