

Trigger Levels

Table 1 below provides recommendations to post advisory signs based on trigger levels for the following criteria: concentrations of three major cyanotoxins in water, cell count of potential toxin producers, and site-specific indicators. These trigger levels were developed to protect human and animal (dogs, livestock) health from cyanobacteria HABs; for more information on how these levels were derived refer to Appendix A - Description of cyanotoxin trigger levels in recreational water bodies. The advisory signs communicate potential risk to the public.

Table 1: Trigger Levels for Human and Animal Health			
	Caution Action Trigger	Warning TIER I	Danger TIER II
Primary Triggers			
Total Microcystins^a	0.8 µg/L	6 µg/L	20 µg/L
Anatoxin-a	Detection^c	20 µg/L	90 µg/L
Cylindrospermopsin	1 µg/L	4 µg/L	17 µg/L
Secondary Triggers			
Cell Density (<i>Toxin Producers</i>)	4,000 cells/mL	--	--
Site Specific Indicators of CyanoHAB	Visible bloom/discoloration, scum, algal mats, satellite imagery,	--	--

^a The primary triggers are met when ANY toxin exceeds criteria

^b Microcystins refers to the sum of all measured microcystin congeners

^c Must use an analytical method that detects $\leq 1 \mu\text{g/L}$ Anatoxin-a