To: Santa Cruz County Healthcare Providers  
From: Gail Newel, MD, MPH, County Health Officer  
Subject: Wound Botulism  
Date: June 7, 2023  

Situational Update:  
In late May, a patient presented to a local emergency department with signs and symptoms consistent with botulism poisoning. After the suspect case was reported, the patient did receive botulinum antitoxin (BAT). The presence of botulinum neurotoxin type A was subsequently confirmed from patient’s blood samples by the California Department of Public Health (CDPH) Microbial Diseases Laboratory. Food poisoning is not suspected in this case; rather, transmission likely occurred through a contaminated wound. The exact source of botulism in this case remains unknown and additional incidences may occur. The last confirmed case of wound botulism in our county was in March of 2021.

Wound botulism is caused by an anaerobic bacterium – *Clostridium botulinum* bacteria entering a wound or opening in the skin and producing the botulinum toxin.

- People who inject street drugs like black tar heroin are more likely to get wound botulism than people who do not because *C. botulinum* bacteria can get in through the injection site and produce the botulinum toxin.
- Rarely, a traumatic injury (like an open fracture) where dirt or soil gets into the wound can cause wound botulism.

[CDC botulism surveillance](https://www.cdc.gov/botulism/index.html) data (most recently available) from 2018 showed that California had the highest rate of laboratory-confirmed wound botulism cases in the nation, all occurring in persons who injected drugs. Public Health asks that local health care providers be aware of the possibility of botulism poisoning associated with injection drug use and recognize that signs/symptoms of botulism can appear to be similar to the effects of drug or alcohol intoxication.
ACTIONS REQUESTED OF HEALTHCARE PROVIDERS

- Be alert for cases of wound botulism, especially in persons who inject drugs. Symptoms include altered vision, drooping eyelids, difficulty swallowing, speaking, or breathing, and muscle weakness, which can progress to descending paralysis. Patients can present with mild symptoms that may progress quickly to respiratory failure. Wound botulism patients do not always present with a visible wound or abscess.

- Prompt clinical diagnosis is imperative, as timely administration of botulism antitoxin (BAT) can halt the progression of disease, lead to better outcomes, and save lives.

- Clinicians must immediately report any suspect botulism cases to the Communicable Disease Unit (CDU) at (831) 454-4114. After hours call (831) 471-1170 and ask to speak with the Public Health official on call, who will notify the State as necessary. Please do not contact the CDC directly.

- California State health officials are on call 24/7 to provide technical consultation for botulism testing and BAT release. The decision to administer BAT is based on clinical presentation. BAT administration should never be withheld pending laboratory confirmation.

- Clinicians should alert patients that injecting drugs may increase their risk of botulism as well as hepatitis and HIV. Persons who inject black tar heroin are especially at risk for wound botulism and cooking or cleaning drug paraphernalia does not decrease a person’s risk.

ADDITIONAL RESOURCES

- CDPH “Black Tar Heroin May Cause Botulism” flyer
- CDPH Botulism Fact Sheet
- CDPH Botulism webpage
- CDC information about injection drug use and wound botulism

For more information about reporting communicable diseases, please visit www.santacruzhealth.org/CDUnit

Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.