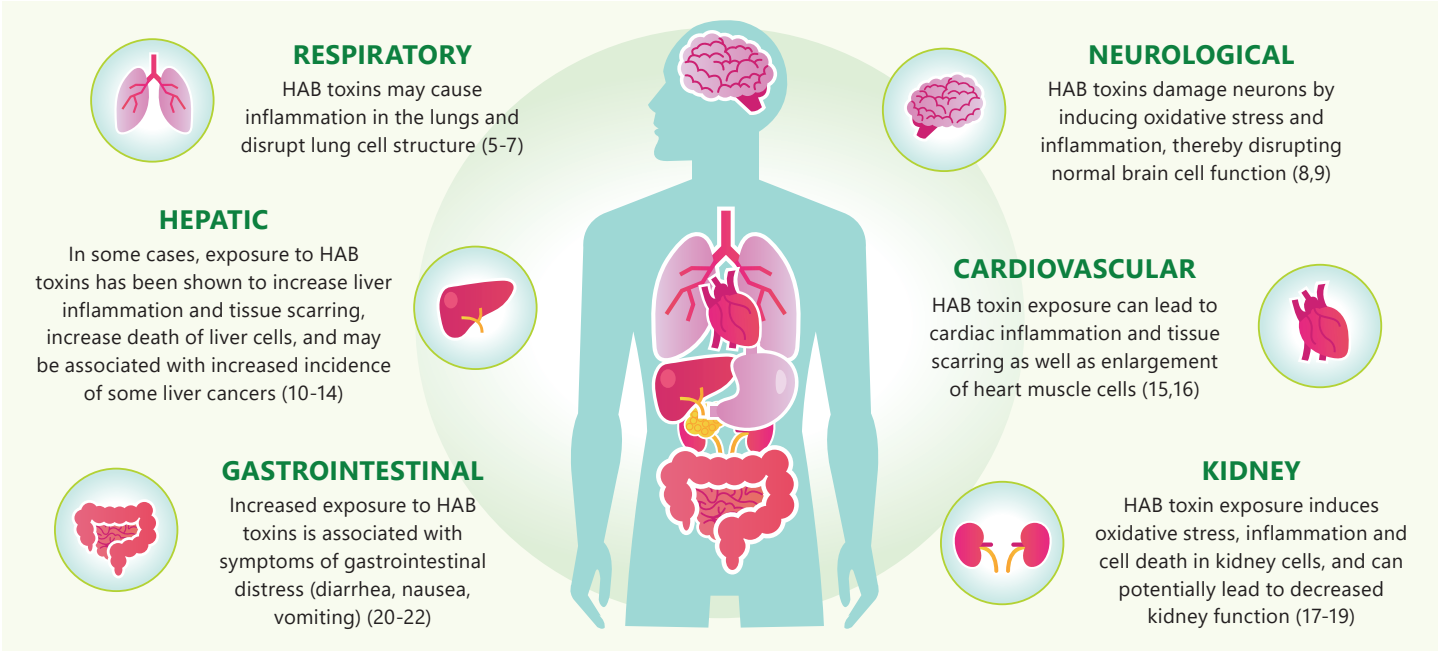
State of research on chronic toxin exposure

Authoritative studies on long-term (chronic) exposure to HABs remain rare. Frequency of exposure, dose, and personal health conditions play a vital role in how any of the various toxins that may be produced by a HAB can affect long-term health. Emerging science is briefly shared below; it is critical to note that most emerging theories are based on studies conducted in laboratories without human subjects, and additional studies are needed.



Who is at greatest risk?

Young children often incidentally ingest large quantities of water when swimming, so **parents with young children should be especially mindful of HAB toxin exposure. People with pre-existing health conditions** such as liver disease, asthma, gastrointestinal or other chronic inflammatory conditions should also be cautious, as HAB toxicity in these patients may worsen their conditions. Talk with your health care provider if you have questions about your health and exposure to HAB toxins. You cannot tell if a bloom is toxic just by looking at it. Remember: When in doubt, stay out!

Glossary

Harmful Algal Blooms (HABs) – rapidly growing algae or cyanobacteria that may produce toxins, which are dangerous for humans and animals.

Cyanobacteria – single celled photosynthetic bacteria that can be found in fresh, brackish and marine water bodies. Also known as blue-green algae.

HAB toxins – toxic substance produced by algae or cyanobacteria within water bodies that negatively impact human and animal health.

Inflammation – a physical condition in which an area of the body becomes swollen and red. It is the body's response to an injury or infection. Airway inflammation is persistent in asthma and other respiratory diseases.

Respiratory symptoms – common signs of lung conditions. Examples include difficulty breathing, dry cough, wheezing, productive cough, nasal congestion, and sore throat.

Go to the United States Centers for Disease Control and Prevention for more information on human health and HABs: www.cdc.gov/habs. | **MAY 2022**

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Contact us at www.glc.org/work/habs

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