

# **Onchocerciasis**

### **Key facts**

- Onchocerciasis or "river blindness" is caused by the parasitic worm Onchocerca volvulus.
- Symptoms include severe itching, disfiguring skin conditions and visual impairment, including permanent blindness.
- People become infected through the bites of infected blackflies (Simulium spp.).
- More than 99% of infected people infected live in sub-Saharan Africa; the disease also exists in some foci in Yemen.
- Community-directed treatment with ivermectin is the core strategy to eliminate onchocerciasis in Africa.

Onchocerciasis – or "river blindness" – is a parasitic disease caused by the filarial worm Onchocerca volvulus. It is transmitted through the bites of infected blackflies (Simulium spp.) that breed in fast-flowing rivers and streams, mostly in remote villages located near fertile land where people rely on agriculture.

In the human body, the adult worms produce embryonic larvae (microfilariae) that migrate to the skin, eyes and other organs. When a female blackfly bites an infected person during a blood meal, it also ingests microfilariae which develop further in the blackfly and are then transmitted to the next human host during subsequent bites.

### Signs and symptoms

Onchocerciasis is an eye and skin disease. Symptoms are caused by the microfilariae, which move around the human body in the subcutaneous tissue and induce intense inflammatory responses, especially when they die. Infected people may show symptoms such as severe itching and various skin lesions. In most cases, nodules develop under the skin. Some infected people develop eye lesions which can lead to visual impairment and permanent blindness.





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## **Geographical distribution**

Onchocerciasis occurs mainly in tropical areas. In the Eastern Mediterranean Region there are two countries endemic for the disease: Sudan and Yemen.

#### **Treatment**

WHO recommends treating onchocerciasis with ivermectin at least once yearly for about 10 to 15 years.

For more information: www.emro.who.int/whd2014





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