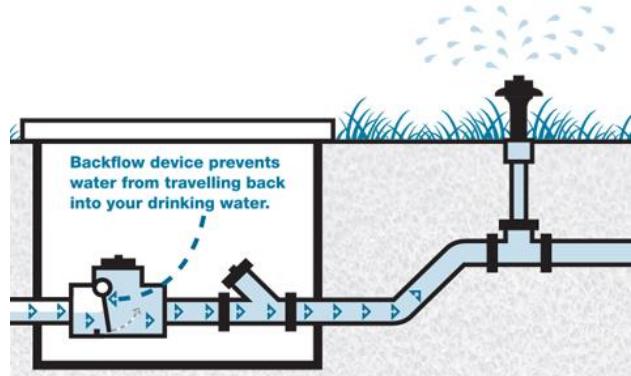




## Flood Mitigation - Installing Backflow Valves

Backflow is the flow of water into a drinkable water supply from a source other than the one intended, such as a municipal water supply<sup>1</sup>. In places that experience heavy rainfall or are located near water bodies, installing a backflow valve can be a precautionary measure used to mitigate damage caused by flooding. Flooding can introduce contamination into a home, including in the basement and the drinking supply.

With developed spaces come a greater amount of runoff, rain which must be collected by a city's sewage system. When the sewage system gets overwhelmed, water may flow back to your home, carrying pollution and waste<sup>2</sup>.



### What is a Backflow Valve?

A backflow valve is a device that homeowners can have installed to ensure that water only flows in one direction<sup>3</sup>. Drinkable water flows from its source out to homes. In some instances water may flow in the reverse, introducing contamination to the original water supply. Installing a backflow valve is cheaper than remodeling a basement damaged by mold, and mitigates health hazards that would arise with contaminated drinking water and being exposed to human waste.

Across the country many municipalities require landowners to have backflow valves everywhere where there is a connection between drinking water and sources of potential contamination<sup>4</sup>. In New York state homeowners are not required to implement this type of control, but those who supply water are<sup>5</sup>.

<sup>1</sup> EPA. 2006. "Cross-Connection Control: A Best Practice Guide". Retrieved Jan 13, 2021.

<https://nepis.epa.gov/Exe/ZyNET.exe/2000ZZB8.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000000%5C2000ZZB8.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

<sup>2</sup> State Farm. 2021. "Flooded basement? How to deal with common causes". Retrieved Jan 14, 2021.

<https://www.statefarm.com/simple-insights/residence/flooded-basement-common-causes>

<sup>3</sup> Plumbing Today. 2017. "What Is a Backflow Preventer and How Does it Work?". Retrieved Jan 13, 2021. <https://plumbingtoday.biz/blog/what-is-a-backflow-preventer-and-how-does-it-work>

<sup>4</sup> NYC Department of Environmental Protection. 2021. "Application for Approval of Backflow Prevention Devices". <https://www1.nyc.gov/nycbusiness/description/application-for-approval-of-backflow-prevention-devices>

<sup>5</sup> New York State. 2018. "Section 5-1.31 - Cross connection control". <https://regs.health.ny.gov/volume-title-10/653916609/section-5-131-cross-connection-control>