DATE
July 8, 2021

SUBJECT Suspect Wound Botulism Case Associated with Injection of Heroin

INSTRUCTIONS

DISTRIBUTED to your local HAN contacts. This HAN is intended for general sharing of information.

- Time for Forwarding: As Soon As Possible
- Please forward to DPHHS at hhshan@mt.gov
- Remove this cover sheet before redistributing and replace it with your own

Please update your HAN contact information on the Montana Public Health Directory

Categories of Health Alert Messages:

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.

Information Service: passes along low level priority messages that do not fit other HAN categories and are for informational purposes only.
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Suspect Wound Botulism Case Associated with Injection of Heroin

BACKGROUND
On July 3, 2021 one case of suspected wound botulism in an individual with a recent history of injecting black tar heroin was reported to the Montana Department of Public Health and Human Services (DPHHS) and local health department partners in the Confederated Salish and Kootenai Tribes (CSKT), Lake county, and Flathead county. There was evidence of subcutaneous or intramuscular injection (i.e. “skin popping”), which is a known risk factor for developing wound botulism after injection drug use. Early in the morning on July 4th, the individual received heptavalent botulism antitoxin after a consult with the Centers for Disease Control and Prevention (CDC) determined that wound botulism was the likely cause of illness. The person was symptomatic for at least six days and had already progressed to respiratory failure before antitoxin was administered. Antitoxin does not reverse the effects of the toxin but prevents further progression of disease.

INFORMATION
Wound botulism is a rare and potentially fatal paralytic illness that occurs when a wound is contaminated by Clostridium botulinum spores that germinate and produce neurotoxins inside the wound. Injection drug use is the leading cause of wound botulism in the United States, and many of those cases are associated specifically with the use of black tar heroin. Symptoms of wound botulism usually appear several days after injecting contaminated drugs, rather than immediately, because it takes several days, or even a couple of weeks, to produce the toxin. Affected patients typically present with prominent cranial nerve palsies resulting in blurred vision, diplopia, ptosis, dysphagia, slurred speech, dysphonia, impaired gag reflex, and facial weakness, followed by progressive descending symmetrical flaccid weakness and respiratory failure.

Supportive care is a mainstay of treatment and may include intensive care with respiratory support through mechanical ventilation. Infected wounds should be debrided and treated with antibiotics effective against anaerobes. The use of certain antibiotic classes could pose a theoretical risk to patients with botulism. Providers should seek up-to-date resources regarding risks, benefits, and monitoring when selecting antibiotic treatment for these individuals.

RECOMMENDATIONS
Clinicians, particularly those treating individuals from northwestern Montana, are requested to be aware of the following recommendations:

- Be alert for possible cases of wound botulism in persons with compatible symptoms and recent history of injection heroin use, regardless of whether dermal wounds or evidence of skin infection are visible. Initial presentations can be mild but may quickly progress to severe illness. Botulism antitoxin therapy should be provided as early as possible with suspected cases, in order to reduce symptom progression. Treatment should
not wait for laboratory confirmation. Refer suspected cases immediately to the nearest emergency department and call local public health immediately.

- **Immediately report suspected cases of wound botulism to your local public health department.** Public health staff involvement is necessary to facilitate laboratory testing at the state health department and to release antitoxin treatment from CDC. If you are unsuccessful at reaching the local health department, call the Montana DPHHS Communicable Disease section 24/7 number at 406-444-0273.

- Be aware that symptoms of wound botulism can look like symptoms of an opioid overdose. This may complicate the initial evaluation, especially if there is a known history of recent injection drug use. The individual described above presented with symptoms similar to an opioid overdose, and naloxone was administered twice with no change in symptoms. Timely administration of naloxone will reverse the effects of an opioid overdose, but will not reverse the symptoms of botulism. If naloxone is appropriately administered to an individual with suspected opioid overdose, but symptoms persist, botulism should be considered.

- Consider neurology and infectious disease consultations to evaluate for botulism. Consider surgical consultations for thorough debridement of wounds and abscesses.

- Any wound specimens should be sent for anaerobic culture. Serum testing for *C. botulinum* toxin can also be conducted by public health laboratories. **Specimens must be collected before antitoxin is administered.**

- Montana DPHHS will arrange a clinical consultation regarding potential cases between medical providers and the 24/7 CDC Botulism Clinical Consultation Service, through the CDC Emergency Operations Center. If clinical consultation supports botulism, antitoxin will be requested and should be administered immediately. **Do not wait for laboratory confirmation of botulism to administer the antitoxin.**

Wound botulism can be prevented by not injecting illicit drugs. If an individual cannot stop using, safe injection practices should be encouraged. Syringe Service Programs (SSPs) in Montana are available and should be recommended to individuals who use injection drugs. It is not known if using safe injection practices can prevent botulism, but injecting safely can help protect individuals against many other infections, including HIV and hepatitis C. SSPs in northwestern Montana include:

Open Aid Alliance (OAA) Syringe Services ([https://www.openaidalliance.org/](https://www.openaidalliance.org/))

- a. OAA Syringe Services Program - **Polson**
  The Polson Syringe Services Program is open Mon-Wed 10am-3pm in the Lake County Health Department. The building is open to the public. For assistance, please call 406-273-1888.

- b. OAA Syringe Services Program - **Missoula**
  Safe injection supplies can be picked up at 1500 Broadway and Cooper St. on Tues. and Thurs. from 12-3pm.
  If you live in Missoula and are unable to pick up supplies during those times, you can request supplies be delivered to you. Call 543-4770 and choose option 2.
  Alternatively, OAA also allows Montanans who don’t live in the Missoula area to receive harm reduction supplies through the mail. More information on this service is available under the "Services" link on their main website ([https://www.openaidalliance.org/](https://www.openaidalliance.org/)).

Flathead Syringe Exchange Program (SEP) - **Kalispell**

The Flathead SEP is open from Tuesdays 1:00-4:00 and Thursdays 1:00-5:30. It is located at 1035 1st Ave West in Kalispell, MT at the Family Planning clinic. Individuals have access to syringes, rapid testing, Narcan, clean works and other supplies through the Flathead SEP. Please call 406-751-8256 for assistance.
The State of Montana has issued a standing order for Naloxone that allows Montanans to access Naloxone at no cost. Additional information about botulism is available at: https://www.cdc.gov/botulism/health-professional.html; https://www.cdc.gov/botulism/wound-botulism.html; https://www.cdc.gov/mmwr/volumes/70/rr/rr7002a1.htm