Save Our Water question: Is it safe to breathe near toxic algae blooms?

Amy Bennett Williams, Fort Myers News-Press  Published 7:00 a.m. ET Aug. 18, 2018

People who live on the water, in boats at local marinas, say they have had no warning about what the green algae can do to them health wise. Fort Myers News-Press

Editor's note: The News-Press started this weekly feature to answer water questions, including those submitted by the public during the 2018 Save Our Water Summit and emailed by readers.

Greg Norte wrote: “I am following up on your recent reporting of the red tide and green algae blooms in Fort Myers. I live in Alva about a quarter-mile from the Franklin Lock.

“I have a niece and nephew, both 2 years old, who live in downtown Fort Myers. I am concerned for our respiratory health, and while the reporting has been excellent on the effects of direct physical contact and ingestion, it has been less clear on the range of effect and negative health effects of living near these areas.

“Is there someone you can direct me to who would be able to help me determine if the air is safe where my family and I live?”

That's a little tough to answer, because there are some differences of opinion in the public health and science communities.

When we posed Greg's question to Brad Dalton, the Florida Department of Health's deputy press secretary, he emailed: “Past field studies on red tide have documented aerosols containing red tide toxins (brevetoxins) travel inland up to 2 miles with the concentrations highest along the beaches. We know that people do get respiratory irritation when they breathe the red tide aerosols. When a person leaves an area with a red tide, symptoms usually go away. If you have symptoms, leave the beach and seek air conditioning. If symptoms persist, please seek medical attention.”

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As for the cyanobacteria, commonly called blue-green algae that collected in thick mats along the Caloosahatchee's Alva shoreline and piled up in spongy rafts at the Franklin Lock, Dalton wrote, "Blue-green algae is different from red tide. The toxin for blue-green algae does not have an aerosol component.

"There is a smell associated with the algae which comes from the decomposing bloom, but that is not toxic."

However, some researchers in the field would beg to differ with Dalton.

"(One) certainly cannot say it is for or against.." said Larry Brand, a University of Miami professor who specializes in harmful algae and recently appeared on a Fort Myers panel after a screening of "Toxic Puzzle," a documentary that explores the link between harmful algal blooms and ALS, also called Lou Gehrig's disease.

The evidence shows it is, Brand says, which is why he's working to secure funding to study algae toxins and their potential effects.

James Metcalf, senior researcher with Wyoming-based Brain Chemistry Labs was also on the panel with Brand, and sampled the Caloosahatchee while he was in the area.

Among other things, Metcalf said the river's current bloom contains microcystin, a deadly toxin produced by cyanobacteria.

To Greg's question, he wrote: "We have identified BMAA (an algae toxin) in air filters." Metcalf points to studies that have shown microcystins in personal air monitors near blooms. And, he writes, research has shown "living near lakes with blooms substantially increases your risk of ALS.

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“We do need more research to work out why people are complaining of breathing and other reactions close to cyanobacteria blooms that don’t produce brevetoxins.”

You can report illnesses from red tide exposure to Florida’s Poison Control Center at 1-800-222-1222. To learn more about red tide, visit floridahealth.gov.

— Do you have a water question? Please send along to water@news-press.com. Stay connected: follow @thenewspress on Instagram, and on Facebook, join our Save Our Water Solutions Group.