NITRATE DRINKING WATER ADVISORY FOR CERTAIN POPULATIONS IN THE COLUMBUS DUBLIN ROAD WATER PLANT SERVICE AREA

The Columbus Division of Water is issuing this nitrate advisory to certain populations receiving water from the Dublin Road Water Plant: do not give tap water to infants below the age of six months or use it to make infant formula, juice or cereal. Women in these areas who are over 30 weeks pregnant should also avoid drinking tap water or any beverages made from tap water. The affected area includes portions of downtown, west and southwest Columbus; Grandview Heights, Grove City, Hilliard, Lincoln Village, Marble Cliff, Upper Arlington, Urbancrest and Valleyview (see attached map). Water supplied to the rest of the Columbus water distribution system does not contain elevated nitrate levels.

Ohio Environmental Protection Agency regulations require that the public be notified within 24 hours when nitrate levels in a public water supply exceed the maximum contaminant level, which is 10 parts per million (ppm). The nitrate level in tap water tested at the Dublin Road plant registered 10.5 ppm. The Division of Water will continue to monitor the Scioto River surface water supply and will notify the public when the advisory may be lifted. This advisory remains in effect until further notice.

As required by the Ohio EPA, the city issues the following health effects notification: infants below the age of six months who drink water containing nitrates in excess of the maximum contaminant level could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and "blue baby syndrome."

Residents who live in the designated service area and have an infant below the age of six months are advised to use bottled water to use in baby formula, juice or cereal. Pregnant women in these areas who are over 30 weeks pregnant should also avoid drinking tap water or any beverages made from tap water. Those who have medical conditions or take prescriptions that may involve a nitrate concern should consult their doctor. DO NOT BOIL THE TAP WATER; boiling increases nitrate levels. Healthy adults and older children can consume higher levels of nitrate because they have fully developed digestive systems. Nitrate is commonly consumed by adults and older children; it is contained in many foods such as processed meats and salads.

The cause of the elevated nitrate levels in the Scioto River is believed to be related to last week's major storm and resulting stormwater runoff from rural and urban areas. Treatment plant expansions at the Dublin Road Water Plant have been underway the past few years and include a new treatment facility.
currently under construction that will provide additional treatment options to remove nitrates from water. That facility should be completed by the end of 2017.

Customers are requested to share this water advisory information with those in the affected area who may not have web or media access and may be unaware.

Frequently asked questions on nitrates are below. For questions on Columbus water quality, please call Columbus Public Utilities’ Customer Service at (614) 645-8276 Monday – Friday 7:00 AM – 6:00 PM or visit https://www.columbus.gov/utilities/. For an interactive map, please visit: http://tinyurl.com/dpunitrate

The Dublin Road Water Plant is located at 940 Dublin Road, Columbus, Ohio (PWS ID OH2504412, Facility ID 2554076).
FREQUENTLY ASKED QUESTIONS ABOUT NITRATES IN WATER

What causes elevated nitrate in drinking water?
Nitrogen occurs naturally and is essential for plant growth, which is why it is applied as a fertilizer to farmland, lawns and golf courses. During certain weather conditions, rural and urban fertilizer along with other pollutants can run off into streams and rivers, where it reacts with water to form nitrate.

How is the public notified of a nitrate alert?
Water suppliers are required by the Ohio Environmental Protection Agency (OEPA) to notify the public when nitrate levels are more than 10 parts per million in the drinking water. The Division of Water's Water Quality Assurance Laboratory monitors nitrate levels regularly. When the levels exceed the standards, advisories are provided to local television, radio and newspaper media outlets, and are posted on the city's website at: www.columbus.gov/utilities/ and on the department’s Facebook (Columbus Public Utilities) and Twitter pages (@cdpu).

What does “parts per million” mean?
“Parts per million” (ppm) is a measure of the concentration of a substance (such as nitrate) in water. As an example, let’s say a bucket of water has nitrate in it at a level of 10 parts per million (or mg/L). If the bucket of water had a million drops of water in it, ten of those drops would be nitrate.[1]

Who should be concerned?
When a nitrate advisory is in effect, customers in the area identified in the news release are advised to not give tap water to infants below the age of six months or use it to make infant formula, juice, or cereal. Pregnant women in the water service area over 30 weeks pregnant should also avoid drinking tap water or any beverages made from tap water. Until the advisory is lifted, bottled water should be used instead for these populations in the Dublin Road Water Plant service area. DO NOT BOIL THE TAP WATER; boiling increases nitrate levels. Healthy adults and older children can consume nitrate because they have fully developed digestive systems. Nitrate is commonly consumed by older children and adults; it is in many foods like processed meats and salads.

What if I cannot afford to purchase bottled water if I am over 30 weeks pregnant or for my infant who is under six months of age?
Bottled water is readily available in the community but if you are in need of assistance, please call 211 or (614) 221-2255 (Hands on Central Ohio), or during a water advisory, bottled water may be available for those who qualify for low income assistance through a variety of programs such as WIC (Women, Infants and Children).

What are the possible health effects of nitrate?
Nitrate is considered a toxin to infants below the age of six months and has also been identified as a health concern for women over 30 weeks pregnant. Please see this fact sheet from the OEPA for more information: http://epa.ohio.gov/Portals/28/documents/pws/Nitrate_in_Public_Drinking_Water.pdf

Is it safe to shower or bathe in the water if it is over 10 ppm?
Nitrate is only a concern for ingestion (eating and drinking) for babies below the age of six months and women over 30 weeks pregnant, so yes. It is not absorbed through skin.[2]

Can baby bottles be washed with tap water during a nitrate alert?
Yes, it is safe to wash baby bottles in tap water containing nitrate. Please remember to use bottled water for mixing any formula, juice, or cereal for infants below the age of six months.

Is elevated nitrate a concern for pets?
The water should be safe for consumption by common household pets such as cats and dogs, including puppies, kittens and elderly pets, but if you have concerns, please contact your veterinarian.

[1] Source: United States Environmental Protection Agency
[2] Source: United States Environmental Protection Agency
I use a carbon filter. Will this help?
Activated carbon filters, such as those in a “Brita” water pitcher, do not remove nitrates.

What about home filter systems?
Point of use (POU) filter systems treat water at a single tap. Point of entry (POE) filter systems treat water used throughout the house. Two types of systems that will remove nitrates from your water are a reverse osmosis unit and a distillation unit. Some vendors may make claims about their effectiveness that are not based on science. EPA does not test or certify treatment units, but an organization that does is: NSF International http://www.nsf.org
Important: All POU and POE filter systems or treatment units need maintenance to operate effectively. If they are not maintained properly, contaminants may accumulate in the units and make your water worse.

How often are nitrate advisories issued in Columbus?
Since 2000, nitrate levels exceeded standards in 2000, 2006, 2015 and 2016. The frequency is dependent upon a variety of factors including when fertilizer is applied and the weather patterns that follow.

How long do the advisories usually last?
A nitrate advisory can last from a few days to several weeks. It is lifted when the source nitrate levels return to normal. There is no way to predict the length of a nitrate advisory because the conditions are affected by weather patterns.

What is the City of Columbus doing to prevent nitrate levels from rising?
The Dublin Road Water Plant is in the midst of a $200 million project to expand capacity and treatment to meet new OEPA regulations; this work includes a $35 million ion exchange treatment facility which, when completed by the end of 2017, will allow the plant to more effectively treat nitrate and other contaminants of concern. The Division of Water works with upstream agricultural landowners to encourage specific best management practices. The Watershed Management staff works with property owners along the city’s reservoirs to encourage environmental stewardship. Additional efforts include installation of green infrastructure around Griggs, O’Shaughnessy and Hoover reservoirs to help naturally filter stormwater that carries contaminants, and a study of the Scioto River watershed will identify long-term nitrate reduction solutions.

How can I find out if I am in the affected service area?
You can check our website at www.columbus.gov/utilities/, and for an interactive map during an advisory, visit http://tinyurl.com/dpunitrate. If you do not have Internet access, you can call Customer Service at (614) 645-8276 Monday through Friday, 7:00 a.m. – 6:00 p.m.

What if I still have questions?
For water quality related questions, please call the Columbus Water Quality Assurance Laboratory at (614) 645-7691. For health related questions, please contact your doctor or Columbus Public Health at (614) 645-7417 or visit: https://www.columbus.gov/publichealth/.

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