

# Barmah Forest virus

## What is Barmah Forest disease?

Barmah Forest virus (BFV) disease is the second most common arbovirus after Ross River virus (RRV) in the Northern Territory (NT).

It is characterised by painful or swollen joints lasting from days to months. Symptoms usually settle by themselves.

## How is it spread?

BFV infection cannot be spread from person to person.

The virus is transmitted to humans by the bite of an infected mosquito.

The mosquitoes present in the NT that can spread the virus are *Aedes vigilax* (salt marsh mosquito), *Culex annulirostris* (common banded mosquito), *Aedes normanensis* (flood water mosquito) and *Aedes notoscriptus* (backyard mosquito).

Many people, particularly children, even if bitten by an infected mosquito, do not develop any symptoms of the disease.

## Where and when is the virus found?

BFV was first isolated in northern Victoria and has been detected in most parts of mainland Australia.

In the NT, the main risk season is from December to May inclusive with the highest risk period usually in February when large numbers of mosquitoes result from either high tides or increased rainfall.

Humid conditions enable mosquitoes to live longer, which allows more chance for a mosquito to pick up a virus from a host animal and to live long enough to pass it on to humans.

## What are the symptoms?

Symptoms vary from person to person and most commonly appear within 3 to 11 days after being bitten.

Although the symptoms of BFV are similar to those of RRV disease the disease is generally milder. Symptoms include painful (sometimes swollen) joints and muscle and tendon pain. The most commonly affected joints are the ankles, fingers, knees and wrists. Other symptoms include a raised red rash affecting mostly limbs and trunk (this may be more florid than the rash of RRV), fever, fatigue, and headache.

Fever, nausea and the skin rash usually disappear within the first 1 or 2 weeks of illness. In a minority of cases lethargy, joint, muscle and tendon pain may last for over 6 months.

Symptoms subside eventually and leave few or no after-effects. As a rule, once you have had BFV once, you will not get it again.

Children tend to have infection without symptoms or experience milder symptoms of shorter duration than adults.

## What is the treatment?

BFV infection is diagnosed by a blood test. There is no vaccine to prevent BFV infection, and there is no medical cure for the disease.

Medical treatment is aimed at easing joint pains and swelling, and minimising fatigue and lethargy. For some people, simple pain-killers are sufficient. Others will require stronger medications to ease the inflammation.

Emotional stress, physical fatigue and alcohol may cause symptoms to worsen or to last longer.

## How can it be prevented?

Try to reduce the number of places with pooling water on your property where mosquitoes can breed.

The only protection from BFV is to avoid being bitten by mosquitoes.

## Personal protective measures

- avoid outdoor exposure between dawn and dusk, especially if within 2 km of wetlands or flooded areas
- ensure flyscreens in houses or caravans are in good condition
- if camping, sleep in a mosquito-proof tent or under a mosquito net. Repellents only protect against mosquito bites for up to four hours, not all night
- use personal repellents containing DEET, picaridin or extract of lemon eucalyptus (PMD) on areas of exposed skin in combination with protective clothing.
- use protective clothing that covers feet, legs and arms. Loose, light-coloured clothing is best.
- use mosquito coils or mosquito lanterns with insecticide treated pads for small and sheltered outdoor areas

For more information on protection measures see [Personal protection from mosquitoes](#).

## Contact

For more information on mosquitoes and virus ecology contact [Medical Entomology at the Centre for Disease Control](#) on 8922 8901.

For more information regarding support groups and education call the Arthritis Foundation of the NT on 8948 5232.

Centre for Disease Control contacts:

Location	Phone
Darwin (Top End Region)	(08) 8922 8044 1800 008 002
Katherine (Big Rivers Region)	(08) 8973 9049
Tennant Creek (Central Australia Region)	(08) 8962 4259
Alice Springs (Central Australia Region)	(08) 8951 7540
Nhulunbuy (East Arnhem Region)	(08) 8987 0357