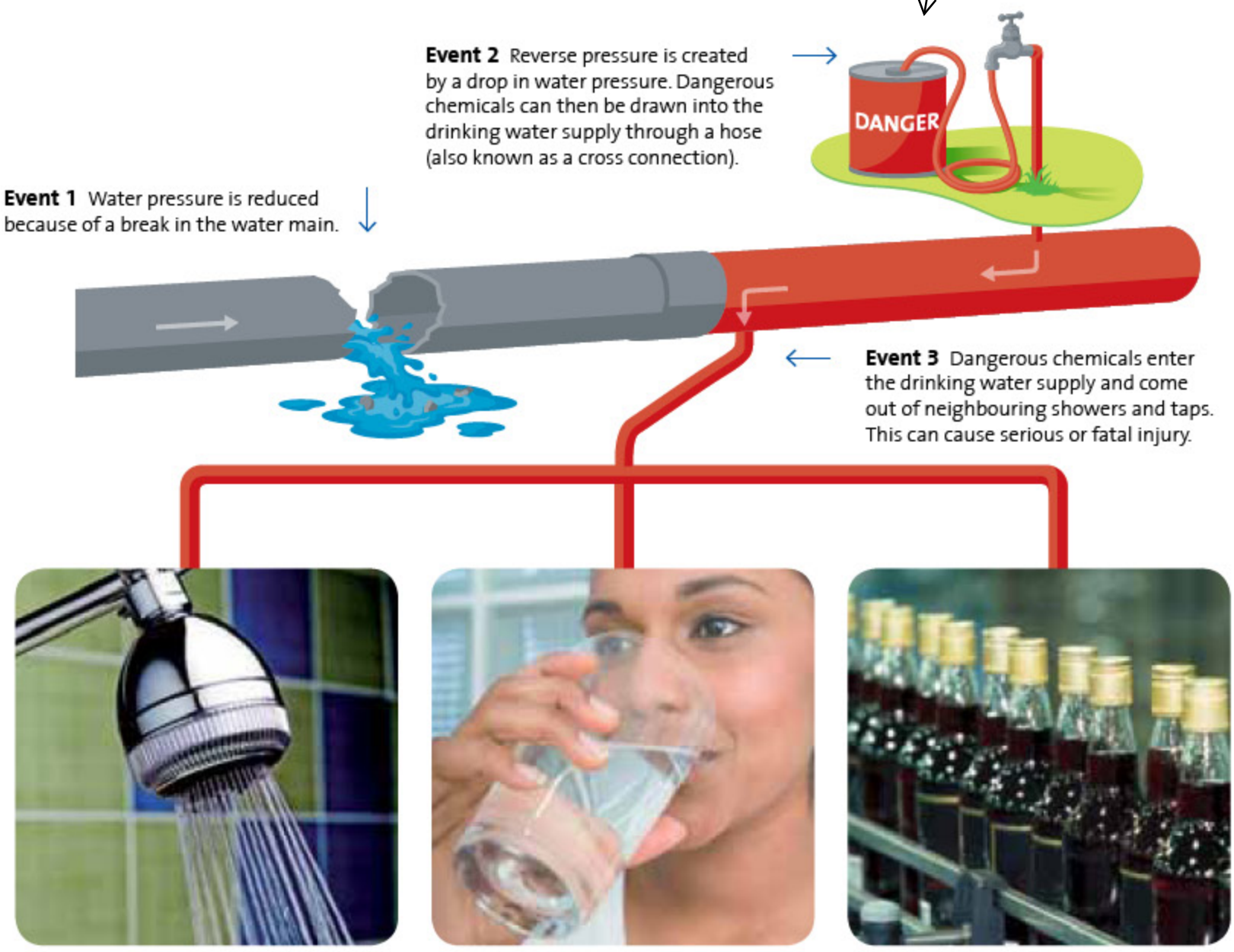
FOR EXAMPLE

YOUR GREASE TRAP

How backflow can occur

Backflow can occur through a series of events, as outlined below:



Event 1

Water pressure is reduced in the water main

If the water pressure is not maintained, there is a chance the water could be drawn backwards into the water main.

Water pressure can be affected by:

- a break in the water main
- pumping water from the main water supply during a fire
- using water at a higher pressure than the pressure supplied
- heavy water use downstream, reducing water pressure upstream
- water outlet at a property being higher than the water main, causing constant back pressure.

Event 2

Reverse pressure is created by a drop in water pressure

This draws dangerous chemicals into the drinking water supply through a cross connection.

A number of different property types can pose a risk to public health through cross connections. These include:

- chemical plants
- shopping centres/malls
- market gardens
- golf courses/sporting ovals
- smash repairers
- metal processing plants
- residential properties with greywater treatment systems.

Event 3

Dangerous chemicals entering the drinking water supply

If this water is used, occupants could be seriously or fatally injured.

What device do I install?

The hazard rating of the processes carried out on your property will determine what type of device you need to install. You will need to consult a licensed plumber with backflow prevention accreditation to determine what your property needs.

The three hazard ratings identified by *AS/NZS 3500.1* are:

- **High hazard** – any condition, device or practice which, in connection with the water supply system, has the potential to cause death.
- **Medium hazard** – any condition, device or practice which, in connection with the water supply system, could endanger health.
- **Low hazard** – any condition, device or practice which, in connection with the water supply system, is a nuisance but does not endanger health or cause injury.

Types of backflow prevention devices

Hazard rating – high

Reduce pressure zone device

Two independent action non-return valves arranged to be force-loaded to the closed position, with a relief valve positioned between the non-return valves arranged to be force-loaded to open to the atmosphere.

Hazard rating – medium

Testable double check valve

Two independent action non-return valves arranged to be force-loaded to the closed position.

Hazard rating – medium

Testable double check detector assembly (Fire services)

A specially designed assembly composed of a line-sized approved double check valve assembly, with a specific by-pass water meter and a meter-sized approved double check valve assembly.

Hazard rating – low

Non-testable dual check valve

Two independently acting non-return valves in series arranged to be forced loaded to the closed position.