

## **Section 1: Title**

# ***Village of Stryker*** **Drinking Water Consumer Confidence Report** **For 2018**

## **Section 2: Introduction**

The Village of Stryker has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

## **Section 3: Source Water Information**

The Village of Stryker is a community public water system. This system operates two wells that pump approximately 114,000 gallons of water per day from a sand and gravel aquifer (water-rich zone), the Michindoh aquifer.

The Ohio Environmental Protection Agency (EPA) completed a study of the Village of Stryker's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the Village of Stryker's source of drinking water has a low susceptibility to contamination. This determination is based on the following information from the Ohio EPA Drinking Water Source Assessment.

- Presence of a thick protective layer of clay overlaying the aquifer,
- Significant depth (over 105 feet below ground surface) of the aquifer,
- No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities, and
- No apparent significant potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high moderate low. This likelihood can be minimized by implementing appropriate protective measures.

This susceptibility analysis is subject to revision if new potential contaminant sources are sited within the protection area, or if water sampling indicates contamination by a manmade contaminant source.

Copies of the source water assessment report prepared for the Village of Stryker are available by contacting the Village Administrator at (419) 682-7119.

## **Section 4: What are sources of contamination to drinking water?**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-

occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

#### **Section 5: Who needs to take special precautions?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

#### **Section 6: About your drinking water.**

The EPA requires regular sampling to ensure drinking water safety. The Village of Stryker conducted sampling for bacteria, pesticides, and other organic chemicals during 2018. Samples were collected for a total of seven different contaminants most of which were not detected in the Village of Stryker's water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

#### **Section 7: Monitoring & Reporting Violations & Enforcement Actions**

None.

#### **Section 8: Table of Detected Contaminants**

Listed below is information on those contaminants that were found in the Village of Stryker drinking water.

**TABLE OF DETECTED CONTAMINANTS**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Bacteriological</b>							
None							
<b>Radioactive Contaminants</b>							
Alpha Emitters	0	15	3.0	N/A	NO	2013	Erosion of natural deposits.
Combined Radium (228)	0	5	1.0	N/A	NO	2013	Erosion of natural deposits.
<b>Inorganic Contaminants</b>							
Barium BA (ppm)	2	2	0.67	N/A	NO	2016	Discharge of drilling wastes. Discharge from metal refiners. Erosion of natural deposits.
Fluoride (ppm)	4	4	1.16	N/A	NO	2016	Erosion of natural deposits, water additive that promotes healthy teeth, and discharge from fertilizer and aluminum factories.
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
None							
<b>Volatile Organic Contaminants</b>							
HAA5	0	60	< 6.0	0.0001 - 0.0044	NO	2018	By product of drinking water chlorination.
TTHM (ppm) STU1	0	80	0.0178	0.0005-0.00088	NO	2018	By product of drinking water chlorination.
<b>Residual Disinfectants</b>							
Total Chlorine Residual	4	4.0	1.9 mg/L	1.3-2.5	NO	2018	By product of drinking water chlorination.
<b>Lead and Copper</b>							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	0	2.9	NO	2017	Corrosion of household plumbing systems, and erosion of natural deposits.	
	0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	NA	0.43	NO	2017	Corrosion of household plumbing system, erosion of natural deposits, leaching from wood preservatives.	
	0 out of 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

**Section 10: Violations**

None.

**Section 11: Nitrate Educational Information**

None.

**Section 12: Arsenic Educational Information**

None.

**Section 13: Lead Educational Information**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Village of Stryker is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

**Section 14: Cryptosporidium Information.**

None.

**Section 15: Radon**

None.

**Section 16: Ground Water Rule**

No significant deficiencies.

**Section 17: Revised Total Coliform Rule (RTCR) Information**

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

**RTCR VIOLATIONS:**

None.

**Section 18: License to Operate (LTO) Status Information**

In 2018 we had an unconditioned license (PWD ID 8601712) to operate our water system.

### **Section 19: Public Notice**

None. No monitoring violations.

### **Section 20: Public Participation and Contact Information**

#### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of the Village of Stryker which meets at 6:00 pm on the second Monday of every month in the Village Hall. For more information on your drinking water contact Alan Riegsecker, Village Administrator at (419) 682-7119.

### **Section 21: Definitions of some terms contained within this report.**

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **The "<" symbol:** A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
- **Picocuries per liter (pCi/L):** A common measure of radioactivity.

### **Section 22: Reporting suspected cross-connections.**

If you believe you have observed a potential cross-connection or if you have any questions regarding backflow prevention, please call the Village Administrator, Alan Riegsecker, at (419) 682-7119 or e-mail [strykeradministrator@midohio.twcbc.com](mailto:strykeradministrator@midohio.twcbc.com).

If a potential or actual cross-connection contamination hazard is identified, the customer will be required to eliminate the hazard and/or install an appropriate backflow preventer at the service connection and/or at the hazard.

### *Special Conditions*

#### Auxiliary Water Systems

##### **What is an auxiliary water system?**

It is any water system on or available to your property other than the public water system. Used water or water from wells, cisterns or open reservoirs that are equipped with pumps or other sources of pressure, including gravity are examples.

##### **What protection is required?**

- The auxiliary water system must be completely separated from water supply plumbing served by a public water system; and
- An approved backflow preventer must be installed at the service connection (where the public water system connects to the customer's plumbing system).

OR

- The auxiliary water system must be eliminated.

##### **Are there exceptions?**

At their discretion, the water supplier may waive the requirement for a backflow preventer at the service connection if all the following conditions are met:

- All components of the auxiliary water system, including pumps, pressure tanks and piping, are removed from the premises, which are defined as all buildings, dwellings, structures or areas with water supply plumbing connected to the public water system.

- The possibility of connecting the auxiliary water system to the water supply plumbing is determined by the water supplier to be extremely low.
- No other hazards exist.
- The customer enters into a contract with the water supplier, as described below.

The contract will require the customer:

- To understand the potential hazard of a cross-connection.
- To never create a cross-connection between the auxiliary water system and the public water system.
- To allow an inspector to survey their property for hazards as long as the contract is in effect.
- To face loss of service and other penalties if the contract is violated.

The water supplier must perform an annual inspection of the customer's contract-regulated property to verify the conditions have not changed, which would warrant installation of a backflow preventer. The water supplier must, by law, do everything reasonably possible to protect the water system from contamination.

#### Booster Pumps

##### **What is the concern?**

Booster pumps connected to plumbing systems or water mains can cause backsiphonage by reducing the water mains. The following requirements are in place to help prevent backsiphonage:

- Booster pumps, not used for fire suppression, must be equipped with a low suction cut-off switch that is tested and certified every year;
- Alternately, when a booster pump is necessary for one-, two- and three-family dwellings, it is preferred that the booster pump draw from a surge tank filled through an air gap; and

- Booster pumps, used in a fire suppression system, must be equipped with either a low suction throttling valve on the discharge side or be equipped with a variable speed suction limiting control system. Low-pressure cut-off devices will suffice for fire pumps installed prior to August 8, 2008, until a significant modification is warranted, at which point the minimum pressure sustaining method must be updated. Each of these methods must be tested and certified each year.

#### Contacts

##### **Need more information?**

Questions concerning backflow prevention and cross-connection control may be directed to your local water department or to your local Ohio EPA District Office at the following numbers:

**Northwest District (419) 352-8461**  
**Northeast District (330) 963-1200**  
**Southwest District (937) 285-6357**  
**Southeast District (740) 385-8501**  
**Central District (614) 728-3778**

Questions regarding internal plumbing in the home may be directed to your local plumbing authority or to the Ohio Department of Commerce, Plumbing Administrator, at (614) 644-3153.

John Kasich, Governor  
Craig W. Butler, Director

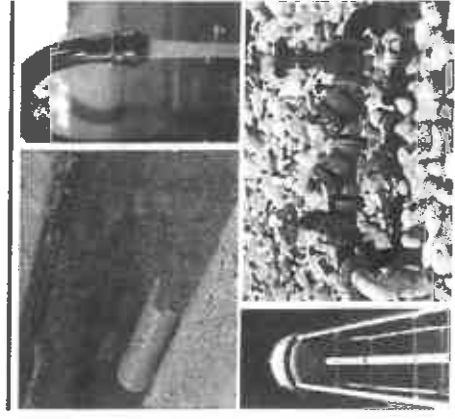
Ohio EPA is an Equal Opportunity Employer  
Printed on Recycled Paper



## Backflow Prevention and Cross-Connection Control

Protecting our  
Public Water System

August 2015



Division of Drinking and Ground Waters  
P.O. Box 1049  
Columbus, Ohio 43216-1049  
(614) 644-2752  
[www.epa.ohio.gov](http://www.epa.ohio.gov)

### What is a cross-connection?

Any physical connection created between a possible source of contamination and any drinking water system piping.

### What is backflow?

It is the flow through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.

### Why be concerned?

- All cross-connections pose a potential health risk.
- Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing. Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through cross-connections.
- Backflow occurs more often than you think.
- You are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water, either your own or someone else's. This includes complying with the plumbing code and not creating cross-connections.

### What causes backsiphonage?

Backsiphonage occurs when there is a loss of pressure in a piping system. This can occur if the water supply pressure is lost or falls to a level lower than the source of contamination. This condition, which is similar to drinking from a glass with a straw, allows liquids to be siphoned back into the distribution system.

### What causes backpressure?

Backpressure occurs when a higher opposing pressure is applied against the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter the drinking water supply. Any pumping system (such as a well pump) or pressurized system (such as steam or hot water boilers) can exert backpressure when cross-connected with the public water system.

### What can I do?

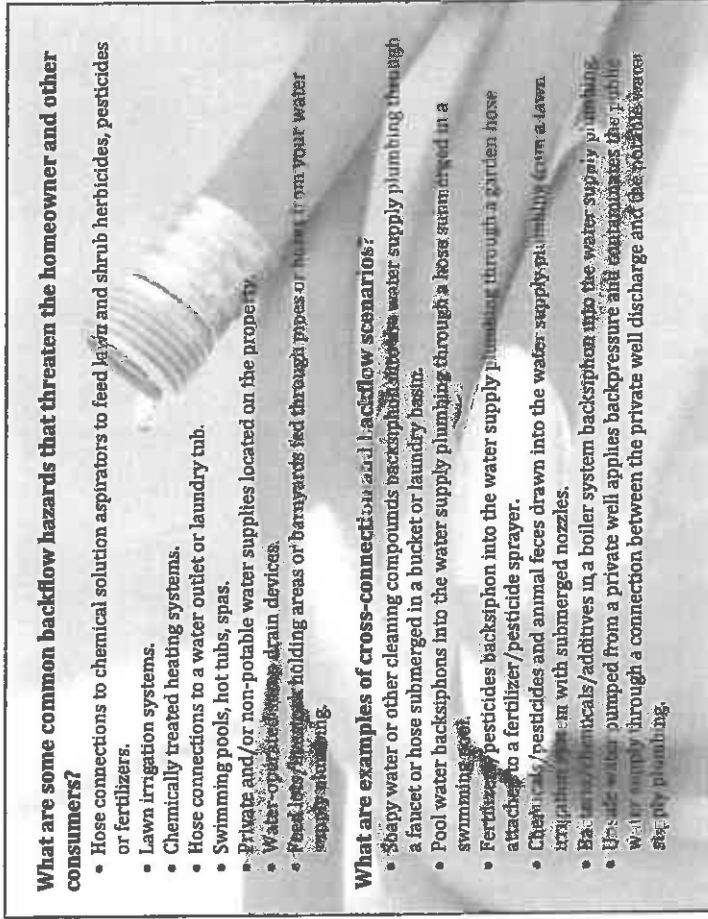
- Be aware of and eliminate cross-connections.
- Maintain air gaps. Do not submerge hoses or place them where they could become submerged.
- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow preventers on lawn irrigation systems.
- Do not create a connection between an auxiliary water system (well, cistern, body of water) and the water supply plumbing.

### What are some common backflow hazards that threaten the homeowner and other consumers?

- Hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides or fertilizers.
- Lawn irrigation systems.
- Chemically treated heating systems.
- Hose connections to a water outlet or laundry tub.
- Swimming pools, hot tubs, spas.
- Private and/or non-potable water supplies located on the property.
- Water-operated valves, drain devices.
- Pools, lawns, and other areas or backyards fed through pipes or hoses from your water supply plumbing.

### What are examples of cross-connection and backflow scenarios?

- Shady water or other cleaning compounds backsiphon into the water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- Pool water backsiphons into the water supply plumbing through a hose submerged in a swimming pool.
- Fertilizers/pesticides backsiphon into the water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Chemicals/pesticides and animal feces drawn into the water supply plumbing through a trap that is open with submerged nozzles.
- Backflow chemicals/additives in a boiler system backsiphon into the water supply plumbing.
- Pressurized water pumped from a private well applies backpressure and contaminates the public water supply through a connection between the private well discharge and the public water supply plumbing.



### What must be done to protect the public water system?

The public water supplier must determine potential and actual hazards. If a hazard exists at a customer's public water supply service connection, the customer will be required to install and maintain an appropriate backflow preventer\* at the meter and/or at the source of the hazard.

\*Check with your water supplier to verify which backflow preventer is required before purchase or installation.

### Who is responsible?

In Ohio, the responsibility for preventing backflow is divided. In general, state and local plumbing inspectors have authority over plumbing systems within buildings while Ohio EPA and water suppliers regulate protection of the distribution system at each service connection.

Water customers have the ultimate responsibility for properly maintaining their plumbing systems. It is the homeowner's or other customer's responsibility to ensure that cross-connections are not created and that any required backflow preventers are tested yearly and are in operable condition.

### What is the law?

Ohio Administrative Code Chapter 3745-95 requires the public water supplier to protect the public water system from cross-connections and prevent backflow situations. The public water supplier must conduct cross-connection control inspections of their water customers' property to evaluate hazards. Local ordinances or water department regulations may also exist and must be followed in addition to state regulations.