Harmful Algal Bloom-related Illness Surveillance System (HABISS)

HAB-RELATED HUMAN ILLNESS REPORT

Problems associated with blooms of unicellular algae, known as Harmful Algal Blooms (HABs), are global and appear to be increasing in severity and extent. HABs have many economic, ecologic, and human health impacts, such as mass mortalities of fish, marine mammals, and seabirds; economic losses from reduced tourism, fish stocks, and shellfish harvests; and a suite of public health problems associated with direct exposure to toxins and the consumption of contaminated fish and shellfish. To assess the public health impacts from HABs, the National Center for Environmental Health (NCEH) created the Harmful Algal Bloom-related Illness Surveillance System (HABISS). HABISS houses data on human and animal HAB-related illnesses (e.g., cyanobacteria poisonings, shellfish poisonings, ciguatera fish poisoning, dermatologic and respiratory complaints) and environmental data characterizing HABs. The primary goal of this surveillance activity is to collect enough data to allow state and local health departments to predict HABs and be proactive in protecting public health.

This form is for the collection of demographic and health information for persons potentially exposed to a harmful algal bloom (HAB) in fresh, estuarine, or marine waters. Please complete the form as thoroughly as possible.
## HAB-RELATED HUMAN ILLNESS REPORT

Fresh water: Anatoxin-a poisoning, Anatoxin-a(s) poisoning, microcystin poisoning...

Marine: Ciguatera fish poisoning, domoic acid (amnesic shellfish poisoning - ASP), saxitoxin (paralytic shellfish poisoning – PSP)...
**Signs and Symptoms** (onset is from time of first exposure, duration is from time of onset)

Symptomatic [ ] Yes  [ ] No  [ ] Unknown

What symptom(s) did the case first experience? ______________________________________________________

Chief symptoms

**General**
- Fatigue
  - Onset [ ]
  - Duration [ ]
- Fever
  - Onset [ ]
  - Duration [ ]
- Loss of appetite
  - Onset [ ]
  - Duration [ ]
- Malaise
  - Onset [ ]
  - Duration [ ]

**HEENT**
- Earache
  - Onset [ ]
  - Duration [ ]
- Nasal congestion
  - Onset [ ]
  - Duration [ ]
- Headache
  - Onset [ ]
  - Duration [ ]
- Sore throat
  - Onset [ ]
  - Duration [ ]
- Conjunctivitis
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]

**Respiratory**
- Cough
  - Onset [ ]
  - Duration [ ]
- Chest tightness
  - Onset [ ]
  - Duration [ ]
- Short of breath
  - Onset [ ]
  - Duration [ ]
- Wheezing
  - Onset [ ]
  - Duration [ ]

**Cardiovascular**
- Chest pain
  - Onset [ ]
  - Duration [ ]
- Cyanosis
  - Onset [ ]
  - Duration [ ]
- Irregular beat
  - Onset [ ]
  - Duration [ ]
- Pale (arms/legs)
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]
- (check all that apply: ___ arms ___ legs ___ mouth)

**Gastrointestinal**
- Nausea
  - Onset [ ]
  - Duration [ ]
- Vomiting
  - Onset [ ]
  - Duration [ ]
- Diarrhea
  - Onset [ ]
  - Duration [ ]
- Pain (up R quadrant)
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]
- Bad taste in mouth
  - Onset [ ]
  - Duration [ ]

**Genitourinary**
- Dark urine
  - Onset [ ]
  - Duration [ ]
- Blood In urine
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]

**Musculoskeletal**
- Muscle pain
  - Onset [ ]
  - Duration [ ]
- Difficulty walking
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]

**Neurologic**
- Confusion
  - Onset [ ]
  - Duration [ ]
- Numbness
  - Onset [ ]
  - Duration [ ]
- Memory loss
  - Onset [ ]
  - Duration [ ]
- Weakness
  - Onset [ ]
  - Duration [ ]
- Seizure
  - Onset [ ]
  - Duration [ ]
- Paralysis
  - Onset [ ]
  - Duration [ ]
- Coma
  - Onset [ ]
  - Duration [ ]
- Vertigo
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]
- Tingling/burning
  - Onset [ ]
  - Duration [ ]
- Vision disturbance
  - Onset [ ]
  - Duration [ ]

**Dermatologic**
- Itching
  - Onset [ ]
  - Duration [ ]
- Rash
  - Onset [ ]
  - Duration [ ]
- Blisters
  - Onset [ ]
  - Duration [ ]
- Jaundice
  - Onset [ ]
  - Duration [ ]
- Other
  - Onset [ ]
  - Duration [ ]

If rash reported, identify the location of the rash (check all that apply):
- Left hand/arm
- Right hand/arm
- Left foot/leg
- Right foot/leg
- Face
- Neck
- Chest
- Back
- Under swimsuit
- Other
  ________________________________

Describe the appearance of the rash ________________________________________________________________

Did the case have multiple exposures [ ] Yes  [ ] No  [ ] Unknown

If yes, when ________________________________________________________________

If yes, did symptoms recur [ ] Yes  [ ] No  [ ] Unknown

Other Symptoms ________________________________________________________________
### Medical Information

- Case interviewed: [ ] Yes [ ] No [ ] Unknown
- Did the case use a dietary supplement made from blue-green algae or Super Blue-Green? [ ] Yes [ ] No [ ] Unknown
- Does the case take herbal supplements or drink herbal teas routinely? [ ] Yes [ ] No [ ] Unknown
  If yes, describe _________________________________
- Does the case use OTC pain medicine containing acetaminophen regularly (more than 5/week)? [ ] Yes [ ] No [ ] Don’t Know
- Did case use any prescribed medication, OTC, or supplements in the month before onset of symptoms? [ ] Yes [ ] No [ ] Unknown
  If yes, list ALL ________________________________

### Case Assessment

- Medical care sought: [ ] Yes [ ] No [ ] Unknown
  If yes, type: [ ] Clinic [ ] ER [ ] Urgent care
- Provider ______________________________
- Location ______________________________
- Phone number _________________________
- Were lab tests conducted: [ ] Yes [ ] No [ ] Unknown
  If yes, type and results
  - Blood tests _______________________________
  - Cultures ________________________________
  - Fecal smears _____________________________
  - Histopathology __________________________
  - Skin biopsies ____________________________
  - Toxins _________________________________
  - Urinalysis ______________________________
  - X-ray __________________________________

### Other Exposed People

- If female of reproductive age, is case currently pregnant or breastfeeding?
  - Yes, pregnant [ ] Yes, nursing [ ] No [ ] Don’t Know

### Case Report Status

- Case report status: [ ] Complete
  - Follow-up required (describe in follow-up section below)
- Diagnosis
  - Not a HAB-related case
  - Not likely a HAB-related case
  - Probable HAB-related case* __________________________
- Source of final diagnosis __________________________
- Follow-up needed: [ ] Yes [ ] No
- Report by (name) ________________________________
  * based on CDC case definitions on page 5
- Other exposed people ____________________________
  - Description ________________________________
  - HABISS # (s) ________________________________
Disease associated with this report

**Primarily associated with freshwater:**
- Anatoxin-a poisoning
- Anatoxin-a(s) poisoning
- Cylindrospermopsis poisoning
- Lyngbyatoxin poisoning
- Microcystin poisoning
- Saxitoxin poisoning (Paralytic shellfish poisoning - PSP)
- Other __________________________

**Primarily associated with marine water:**
- Azaspiracid poisoning
- Brevetoxin poisoning
- Ciguatera fish poisoning
- Domoic acid poisoning (amnesic shellfish poisoning - ASP)
- Lyngbyatoxin poisoning
- Saxitoxin poisoning (Paralytic shellfish poisoning - PSP)
- Okadaic acid poisoning (Diarrhetic shellfish poisoning-DSP)
- Other __________________________

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**CDC case definition summary for selected toxins** (for complete description see CDC Proposed Case Definitions for Algal Toxin-related Diseases)

**NOTE:** We do not have definite case definitions for these poisonings. We cannot rule out that a person may present with symptoms immediately after exposure or days after exposure.

<table>
<thead>
<tr>
<th>Poison</th>
<th>Causative organism</th>
<th>Vector</th>
<th>Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatoxin-a</td>
<td>Anabaena spp.</td>
<td>Contaminated fresh water</td>
<td>minutes to hours</td>
</tr>
<tr>
<td></td>
<td>Aphanizomenon spp.</td>
<td>Planktothrix spp.</td>
<td></td>
</tr>
<tr>
<td>Anatoxin-a(s)</td>
<td>Anabaena flos-aquae</td>
<td>Contaminated fresh water</td>
<td>minutes to hours</td>
</tr>
<tr>
<td>Azaspiracid</td>
<td>Protoperidinium</td>
<td>Shellfish: clams, scallops, mussels, oysters</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>Brevetoxin</td>
<td>Dinoflagellates</td>
<td>Contaminated marine waters and shellfish</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td></td>
<td>Karenia brevis</td>
<td>Other Karenia spp.</td>
<td></td>
</tr>
<tr>
<td>Ciguatoxins</td>
<td>Dinoflagellates</td>
<td>Many fish species: eel, grouper, mackerel, snapper...</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td></td>
<td>Gambierdiscus toxicus</td>
<td>Gambierdiscus spp</td>
<td></td>
</tr>
<tr>
<td>Cylindrospermopsis</td>
<td>Cylindrospermopsis raciborski, Aphanizomenon ovalisporum</td>
<td>Contaminated fresh water and possibly fish</td>
<td>hours to days</td>
</tr>
<tr>
<td>Domoic acid</td>
<td>Pseudo-nitzschia spp.</td>
<td>Nitzschia pungens</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>Lyngbyatoxin</td>
<td>Lyngbya sp.</td>
<td>Contaminated fresh or marine waters</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>Microcystins</td>
<td>M. Aeruginosa</td>
<td>Contaminated fresh water</td>
<td>hours to days</td>
</tr>
<tr>
<td></td>
<td>Anabaena spp.</td>
<td>Planktothrix spp.</td>
<td></td>
</tr>
<tr>
<td>Okadaic acid</td>
<td>Dinophysis sp.</td>
<td>Shellfish: crab, clams, scallops, mussels, oysters, crabs</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>Saxitoxins</td>
<td>Dinoflagellates and Cyanobacteria (Aphanizomenon sp. Anabaena circinalis)</td>
<td>Shellfish (clams, cockles, mussels, oysters, whelks) or puffer fish</td>
<td>&lt;24 hours</td>
</tr>
</tbody>
</table>

**Suspect Case**

Exposure to water or to seafood with a confirmed algal bloom AND onset of associated signs and symptoms within a reasonable time after exposure AND without identification of another cause of illness.

**Probable Case**

Meets criteria for Suspect Case AND there is laboratory documentation of a HAB toxin(s) in the water.

**Confirmed Case**

Meets criteria for a Probable Case combined with professional judgment based on medical review.

**Healthcare Providers:** Please fax form to the local health department of the residence of the ill individual. A list may be found at: [http://odhlogin.sso.odh.ohio.gov/LHDdirectory/NetMgr/ODHList.aspx](http://odhlogin.sso.odh.ohio.gov/LHDdirectory/NetMgr/ODHList.aspx)

If you are unable to identify the residence, please send to your local health department.

**Local health departments please fax forms to:** (614) 564-2456

Harmful Algal Blooms (HAB)
Outbreak Response and BT Investigation Team (ORBIT)
Ohio Department of Health (ODH)

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