



## Frequently asked questions about borealpox virus

- **Why did the name change from “Alaskapox” to “borealpox” virus?**

The name “borealpox” references the ecosystem where the virus was first identified in both humans and small mammals. It is less specific than the former name “Alaskapox” and allows room for the possibility of the virus being identified in small mammals (and humans) outside of Alaska as we learn more about the virus.

- **What is borealpox virus?**

Borealpox virus is an orthopoxvirus that was first discovered in 2015 in a woman who lived near Fairbanks. As of December 2023, six more infections in people have been reported. This virus belongs to a group of viruses called orthopoxviruses. These viruses infect mammals and cause skin lesions.

- **What are the signs and symptoms of borealpox virus?**

People with borealpox have had one or more skin lesions (see photos below) and other symptoms like swollen lymph nodes and joint or muscle pain. Several borealpox patients initially thought they had a spider or insect bite. Nearly all patients had mild illnesses that resolved on their own after a few weeks. There has been one patient with an immunocompromising condition that developed severe disease and died after prolonged illness.

- **Where is borealpox virus found?**

Six of the known human infections occurred in people who lived in the Fairbanks North Star Borough (FNSB) and one infection occurred in a person who lived in the Kenai Peninsula Borough. While animal trapping studies have confirmed the presence of the virus in small mammals in Interior Alaska, it is very likely that the virus is present more broadly in Alaska’s small mammals and that more infections in humans have occurred but were not identified. More animal testing is under way to better understand the distribution of the virus in animal populations throughout Alaska and beyond.

- **Where does the virus come from?**

We believe that borealpox virus primarily occurs in small mammals. Through multiple rounds of small mammal field sampling conducted in 2015, 2020 and 2021, and from screening frozen tissue samples archived at the University of Alaska Museum, the presence of the borealpox virus has been confirmed in two species in the Interior: Northern Red-backed Voles (*Myodes rutilus*) and Masked Shrews (*Sorex cinereus*), which are the two most common and widespread small mammal species in Alaska. However, evidence also suggests the virus is present in other small mammal species in Alaska and that its prevalence extends to areas outside of Interior Alaska and Kenai Peninsula, and probably beyond Alaska. We are not sure exactly how the virus spreads from animals to people but contact with small mammals and potentially domestic pets who come into contact small wild mammals could play a role.

- **Can people with borealpox infect other people?**

While human-to-human transmission of borealpox virus has not yet been observed, some orthopoxviruses can spread by direct contact with lesions (particularly broken skin contact with lesion secretions). Therefore, we advise individuals with skin lesions potentially caused by borealpox to keep the affected area covered with a bandage and avoid sharing bedding or other linens that have come into contact with the lesion.

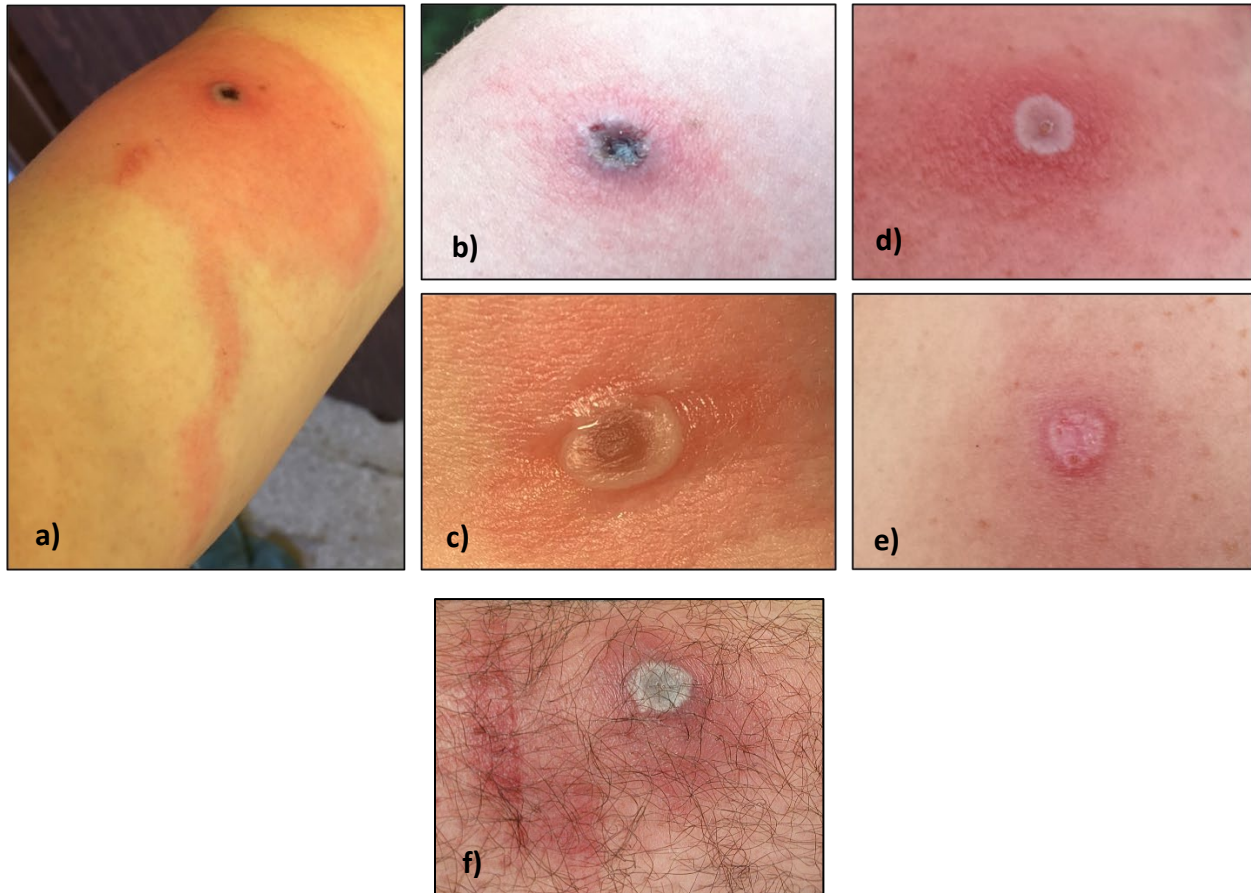
- **What should I do if I think I have borealpox?**

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Talk to a health care provider. They can assess whether your symptoms might be caused by borealpox or something else. Keep the lesion covered and avoid touching it.

- **What should health care providers do if they think a patient may have borealpox?**

If you suspect borealpox virus infection and have not identified an alternative diagnosis, contact the Alaska Section of Epidemiology at 907-269-8000 to facilitate testing and treatment (if warranted). Advise the patient to keep the lesion covered with a bandage. Take photos of the lesion.



*a): A borealpox lesion about 10 days after symptom onset. b): Close-up of same lesion (a) about 12 days after symptom onset. c): A borealpox lesion about 5 days after symptom onset; the lesion was about 1.2 cm across. d): A borealpox lesion about 5 days after symptom onset; this lesion was about 1 cm across. e): The same lesion as above (d), about 4 weeks after symptom onset. f): A borealpox lesion around the reported symptom onset date.*



*A boreal pox lesion from an immunocompromised patient about 3 days after symptom onset (left) and about 8 weeks after symptom onset (right) with the area of lesion swelling measuring about 22 x 11 cm.*