



Implementation of CDC One Health HABS Reporting System in California

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Current Reporting

- Human health impacts (or death) is not a reportable condition – water body manager or victim may report to LHO and/or CDPH (Duty Officer at EHIB)
 - If WaterBoards notified, will report to CDPH
 - CDPH to notify WaterBoards if report from elsewhere
- Pet illness or death similar to human
- Livestock or other domesticated animal may be reported to LHO, CDFA, or local agricultural authority
 - WaterBoards may be notified
- Wildlife (fish kill, deer or other mammal deaths or birds) may be reported to CDFW
 - WaterBoards to be notified of bloom

Health Impact Data

- May reside in several different systems
- May go unreported
- Follow up/investigation of reports is not consistent
- Seldom published in aggregate, just case reports
- Data are necessary to determine scope of human, domesticated animal, and wildlife impact at regional, state and national levels
 - Impact policy, grant funding, government resourcing, and mitigation at all levels

CDC One Health HABs NORS Module

- ‘One Health is an approach that recognizes that human, animal, and environmental health are interconnected, and that human health, animal health, and environmental health communities can more effectively address many linked health challenges by working together.’ –CDC
- OH HABs is a module of the National Outbreak Reporting System (NORS)
 - Online state based reporting system for reportable foodborne, waterborne and/or enteric disease *outbreaks in humans*.
 - OH HABs differs in that HABs related illnesses are not (generally) reportable and will be reported as cases (humans as well as pets, others) or mass events (fish kills, multiple livestock deaths)
- Piloted in many HABs impacted states since 2014, system implemented in 2016 in (25?) states
 - On average 10-100 reported cases or events per state per year

CDC One Health HABs NORS Module

- No federal funding to implement system at state levels
- Not reportable human health events in any state (one state currently pending legislation)
- In California, included in a five year CDC Environmental Health Tracking Program grant, beginning in 2017
 - 10% FTE for one grant funded staff member
 - CDPH infrastructure/administrative support
- Will use data collected to increase internal awareness of resources needed for tracking HABs related health impacts and/or federal or foundation funding

CDC One Health HABs NORS Module

Human Cases of Illness	<ul style="list-style-type: none">• Individual cases of human illness (multiple cases constitute an outbreak, so also report as such to CDC)• Can include any exposure route (so may include consumption of ocean caught fish or shellfish)
Animal Cases of Illness	<ul style="list-style-type: none">• Individual cases of animal illness• Domestic pets (e.g., dogs, cats, parrots, guinea pigs)• Livestock (e.g., cattle, sheep, goats, chickens, pigs, horses)• Wildlife non-domesticated animals (e.g., birds, sea lions, fish, deer)• Freshwater or marine, but emphasis is on freshwater for OH HABs
Harmful Algal Bloom Events	<ul style="list-style-type: none">• Location and description of a HAB in any water body (e.g., inland lake, coastal water body, brackish water body; emphasis on freshwater)• For foodborne HAB-associated illnesses with no observed HAB event, the most likely food source (e.g., seafood catch or harvest location) may be reported.

Multi Agency Communication

- California Environmental Protection Agency/Office of Environmental Health Hazard Assessment
 - Beckye Stanton and Reggie Linville
- State Water Resources Control Boards (communication hub)
 - Marisa Van Dyke and Ali Dunn
- California Department of Fish and Wildlife/Wildlife Investigations Lab
 - Stella McMillin and Krysta Rogers
- California Department of Public Health/Tracking California (Cal Envir. Health Tracking)
 - Susan Paulukonis, Jhaqueline Valle and CDPH Duty Officer

HABs Health Event Details

- Human Event form: tinyurl.com/yc9uvyyj (or Google One Health HABs and click 'Forms' at bottom of first result)
 - Case details: age; sex; state of residence; general medical history;
 - Exposure details: geography, date/time and details;
 - Health event details: symptoms; medical care including tests and results;
 - Resolution: outcomes; reported to what authorities
- Animal Event form: tinyurl.com/yd4tw799
 - Case details: animal species/genus/breed, age, weight, sex, pre-existing conditions; number of animals; deceased (and if so, state of carcass);
 - Exposure details: geography, date/time and details;
 - Health event details: symptoms; medical care including tests and results;
 - Resolution: outcomes; reported to what authorities

Timeline

- Coordinated multi agency drafted outreach efforts to CCHABs membership, LHOs, lake managers, relevant vet clinics in winter spring 2018
- Continued data collection by Waterboards in 2018
- Addition of OH HABs reporting (on line now)
 - Expect 25-50 cases per year
- Funding for OH HABs data collection/follow up is for five years
 - May be continued or folded in another state program

Data

- Tracking/CDPH personnel have access to OH HABs data
 - Will do regular report outs via CCHABs and other relevant meetings
 - Hope to do aggregated reporting on CDPH and/or Tracking California website, pending approval and large enough numbers
- Can share de identified details of events with agencies/researchers with approval
- Share data to support grant or funding applications, policy changes, etc.
- Manuscripts if enough data – potential for community level linkage with health outcomes
 - ‘Sentinel’ cases can prompt looking into other data sources for similar cases at same time/geography

Questions

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