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# Sindbis

## Frequently Asked Questions

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### **What is Sindbis fever?**

Sindbis fever is a febrile arthritis caused by infection with the Sindbis virus (SINV). SINV is an arbovirus that is transmitted to humans and other vertebrates via the *Culex* mosquitoes from birds, their normal reservoir. Sindbis fever occurs in Africa, Oceania and Eurasia. The virus was first isolated from *Culex* mosquitoes in 1952 in Egypt. Human cases were first described in 1961 in Uganda, 1963 in South Africa and in 1967 in Australasia.

### **What are the symptoms of Sindbis Fever?**

Sindbis fever is usually self-limiting with an incubation period of 7 days. The most common symptoms are: fever, macula-papular itchy rash, joint pains and malaise. The infection is mostly subclinical, however fatalities have been reported. The symptoms usually resolve within 1 to 2 weeks. Occasionally the joint pains may persist for months or years.

### **Who is most at risk?**

Everyone who is not immune who is exposed to vector mosquitoes may be susceptible to infection. Male and females are equally affected. In endemic areas people between the ages of 30 to 69 are most affected.

### **Can sindbis Fever be prevented?**

Protection against mosquitoes is the mainstay of prevention in SINV prevalent areas. There is no prophylaxis or vaccine to prevent the infection.

### **How is sindbis diagnosed?**

Laboratory confirmation after clinical suspicion is necessary. Diagnosis of sindbis can be done based through the presence of sindbis virus antigen or antibodies to the virus. Sindbis virus can be isolated from a whole blood specimen collected at the acute stage within a week of disease onset; however, virus isolation (through culture) takes at least 18 days. A reverse transcription PCR can be done on request during the acute phase and has a 2 day turn-around time. To detect antibodies (IgG and IgM) against sindbis virus, a Haemagglutination Inhibition assay (HAI) is done and has a 5 day turn-around time. If antibodies against sindbis virus are detected on the HAI test, an IgM-capture Enzyme-Linked Immunosorbant Assay (IgM ELISA) is done to distinguish between recent and past infection and has a 2 day turn-around time. Sero-diagnosis rests on demonstrating a fourfold increase in sindbis IgG titer between the acute and convalescent phase sera; however, getting paired sera is usually not practical. Alternatively, the demonstration of IgM antibodies specific for sindbis virus in acute-phase sera is used to demonstrate recent infection in instances where paired sera cannot be collected.

**How is Sindbis Fever treated?**

No specific treatment is available but non-steroidal anti-inflammatory drugs may be administered to the patient to help in easing arthritic pain and fever. Antihistamines may help for the itchy rash. Getting plenty of rest is advisable to speed recovery. Symptoms, apart from joint pain, usually diminish within 1-2 weeks.

For more information please refer to:

[http://www.nicd.ac.za/assets/files/NICD-NHLS\\_Quick\\_Guide\\_for\\_Lab\\_Diagnosis\\_of\\_Priority\\_Diseases\\_v2\\_1.pdf](http://www.nicd.ac.za/assets/files/NICD-NHLS_Quick_Guide_for_Lab_Diagnosis_of_Priority_Diseases_v2_1.pdf)  
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