



COMMONWEALTH of VIRGINIA

Department of Health

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STATE HEALTH COMMISSIONER

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September 1, 2011

Mr. Robert L. Beck
19 Hardwood Road
Lake Monticello
Palmyra, Virginia 22963

Dear Mr. Beck:

Thank you for expressing concern about the possibility of *Naegleria fowleri* in Lake Monticello. The Virginia Department of Health (VDH) is responsible for educating the public on the potential risks of swimming in natural bodies of water.

N. fowleri is a type of amoeba that is commonly found in freshwater lakes, not only in the United States, but throughout the world. This amoeba also is known to inhabit soils, as well as lake and river sediments. In rare instances, *N. fowleri* can cause an infection known as primary amoebic meningoencephalitis (PAM) when water enters deep into the nose. PAM is nearly always fatal but is exceptionally rare. Prior to the recent *N. fowleri*-related death that occurred in 2011, the last documented case of *Naegleria*-related infection in Virginia occurred in 1969. There is no evidence available that would suggest that water or sediment at Lake Monticello would be any more or less likely to contain *N. fowleri* than other Virginia lakes.

The U.S. Centers for Disease Control and Prevention (CDC) advises swimmers to assume that a very low risk of *N. fowleri* infection is present when swimming in warm freshwaters. Extended warm conditions in freshwater, or conditions that cause lake sediments to be stirred, may result in an increase of *N. fowleri* levels. Since the organism is commonly found in Virginia waters and infections occur so infrequently, we do not know yet what concentrations of *N. fowleri* in water would indicate an increased risk of infection.

Methods to detect the presence and number of *N. fowleri* in water and sediments do exist. Commercial environmental laboratories, however, normally do not perform this type of testing. Additionally, tests to determine the number of organisms in water can take weeks to produce results, further limiting the usefulness of those results when making recreational water quality decisions.

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VDH advises that concerned individuals may choose to avoid swimming during extended hot weather conditions. Additionally, swimmers may choose to avoid stirring up sediment in shallow parts of the lake. Finally, using nose plugs or holding the nose while swimming, diving, or during water sports can reduce the risk of water going up the nose. Additional information on *N. fowleri* is available on the Virginia Department of Health's website at <http://www.vdh.state.va.us/epidemiology/DEE/otherzoonosis/Naegleriafowleri.htm> and a safe swimming brochure is available at <http://www.vdh.state.va.us/epidemiology/DEE/Waterborne/documents/RecWater.pdf>.

Should you have any additional questions pertaining to *N. fowleri*, please contact your local health department. You may also contact me directly at 804-864-8111.

Sincerely,

Rebecca LePrell, MPH
Director of Environmental Epidemiology
Virginia Department of Health

cc: Jeff McDaniel, Environmental Health Manager, Thomas Jefferson Health Department, VDH
cc: Elizabeth Davies, District Epidemiologist, Thomas Jefferson Health Department, VDH