



# ***Villa Julie Infirmary***

## ***2018 Annual Drinking Water Quality Report***

MD0030016

### **Is my water safe?**

Last year, as in years past, your tap water met all EPA and state drinking water health standards. Villa Julie Infirmary is pleased to provide this annual water quality report for calendar year 2017. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Villa Julie Infirmary routinely monitors for contaminants in your drinking water. We vigilantly safeguard our water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

### **Do I need 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 infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### **Where does my water come from and what are the potential sources of contamination?**

The sources of water supply wells in northern Baltimore County are unconfined fractured rock aquifers. The Villa Julie Infirmary water system, located in the Greenspring Valley of northern Baltimore County, is currently using one well that draws water from the Cockeysville Marble formation. Point sources of contamination were identified within the assessment area from field inspections, contaminant inventory databases, and previous studies. The susceptibility analysis is based on a review of the existing water quality data for the water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and the inherent vulnerability of the aquifer. It was determined that the Villa Julie Infirmary water supply is susceptible to nitrate and may be susceptible to radon dependent upon the MCL that EPA and Maryland adopt for this contaminant. For more information on the source of your water and the significant potential sources of contamination, contact the Maryland Source Water Assessment Program at the Maryland Department of the Environment at (410) 537-3714 or visit on the web [www.mde.maryland.gov](http://www.mde.maryland.gov)

### **Why may there be contaminants in my drinking water?**

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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:

1. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
  2. 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.
  3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
  4. 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.
  5. 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

### **Units of Measurement & Conversions:**

NA: Not applicable

ppm: parts per million, or milligrams per liter (mg/L)

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion, or micrograms per liter (µg/L)

**Important Drinking Water Definitions:**

**MCLG:** Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risks for safety. MCLG allows for margin of safety.

**MCL:** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**ALG:** Action Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**MRDLG:**Maximum Residual Disinfectant Level Goal. The level of a 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 microbe contaminants.

**MRDL:** Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbe contaminants.

## Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected in your water. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be up to five years old.

| Contaminant | Date Sampled | MCLG | Action Level (AL) | 90 <sup>th</sup> Percentile | # sites over AL | Units | Violation | Typical Source                                                                                         |
|-------------|--------------|------|-------------------|-----------------------------|-----------------|-------|-----------|--------------------------------------------------------------------------------------------------------|
| Copper      | 08/16/2016   | 1.3  | 1.3               | 0.24                        | 0               | ppm   | No        | Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems |

| Contaminant<br>(units)                      | Collection<br>Date | MCLG                     | MCL    | Highest<br>Level<br>Detected | Range |      | Violation | Typical Source                                                                                    |
|---------------------------------------------|--------------------|--------------------------|--------|------------------------------|-------|------|-----------|---------------------------------------------------------------------------------------------------|
|                                             |                    |                          |        |                              | Low   | High |           |                                                                                                   |
| Disinfectants and Disinfection By-Products: |                    |                          |        |                              |       |      |           |                                                                                                   |
| Total<br>Trihalomethanes<br>(ppb)           | 2017               | No goal for<br>the total | 80     | 6.2                          | 6.2   | 6.2  | No        | Byproduct of chlorination                                                                         |
| Chlorine (ppm)                              | 2017               | MRDLG=4                  | MRDL=4 | 1                            | 0.6   | 1    | No        | Water additive used to control<br>microbes                                                        |
| Inorganic Contaminants:                     |                    |                          |        |                              |       |      |           |                                                                                                   |
| Nitrate as<br>Nitrogen (ppm)                | 2017               | 10                       | 10     | 3                            | 3.1   | 3.4  | No        | Runoff from fertilizer use; leaching<br>from septic tanks, sewage; erosion of<br>natural deposits |

**Copper**

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

**Lead**

If present, elevated levels of lead can cause serious health problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Villa Julie Infirmary 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 drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

**Nitrate**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

### Villa Julie Infirmary

**For additional information or questions contact:**

**Duke McKenna**  
**(410) 486-6215 ext. 304**

Prepared by: Water Testing Labs of Maryland, Inc.

For more information on contaminants in drinking water and its effects go to [www.wtlmd.com](http://www.wtlmd.com)