

How Is My Water Disinfected after a Leak?

Despite the many lengths to which water agencies go to maintain their distribution systems, including the regular programs of flushing and cleaning pipes, leaks and larger ruptures still occur. They can happen for a number of reasons but, nevertheless, the pipe and the water it carries must be made clean and safe for public use in the end. How do agencies go about doing this?

Water processed through a treatment plant receives different chemicals to kill the germs that may be present in the supply. The most common of these disinfectants are chlorine and chloramine. These disinfectants neutralize germs in the water without doing harm to the people who consume it. Their levels are highly monitored and controlled for safety and public satisfaction. After a leak or break the integrity of the system must be reestablished. The agency responsible for the particular system first caps the leak and repairs the broken pipe. Then the water and cleanliness of the pipe itself must be addressed.

After a leak, the pipe is isolated from the system and then filled with water that contains higher levels of chlorine. This water is held in the pipe for a while, killing any germs that may be present. The highly chlorinated water is then discharged according to federal, state, and local regulations to protect the environment and adjacent water supply. This may include introducing an additional chemical to the pipe to destroy the chlorine. Likewise, depending on the severity of the break, a boil water advisory may be given or bacteriological samples may be taken until it is determined that the water delivered through the pipe is again safe to consume.

Whatever the cause may be, water leaks and ruptures are a serious issue for water agencies. Tests and measurements are done regularly to detect and prevent future issues, to save water and money, and to protect the water supply for the consumer. Anyone that observes or suspects a leak is encouraged to contact their local water company for further investigation. Water saved now will help sustain us during dry periods in the future.