What Should I Know About Certain Contaminants?

Radon
Radon, a colorless, odorless gas that occurs naturally in soil and water. Radon is a product of the natural decay process of radium. It is one of many radioactive gases found in nature. Many homes in the county have radon levels above the American Lung Association guideline.

Cryptosporidium
Cryptosporidium is a parasite that is transmitted in water from one person to another. Cryptosporidium can cause gastrointestinal illness in humans. It is one of the most common causes of waterborne illness in the United States.

Nitrate
The maximum contaminant level (MCL) of nitrate in drinking water is 10 mg/L. Nitrate is a common contaminant in drinking water, and it is formed by the decay of nitrogenous fertilizers, animal waste, and industrial processes. Nitrate can also come from natural sources, such as septic systems and agricultural activities.

Lead
The maximum contaminant level (MCL) for lead in drinking water is 15 parts per billion (ppb). Lead is a heavy metal that can be harmful if ingested. Lead can enter drinking water from old plumbing fixtures and pipes, and from lead service lines that connect a home to the water main. Lead exposure can cause health problems, especially for infants, young children, and pregnant women.

The sources of water include lakes, rivers, streams, ponds, reservoirs, springs and wells. Water is contaminated in one of two ways: through natural processes or due to human activity. It dissolves naturally occurring minerals and, in some cases, radioactive substances into it. Natural contamination can be caused by the presence of contaminants from the environment. Human activity can contaminate the water by introducing substances that are not naturally present into the water body. Contaminants that may be present in sources of water include:

- Microorganisms, such as algae and other water-borne organisms, which can be naturally occurring or introduced into the water body.
- Chemicals, which can be naturally occurring or introduced into the water body by human activity.
- Radionuclides, which can naturally occur in the environment. Radionuclides that can be naturally occurring or introduced into the water body.

In order to ensures that the water we drink is healthy, the Environmental Protection Agency (EPA) regulates sources that limit the amount of certain contaminants in water provided to public water systems. The Water Quality Act of 1987 requires states to develop regulations to ensure that water systems are protected from contamination. The purpose of these regulations is to protect public health. The water we drink is a mixture of water and dissolved substances. These substances may be naturally occurring or introduced into the water body by human activity.

Drinking water includes a variety of sources, including drinking water from public and private water systems, recreational water bodies, and water used for irrigation. There are no detectable levels of lead in the water supplied by the MDWASD. Research has shown that infants and young children are more susceptible to lead poisoning than adults. Children are more likely to be exposed to lead in drinking water than adults, as they tend to drink larger volumes of water and have less developed kidneys to remove lead from the body.

Miami-Dade County’s water consistently meets state and federal standards for both appearance and safety. Additional information is available from the Safe Drinking Water Helpline (305-438-4709).
## Miami-Dade Water & Sewer 2004 Water Quality Data

### Parameters

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| Radon Data Summary

### List of Detected Parameters

- Uranium (µg/L)
- Alpha Emitters (pCi/L)
- Sodium (ppm)
- Nickel (ppb) (e)
- Lead (ppb) (e)
- Copper (ppm) (e)
- Barium (ppm)
- Chloramines (ppm)
- Haloacetic Acids (ppb) (d)
- Total Trihalomethanes (ppb) (d)
- Total Coliform Bacteria (c)
- Chromium (ppb) (g)
- Nickel (ppb) (g)
- Lead (ppb) (g)
- Copper (ppb) (g)
- Mercury (ppb)
- Fluoride (ppb)
- Arsenic (ppb)
- Radon

### Notes

- All are below maximum contaminant levels as noted. Not listed are many others we test for, but that were not detected.
- Unless otherwise noted, all parameters were tested in 2004.

### Footnotes

- (e) = 90th percentile value. The 90th percentile value is reported. If the 90th percentile value does not exceed the AL, i.e., less than 10% of the homes exceed the AL, the systems are in compliance and new testing is required. The value which precedes the parentheses is the running annual average. This is the value which is compared with the AL.
- (g) = Fluoride testing to demonstrate compliance with State regulations is required every three years in accordance with the State’s monitoring framework. However, Florida laws are more stringent in that the addition of a disinfectant is necessary which only requires testing every three years. The Norwood plant system was tested in 2004.
- (h) = Data presented is from the most recent testing conducted in accordance with regulations. Both systems are under reduced monitoring framework. The Norwood plant system was tested in 2004.
- (d) = Fluoride testing is not required as the system is in compliance with the Alachua County health department framework. NFIS laws are in place to control microbial contaminants.

### Definitions

- **Maximum Residual Disinfectant Level Goal (MRDLG)** - The highest level of a disinfectant allowed in drinking water which is necessary to protect public health. It is to control microbial contaminants.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water which is necessary to protect public health. MRDLs are set as close as feasible using the best available scientific data.

### Abbreviations

- AL = Action Level
- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- ND = Not Detected
- MRDLG = Maximum Residual Disinfectant Level Goal
- MRDL = Maximum Residual Disinfectant Level

### For Customers With Special Health Concerns

Some people may be more vulnerable to contaminants in water than the general population. These people include babies, young children, the elderly and persons with immune system disorders. These people may be more vulnerable to health effects in response to contaminants in drinking water. There is convincing evidence that the addition of a disinfectant is necessary which only requires testing every three years. The Norwood plant system was tested in 2004. It is recommended that individuals whose immune systems are compromised consult their doctors before 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.