



## Sianobakteria ni nini?

Sianobakteria (pia inajulikana kama mwani wa bluu-kijani) kwa kawaida hupatikana katika vyanzo vya maji safi nchini Marekani na kote Vermont. Katika hali zinazofaa, sianobakteria inaweza kuongezeka kwa haraka na kuunda vijiumbehai wa sehemu ya juu na idadi nyingi inayojulikana kama michanuo, haswa wakati wa siku za joto za mwisho wa msimu wa kiangazi na mapema katika msimu wa mapukutiko.

## Je, michanuo ya sianobakteria hufanana na nini?

Michanuo ya sianobakteria kawaida hufanana na:

- Supu nzito ya dengue au rangi iliyomwagika juu ya maji
- Huwa na rangi ya kijani au bluu-kijani, lakini inaweza kuwa kahawia, zambarau, nyekundu au nyeupe
- Vipande vya povu kando ya ufuo
- Vipande vya povu juu ya maji ambavyo hutengana kwa urahisi.
- Madoa madogo au matone mazito yanayoelea au chini ya uso wa maji

Michanuo ya sianobakteria kawaida haifanani na:

- Nyuzi ndefu nyembamba za kijani kibichi zenye kung'aa, zinazohisi kama tope au pamba – hii inawezekana kuwa ni mwani wa kijani usio na madhara
- Rangi ya njano ya haradali – pengine hili ni chavuo

Pata video na picha za sianobakteria kwenye [healthvermont.gov/cyanobacteria](https://healthvermont.gov/cyanobacteria).

## Ninawezaje kugusa sianobakteria?

Unaweza kugusa sianobakteria wakati wa:

- Kuogelea
- Kuendesha boti au mtumbwi wa kuteleza majini
- Shughuli za ndani ya maji karibu na au kwenye michanuo
- Kunywa maji ya juu ambayo hayajasafishwa

Watoto na wanyama kipenzi wana hatari kubwa ya kuathiriwa na sianobakteria kwa sababu wana uwezekano mkubwa wa kucheza karibu na ufuo na wana uwezekano mkubwa wa kumeza maji.

Mifumo ya maji ya umma kwenye Ziwa Champlain hushirikiana na washirika wa serikali kufuatilia michanuo inayoweza kuathiri ubora wa maji ya kunywa.

## Je, kugusa sianobakteria kuna athari gani za kiafya?

Athari za jumla za kiafya zinazosababishwa na kugusa seli za sianobakteria ni pamoja na:

- Vipele au mwasho wa ngozi
- Athari zinazofanana na mzio kama vile kutoa kamasi kwenye pua au mwasho wa koo

Baadhi ya sianobakteria zinaweza kuzalisha misombo hatari inayoitwa sumu za siano (cyanotoxins). Wakati sumu hizi zimemezwa kwa kiasi kikubwa, zinaweza kusababisha:

- Matatizo makali na sugu ya tumbo kama vile kuhara na kutapika
- Uharibifu wa ini unaoweza kuchukua saa au siku kadhaa kuonekana kwa watu au wanyama
- Miguu na mikono iliyokufa ganzi, mwasho wa vidole vya mikono au kizunguzungu

Sumu za sianobakteria pia zinaweza kusababisha maradhi na wakati mwingine kifo kwa wanyama kipenzi na mifugo. Dalili zinazowezekana ambazo wanyama wanaweza kuonyesha ni pamoja na:

- Udhaifu au kuyumbayumba
- Matatizo ya kupumua
- Mipapatiko
- Kutapika au kuhara

Haiwezekani kujua ikiwa mchanuo una sumu hatari kwa kuuangalia tu. Vipimo vya maabara pekee vya sampuli za maji ndivyo vinaweza kuthibitisha kama mchanuo ni sumu. Unapotilia shaka, ni bora usikaribie maji.

## Je, maziwa yanafuatiliwa kwa ajili ya michanuo ya sianobakteria?

Wakati wa msimu wa kiangazi na mapema msimu wa mapukutiko, Ziwa Champlain na baadhi ya maziwa ya Vermont ya bara hufuatiliwa kwa ajili ya hili. Unaweza kupata ripoti za kila wiki kwenye Ramani ya Ufuatiliaji wa Sianobakteria kwenye [healthvermont.gov/tracking/cyanobacteria-tracker](https://healthvermont.gov/tracking/cyanobacteria-tracker).

Tafadhali kumbuka kuwa Kifuatiliaji cha Sianobakteria kinaweza kukusaidia kuelewa mahali ambapo michanuo imeripotwa hivi majuzi, lakini hakiwezi kukueleza hali zilivyo kwa sasa katika eneo unalopenda la kuogelea. Hii ni kwa sababu hali ya michanuo inaweza kubadilika haraka, na sio maeneo yote yanayofuatiliwa. **Ni bora kujifunza kuhusu mwonekano wa michanuo ya sianobakteria na kuiepuka.**

## Je, ninapaswa kufanya nini nikiona mchanuo wa sianobakteria?

- Usiguse maji.
- Weka wanyama vipenzi na mifugo mbali na maji.
- Mtahadharishe msimamizi wa ufuo au afisa wa afya wa mji.
- Ripoti mchanuo huo katika [tinyurl.com/bloom-report](https://tinyurl.com/bloom-report).

## Je, ninaweza kupata wapi taarifa zaidi?

Idara ya Afya ya Vermont— piga simu 800-439-8550 au tembelea [healthvermont.gov/cyanobacteria](https://healthvermont.gov/cyanobacteria)

Idara ya Uhifadhi wa Mazingira ya Vermont — piga simu 802-490-6130 au tembelea [dec.vermont.gov/watershed/lakes-ponds/learn-more/cyanobacteria](https://dec.vermont.gov/watershed/lakes-ponds/learn-more/cyanobacteria)

Kamati ya Ziwa Champlain - piga simu 802-658-1414 au tembelea [lakechamplaincommittee.org](https://lakechamplaincommittee.org)

Mpango wa Bonde la Ziwa Champlain - piga simu 802-372-3213 au tembelea [lcbp.org](https://lcbp.org)



## What are cyanobacteria?

Cyanobacteria (also known as blue-green algae) are naturally found in fresh water in the U.S. and throughout Vermont. Under the right conditions, cyanobacteria can multiply quickly to form surface scums and dense populations known as blooms, especially during the warm days of late summer and early fall.

## What does a cyanobacteria bloom look like?

Cyanobacteria blooms most commonly look like:

- Thick pea soup or spilled paint on the water's surface
- Green or blue-green in color, but can be brown, purple, red or white
- A mat of foam along the shoreline
- A mat on the surface of the water that breaks apart easily
- Small specks or blobs floating at or below the water surface

A cyanobacteria bloom does not usually look like:

- Stringy, bright grass-green, long strands that feel slimy or cottony — this is likely harmless green algae
- Mustard yellow in color — this is probably pollen

Find a video and photos of cyanobacteria at [healthvermont.gov/cyanobacteria](https://healthvermont.gov/cyanobacteria).

## How can I come in contact with cyanobacteria?

You may be exposed to cyanobacteria while:

- Swimming
- Boating or jet-skiing
- Water-based activities near or in blooms
- Drinking untreated surface water

Children and pets have a higher risk of being exposed to cyanobacteria because they are more likely to play near the shoreline and are more likely to swallow water.

Public water systems on Lake Champlain work with state partners to monitor blooms that might impact the quality of drinking water.

## What are the health effects of being exposed to cyanobacteria?

General health effects caused by exposure to cyanobacteria cells include:

- Rashes or skin irritation
- Allergy-like reactions such as a runny nose or a sore throat

Some cyanobacteria may produce harmful compounds called cyanotoxins. When these toxins are swallowed in large amounts, they can cause:

- Sharp, severe stomach problems like diarrhea and vomiting
- Liver damage that may take hours or days to show up in people or animals
- Numb limbs, tingling fingers and toes or dizziness

Cyanobacteria toxins can also cause illness and sometimes death in pets and livestock. Possible symptoms animals may show include:

- Weakness or staggering
- Difficulty breathing
- Convulsions
- Vomiting or diarrhea

It is not possible to tell if a bloom contains harmful toxins just by looking at it. Only laboratory tests of water samples can confirm whether a bloom is toxic. When in doubt, it's best to stay out of the water.

### **Are lakes monitored for cyanobacteria blooms?**

During the summer and early fall, Lake Champlain and some inland Vermont lakes are monitored. You can find weekly reports on the Cyanobacteria Tracker Map at [healthvermont.gov/tracking/cyanobacteria-tracker](http://healthvermont.gov/tracking/cyanobacteria-tracker).

Please note that the Cyanobacteria Tracker can help you understand where blooms have been reported recently, but it cannot tell you what the conditions are currently at your favorite swimming area. This is because bloom conditions can change rapidly, and not all locations are monitored. **It's best to learn what cyanobacteria blooms look like and stay away from them.**

### **What should I do if I see a cyanobacteria bloom?**

- Do not come in contact with the water.
- Keep pets and livestock away from the water.
- Alert the beach manager or town health officer.
- Report the bloom at [tinyurl.com/bloom-report](http://tinyurl.com/bloom-report).

### **Where can I get more information?**

Vermont Department of Health – call 800-439-8550 or visit [healthvermont.gov/cyanobacteria](http://healthvermont.gov/cyanobacteria)

Vermont Department of Environmental Conservation – call 802-490-6130 or visit [dec.vermont.gov/watershed/lakes-ponds/learn-more/cyanobacteria](http://dec.vermont.gov/watershed/lakes-ponds/learn-more/cyanobacteria)

Lake Champlain Committee – call 802-658-1414 or visit [lakechamplaincommittee.org](http://lakechamplaincommittee.org)

Lake Champlain Basin Program – call 802-372-3213 or visit [lcbp.org](http://lcbp.org)