

## YABAPOXVIRUS

Animal Group(s) Affected	Transmission	Clinical Signs	Severity	Treatment	Prevention and Control	Zoonotic
Primates, including human	Accidental inoculation, insect vectors, body fluids, wounds. Humans infected via skin wounds.	Benign growths on the face and limbs (histiocytoma) which may reach several cm in diameter	Mild to severe	Supportive. Usually spontaneous regression in 3-6 weeks	Careful handling of nonhuman primates. Disinfection of fomites and vector control.	Yes

**Fact Sheet compiled by:** E. Marie Rush

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**Fact Sheet Reviewed by:** Marc Valitutto; Benjamin Monroe; Jenifer Chatfield; Joerg Mayer

**Susceptible animal groups:** Primates, human and non-human

**Causative organism:** Yabapoxvirus (genus *Yatapoxviridae*)

**Zoonotic potential:** Yes

**Distribution:** Western Africa (originated in Yaba, Nigeria)

**Incubation period:** Unknown, but clinical signs can appear within days of inoculation

**Clinical signs:** In non-human primates, subcutaneous tumors begin as small erythematous areas, but can quickly proliferate once the histiocytes become infected. The infected animal develops a high titer during tumor growth, and regression of the tumor is likely caused by *in vivo* cytopathic effects of virus. Signs in humans are similar to nonhuman primates. Lesions typically regress spontaneously within 3-6 weeks. Pruritus may accompany lesions. This disease is different from Yaba-like disease virus, which is in the same genus *Yatapoxviridae*.

**Post mortem, gross, or histologic findings:** Grossly apparently subcutaneous tumors that when biopsied, show large pleomorphic histiocytic cells loosely arranged in a vascular network.

**Diagnosis:** History of direct or indirect contact with non-human primates or transport from and travel to west Africa, ELISA, PCR, histopathology of tumors, EM

**Material required for laboratory analysis:** Serum, tissue for histopathology or EM.

**Relevant diagnostic laboratories:** This is an uncommon disease, but has been noted in North American collections. Most laboratories that process non-human primate samples can either run the PCR for this virus or can direct personnel accordingly to an appropriate laboratory facility for testing of samples. Histopathology and EM can be done at most laboratories that normally process tissues and have the capabilities for these procedures.

**Treatment:** Supportive – spontaneous resolution usually in ~3-6 weeks

**Prevention and control:** Avoid contact with primates that have had potential exposure. Proper quarantine and testing of animals with history of exposure or recent shipment from west Africa. Humans should keep all skin wounds cleaned, bandaged and covered when working with non-human primates. Thorough disinfection of all potential fomites in housing areas for primates in collections and protection of animal care staff through education and proper clothing and protective wear (gloves, long sleeves). Vector control.

**Suggested disinfectant for housing facilities:** Detergents, hypochlorite, alkalis, Virkon® and glutaraldehyde.

**Notification:** Public health officials may need to be notified if zoonotic transmission occurs, depending on the state.

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**Measures required under the Animal Disease Surveillance Plan:** Currently none

**Measures required for introducing animals to infected animal:** Do not introduce animals with clinical disease (active or resolving pustules/lesions) to non-infected or new animals. Allow resolution of all lesions completely prior to introduction and follow proper quarantine measures for individual facility.

**Conditions for restoring disease-free status after an outbreak:** Condition typically spontaneously resolves within weeks with supportive care. Treatment of any secondary infections should assist in wound healing. Immunosuppressed animals may be more susceptible to infection and secondary disease and complications. Proper disinfection of animal area and fomites should be done following an outbreak or care of an infected animal prior to housing new animals in the area.

**Experts who may be consulted:**

Centers for Disease Control and Prevention

Poxvirus and Rabies Branch, Division of High-Consequence Pathogens and Pathology

1600 Clifton Rd

Atlanta, GA 30333

800-CDC-INFO

**References:**

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