Oropouche virus disease

Oropouche virus disease is an arboviral disease caused by the Oropouche virus (OROV) spread to humans mainly through the bite of an infected midge

Oropouche virus disease is an infection caused by the Oropouche virus (OROV). This virus is mainly spread by a bite from an infected midge (*Culicoides paraensis*) that usually bite from dawn to dusk. These midges are common in the Americas and the Caribbean but are not a type of midge found anywhere in the UK. Some mosquitoes can also spread OROV and may bite at different times.

Oropouche virus was first discovered in Trinidad and Tobago during the 1950s. Since then, outbreaks have occurred in other parts of the Caribbean and in several Central and South American countries. In 2024, outbreaks were reported in Barbados, Bolivia, Brazil, Colombia, Cuba, Dominican Republic, Ecuador, Guyana, Panama and Peru, including in areas of the Caribbean, Central and South America that had not previously reported locally acquired cases.

OROV disease symptoms begin four to eight days after a bite from an infected midge or mosquito. The illness starts suddenly, usually with fever, headache, joint pain, muscle aches and chills. Other symptoms can include nausea, vomiting, rash, light sensitivity, dizziness and pain behind the eyes. Symptoms usually last for up to seven days. In up to 60% of cases, symptoms may return a few days or even weeks later.

Some people may develop more severe disease, including meningitis or encephalitis. OROV has also been linked to a rare neurological disorder called Guillain-Barré syndrome. Fatal human OROV disease cases were reported for the first time in 2024.

Human to human OROV transmission has never been reported. However, in 2024, mother to baby transmission of the virus in pregnancy was confirmed. It is not clear how often mother to baby transmission occurs or if the risk is increased at specific stages of pregnancy. Work to gain a more detailed understanding of OROV infection risks during pregnancy continues and information will be updated once it becomes available.

OROV was also found in the semen of a traveller with the disease for the first time in 2024. This raises concerns about the possibility of sexual transmission of OROV (which has been reported with other viruses such as Zika virus disease). It also has potential implications for sperm donation and assisted reproduction.

Treatment for OROV disease is supportive: there is no specific drug treatment available. Initial symptoms can be treated with rest, drinking fluids to prevent dehydration, and taking over the counter medicines to reduce fever and pain.

Prevention and preparing for travel

Travellers should seek advice from a health professional before travel for information on OROV risk at their destination. Additionally, information on current OROV disease outbreaks is available from the 'Outbreaks' section of our Country Information pages. However, OROV disease cases may not

always be consistently reported, as some countries may not have the resources for effective disease surveillance systems.

There is no vaccine or drug to prevent OROV infection. OROV can be prevented by following good bite avoidance advice to reduce midges and mosquitoes bites. This also helps protect against other insect and tick-borne infections, which may be a risk at the destination.

Insecticide treated fine mesh bed nets and chemical insecticides sprayed inside and outside can help deter midges. Standard bed nets are less effective against biting midges, as these insects are small and can pass through the netting.

Travellers should try to stay in places with air conditioning and/or window and door screens with 20x20 gauge mesh designed to keep biting midges outside.

As research shows OROV can been found in semen, travellers, and their partners, concerned about the possibility of spreading OROV during sex can consider using condoms or not having sex during travel, and then for six weeks after returning to the UK.

Due to concerns about transmission of OROV from mother to baby in pregnancy, a cautious approach is recommended. Pregnant woman and anyone planning pregnancy should be informed about OROV and have a careful discussion about suitability of travel destinations and potential risks with their health care provider. If a pregnant woman chooses to travel to an OROV affected area, insect bite prevention recommendations should be strictly followed.

Other diseases such as dengue, Zika virus disease and malaria may be a risk in areas where OROV disease is reported. Pregnant women should also discuss these potential risks carefully with their health care provider.

Health professionals should be alert for travellers returning from areas with a risk of insect spread infections. Symptoms of OROV infection are similar to other infections reported in the Americas and the Caribbean, including dengue, chikungunya or Zika virus disease.

If OROV disease is suspected, health professionals should seek expert clinical advice, initially from a local microbiology, virology or infectious disease consultant.

Resources

- UK Health Security Agency: Oropouche virus disease
- Pan American Health Organization: Q&A - Oropouche fever
- World Health Organization: Oropouche virus disease
- US Centers for Disease Control and Prevention: Meet the Midge