

**Communicable Disease Epidemiology  
and Immunization Section**

401 5th Avenue, Suite 1250  
Seattle, WA 98104

**206-296-4774** Fax 206-296-4803  
TTY Relay: 711

[www.kingcounty.gov/health](http://www.kingcounty.gov/health)

**Health Advisory: Probable Wound Botulism in a Person who Uses Injection Drugs in King County –  
9 OCTOBER 2017**

**Action requested:**

- **Be aware of a probable case of wound botulism in a person who injects drugs (PWID) in King County**
- **Be alert for symptoms of botulism among PWID, especially black tar heroin users, including one or more of:**
  - **Bilateral cranial nerve signs and symptoms including blurred vision, diplopia, ptosis, dysphagia, dysarthria, impaired gag reflex, dry mouth, and facial weakness**
  - **Descending, symmetrical flaccid paralysis that may progress to respiratory failure**
- **Onset of symptoms of wound botulism is usually *several days after injecting* contaminated drugs, but may be weeks later.**
- **Symptoms may be subtle initially, and progress at a variable pace. Early diagnosis and treatment can prevent progression to more extensive paralysis, however the diagnosis is frequently missed at one or more visits before botulism is suspected.**
- **When a case of wound botulism is suspected:**
  - **Immediately notify Public Health at (206) 296-4774**
  - **Thoroughly examine the patient head-to-toe for wounds; abscesses containing the bacteria may sometimes be found at injection site(s)**
  - **Obtain serum (minimum volume: ~10ml) for toxin assay; if foodborne botulism cannot be ruled-out, also collect a stool sample for toxin assay and for *C. botulinum* culture**
  - **Consider neurology, infectious disease, and surgery consultation**
- **Treatment of wound botulism includes botulinum antitoxin, surgical debridement and irrigation of wounds, and appropriate antibiotics.**
- **Educate PWID patients about wound botulism, its symptoms, the need to seek medical care promptly, and prevention.**

**Background:** An adult male presented to an emergency department (ED) on September 30 with a two day history of diplopia and myalgia. He had a history of black tar heroin injection drug use and had evidence of abscesses on upper and lower extremities. MRI of his head and neck was unremarkable and the patient was discharged. On October 2, the patient presented to another ED with progressive, descending weakness of the shoulders and chest and respiratory difficulty; the patient was intubated. Botulinum neurotoxin was not detected in the patient's serum at Washington State Public Health Laboratory, however the overall sensitivity of laboratory tests in wound botulism has been reported to be between 33–68%. Symptoms of wound botulism usually appear several days after injecting contaminated drugs rather than immediately, and some symptoms of wound botulism can look like symptoms of opioid overdose, such as slurred speech or inability to talk, weakness, and trouble breathing. Healthcare providers should have a high index of suspicion and perform a careful neurologic exam in PWID who present with abnormal cranial nerve signs and/or symptoms.

**Resources:**

- **CDC botulism information:** <https://www.cdc.gov/botulism/index.html>