



**State of Connecticut  
Department of Public Health  
Drinking Water Section**



**Flood and Storm Water Advisory for Public Water Systems**

When heavy precipitation and flooding occurs, it is important to recognize that these unusual events can affect the quality of drinking water obtained from drilled wells, shallow wells and springs. Most at risk would include water sources that are in areas where flooding has occurred or is imminent, drilled wells located in well pits where groundwater tables have risen above the top of the well head, and shallow wells or springs located down gradient from open pollution sources such as agricultural or animal waste run-off or nearby septic systems. Other less common indicators of pollution may include water discoloration or unusual taste or odor to the water supply.

Public water systems are encouraged to frequently inspect their water sources during these storm events to determine if there may be conditions present that would make them vulnerable to pollution and possible contamination. If these conditions are present then water sampling is encouraged and you are advised to contact the Drinking Water Section (DWS) at (860) 509-7333 to report these conditions. Any unusual aesthetic changes to the water (color, taste or odor) should also be reported to DWS and precautionary measures such as the use of bottled water for drinking and cooking are recommended until water testing can determine if contamination is present in the water supply. The DWS can provide assistance in recommending the appropriate types of water testing for your public water system during these events. Total coliform bacteria and E. coli bacteria testing is of the most significance and are used as indicators of bacteriological contamination. The presence of E. coli bacteria indicates that the source of contamination has a fecal origin and there may be more harmful organisms present. If bacteriological contamination is present in the water supply during these storm events, public water systems should notify their consumers and encourage the use of bottled water for drinking, cooking, and other uses that may result in ingestion. Boiling rapidly for a minimum of one minute can also effectively disinfect water. Persons bathing or washing with water that has been contaminated with fecal matter also experience an increased risk to health.

Public water systems that provide water treatment including continuous disinfection (chlorine or ultraviolet light) of their water supply are encouraged to test the raw untreated water quality from each well suspected of being compromised by pollution from flooding or run-off. It may be appropriate to perform raw water testing of each water source as a precautionary measure even if there are no obvious signs of concern. Flood waters entering a well can change the quality of the water and introduce sediment, organic matter and contamination that could overwhelm a treatment system and render it ineffective as a safeguard to bacteria contamination.

In addition to wells, buried water storage tanks or other water system components can also be vulnerable to contamination. Elevated water tables can place an increased

hydraulic load on concrete tanks causing seepage through joints or hairline cracks. Floodwater and run-off can seep through access hatches or vents that are not watertight or do not provide adequate protection. Operators should inventory water system components that may be vulnerable to contamination and frequent inspections of these components during the storm event are recommended.

After flood waters have receded wells that have been impacted should be disinfected and tested to ensure that the water is of safe sanitary quality. The recommended procedure for disinfecting a well is available on the DWS website at [http://www.ct.gov/dph/lib/dph/drinking\\_water/pdf/Well\\_Disinfection.pdf](http://www.ct.gov/dph/lib/dph/drinking_water/pdf/Well_Disinfection.pdf)

Public water systems that have wells located in well pits with inadequate drainage should hire a Connecticut licensed well drilling contractor to have the well raised above the ground surface or maintain sufficient drainage of the pit and ensure all conduits and joints are watertight. The DWS has guidelines available for raising well casings on the DWS website at [http://www.ct.gov/dph/lib/dph/drinking\\_water/pdf/well\\_casing\\_extension.pdf](http://www.ct.gov/dph/lib/dph/drinking_water/pdf/well_casing_extension.pdf)

The DWS's normal business hours are from 8:00am to 4:30pm. The DPH's 24-hour emergency number is 860-509-8000.

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