

Enterovirus 71 (EV71) Neurological Disease

Description:

Enterovirus 71 (EV71) neurological disease is a rare but serious complication of infection with Enterovirus 71, a virus which can also cause hand, foot and mouth disease. Although Enterovirus 71 causes frequent outbreaks of hand foot and mouth disease, cases or outbreaks of Enterovirus 71 neurological disease are rare and mainly occur in children. Paralysis is more common in children under 2 years of age and meningitis is more common in children from 2 - 5 years of age. In 1999, Western Australia experienced an outbreak with 14 cases of meningitis and 8 cases of paralysis, 3 of which have become permanent.

Symptoms:

Enterovirus 71 is one of the causes of a mild illness called hand, foot and mouth disease which usually starts with a slight fever followed by blisters or ulcers in the mouth and on the hands and feet. However, in a small number of children it may cause high fever, meningitis (inflammation of the lining of the brain), encephalitis (inflammation of the brain itself), and paralysis.

The usual time between contact with the virus and the development of the illness is approximately 3-5 days. After fever develops it usually takes 1 - 3 days before meningitis occurs, but paralysis can occur within 10 - 30 hours after symptoms begin.

Transmission:

Enterovirus 71 is usually spread by respiratory droplets, through contact with the fluid in the blisters or contact with infected faeces. The virus may continue to be excreted in the faeces for many weeks.

The virus can be in the faeces for at least 2 months after symptoms develop. A person is infectious for as long as the virus is present in the faeces.

Treatment:

There is no proven treatment for the virus. Treatment usually focuses on the person's symptoms.

Prevention:

Good hygiene is the single most effective way of preventing the spread of the disease. Hands should be washed thoroughly in soap and water for at least 15 seconds and then dried thoroughly. It is important to wash hands after going to the toilet, touching soiled linen or articles and before preparing or eating food. Teach children to wash their hands effectively before eating or drinking and after going to the toilet.

Control

Children with hand foot and mouth disease should be excluded from child care and schools until all blisters have healed.

Children with Enterovirus 71 neurological disease should be excluded until the virus is no longer being excreted in the faeces and until a medical certificate of recovery is obtained.

Help and Assistance

For further information please contact your local doctor, community health centre, nearest population health unit, or contact Queensland Health information phone number 13HEALTH.

Related Content

[Hand foot and mouth](#) fact sheet

References

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Heymann, D., ed. 2004. *Control of Communicable Diseases Manual*, 18th edition. Washington, DC: American Public Health Association.