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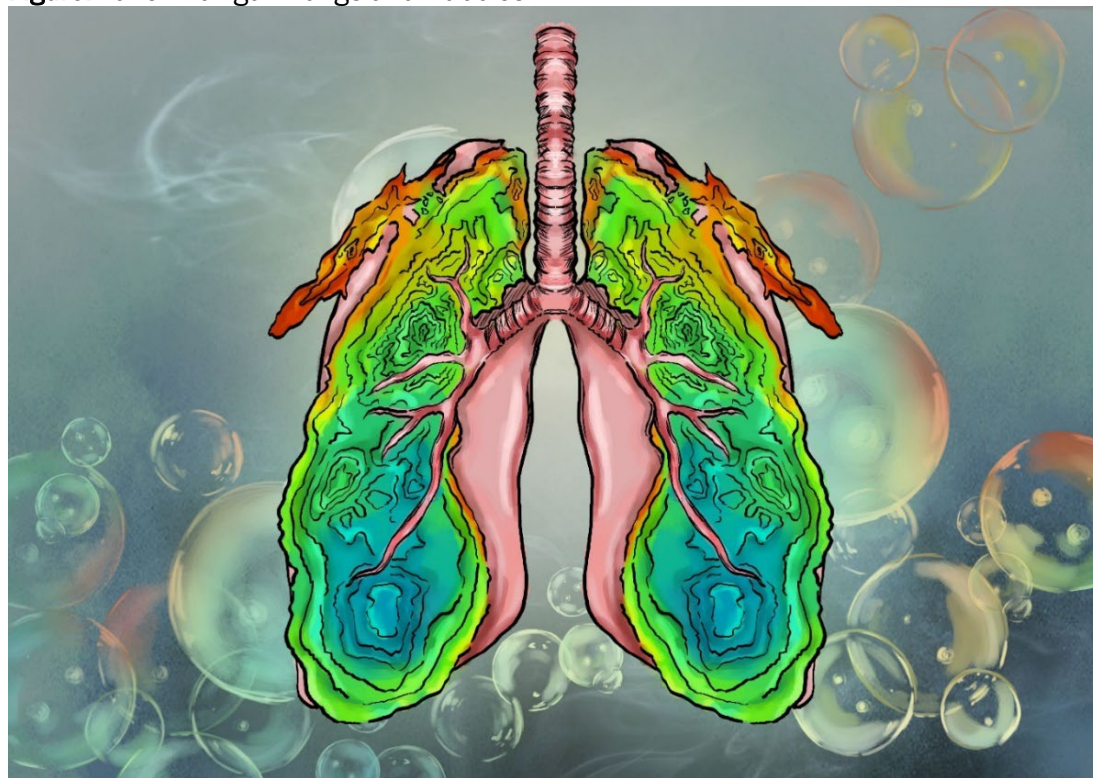
Great Lakes Eutrophication and Respiratory Health Harms

Anaid Kassidy Corona-Andaverde

Abstract

This digital drawing of satellite images showing the eutrophication of Lake Michigan visually explores relationships among respiratory health, algae blooms, and aerosolized cyanotoxin exposure.

Figure. *Lake Michigan Lungs and Bubbles*



Media

Digital illustration using Krita and Wacom® Cintiq.

This digital drawing of satellite images represents the eutrophication of Lake Michigan. Despite advocacy and statewide monitoring initiatives,^{1,2,3} harmful algae blooms (HAB) continue to contribute to exposure to cyanotoxins, produced by cyanobacteria,⁴ in the Great Lakes. HAB exposure extends beyond **contaminated recreational water** bodies, as aerosolization transports toxins inland. Indeed, 15% of global asthma trigger responses annually result from aerosolized HAB **toxin inhalation** in shoreline areas.⁵ The most frequent symptoms include cough, allergy, malaise and fatigue, headache, shortness of breath, hypertension, acute pharyngitis, and acute upper respiratory infection.^{4,6} Cyanotoxin inhalation will likely be exacerbated by ongoing climate change and more frequent algae blooms.

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Conflict of Interest Disclosure

Contributor disclosed no conflicts of interest relevant to the content.

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