

7-25-09 What Color Is Your Water?

As the popularity of bottled water waned in response to the awareness of global warming, people purchased reusable bottles for their tap water and the producers of bottled water became nervous. Would something so incredibly popular and seemingly necessary to so many, be here one day and gone the next? What would Poland and Pepsi do? They would give us designer water, that's what. Don't care for water but you know you're supposed to be drinking it? Maybe flavored water is for you. On a diet? Maybe a colorful tasty drink with artificial sweetener would help out. Need more energy? There's power waters for you. Forgot your vitamins this morning? Vitamin water fits your needs today. More interested in the healing powers of herbs? They've got that kind of water, too.

To each his own. I hope the choices will be informed choices. Just because the purchased drinks are from approved sources, does not mean they are good for us. It just means they are not poisonous. Well, at least it means they are not supposed to be. Accidents and sloppy ways do happen.

What about the water we like to play in? Massachusetts is blessed with an abundance of rivers, ponds and lakes. Some serve as surface water supplies and many of them as recreational water bodies. These waters come in lots of colors, too. It might be reddish brown from the tannins in leaves and branches or from high iron content. It might be brown from sediment. It might be green from algae. These colors are not in and of themselves an indication of something harmful. The clearest of water can be full of bacteria. Colors can be an indicator, though, of health risks and while we read and learn about our rainbow of beverage choices, we might as well learn about the various shades and hues of recreational waters.

Massachusetts is not only blessed with both ocean and fresh waters, it is also blessed with a Department of Public Health with guidelines for cyanobacteria (blue-green algae) in freshwater recreational water bodies. Not all states do, you know. The protocol is based on the research that has been going on worldwide for several years now. The most widely referenced is probably that published by the World Health Organization (WHO) in 2003. Since then, Australia's National Health and Medical Research Council issued *Guidance on Managing Risks in Recreational Waters* in 2005 and California's State Water Resources Control Board developed *Guidance about Harmful Algal Blooms* in 2006 and the Oregon and Vermont Framework published *Addressing Public Health Risks for Cyanobacteria in Water* in 2007, just to name a few. These are not exactly small time players here. Scientists have been watching for many years what was at first anecdotal evidence. There were stories of livestock dying after drinking green water from farm ponds, children vomiting after playing in pond water, people developing skin rashes or respiratory problems, heart and liver damage and even a tragic story of a young man dying of a heart attack after jumping into a golf course pond.

There are numerous variables at play here. People respond differently to the same thing. Some are prone to asthma, others to eczema. The exposures vary also. Some people keep their head above the water when swimming, while others swim under the water. Children and pets are likely to spend more time in the water, ingest lots of water and their smaller body size puts them at a disadvantage when it comes to exposure.

Then, of course, there are the differences in the algae themselves. There are different types and some of them produce toxins. And they change quickly. During the hot days of summer, the numbers can grow rapidly, forming a bloom so thick that it forms a scum on the surface and is so thick that you can't see your hand reaching down into it.

We've recently had our first closing of beaches for this year due to high algae counts in Halifax at the West Monponsett Pond. (Last summer was the first closing ever because of algae.) The MA DPH guidance recommends closing of beaches when the cell count exceeds 70,000 per milliliter. Our last sample count was 178,000+. And, I've got to tell you: It didn't really look that bad, (compared to last year's pea soup with an even higher cell count). And, I suspect, it is the look of the water that most people use to determine whether or not it is safe to enter.

I suppose we also don't ever have our guard up to react to green water if we have simply become accustomed to that appearance. It seemed that's what people were thinking on last Saturday. I was in town for a housing matter and it was hot sunny day when I drove by the West Monponsett Pond. People were sailing and jet skiing and fishing and throwing balls to a dog at the State Boat Ramp. I could not just drive by.

I introduced myself, told the people they should stay out of the water because of a high cell count for algae that can be very harmful and I tried to hand out a fact sheet. Only one man took it. Everyone else said, "No, that's all right. I'm good." "No, thanks. I'm just going to jet ski." I tried to tell the jet skier that the spray can get in his eyes and that the algae can become aerosolized, getting into his lungs. He indicated that he wasn't concerned. That has to mean that he did not believe what I was telling him.

At least I tried. I just wanted them to have the information; to be able to make an informed choice. Those were not really informed choices, though. They were more like ignored choices. Listening and learning take time, though. I'll keep trying. Please help spread the word. Confirm what I'm telling you (Google cyanobacteria health risks) and pass it on.

What color water would you like? I'm going for clear, clean and safe.

Cathleen Drinan is the health agent for Halifax, MA. Let her know of fish kills, sick pets, sick children or any health problems that seemed to develop after contact with algae filled waters. She can be reached at 781 293 6768 or cdrinan@town.halifax.ma.us