

Human parechoviruses usually cause mild respiratory or gastrointestinal symptoms. Some strains can cause more severe illness, particularly in young children. Good hygiene is vital to protect against parechovirus.

Human parechovirus

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What is human parechovirus?

Human parechoviruses (HPEV) were first identified in 1956 and were previously known as echoviruses 22 and 23. Some HPEV strains are associated with more severe infections such as encephalitis and acute flaccid paralysis.

What are the symptoms?

- Human parechoviruses (HPEVs) usually cause no symptoms at all but when illness occurs it is most commonly a mild diarrheal illness or respiratory infection.
- Infection with some strains can, rarely, lead to more severe blood infection (sepsis) and neurological infection (meningitis or encephalitis), particularly among young children.
- Children under 3 months of age are most likely to develop severe disease – and babies can become unwell very quickly – but most recover after a few days with supportive treatment.

How is it spread?

- Parechovirus is usually spread from person to person through contact with respiratory droplets, saliva or faeces from an infected person.

Who is at risk?

- Anyone can get infected with parechovirus. Young babies appear to be at risk of more severe disease.

How is it prevented?

- There is no vaccine to protect you from parechovirus infection.
- Good hygiene is the best protection. Wash hands with soap and water after going to the toilet, before eating, after wiping noses, and after changing nappies or soiled clothing
- Avoid sharing cups, eating utensils, items of personal hygiene (for example: towels, washers and toothbrushes), and clothing (especially shoes and socks)
- Thoroughly wash any soiled clothing and any surfaces that may have been contaminated.
- Teach children about cough and sneeze etiquette.
 - Cover coughs and sneezes with a tissue. Coughing into an elbow is better than coughing into your hands.
 - Dispose of used tissues in the bin straight away.
 - Wash your hands afterwards with soap and water.
- People who are unwell with colds, flu-like illness or gastro illness should stay away from small babies. If you are caring for a small baby and are unwell, wash your hands or use an alcohol-based hand rub before touching or feeding the baby.

How is it diagnosed?

- Your doctor may diagnose infection based on the symptoms. If required, stool samples, nose and throat swabs, cerebrospinal fluid, or blood can be tested for parechovirus at a specialist laboratory.

How is it treated?

- There is no specific treatment for parechovirus; treatment is supportive only.

What are the signs of a serious infection?

Signs that a newborn or young infant might have a more serious form of parechovirus infection include fever (38°C or above) with any of the following:

- Irritability and appearing to be in pain
- Abnormal movements / jerking movements
- Widespread rash
- Rapid breathing
- Excessive tiredness, drowsiness
- Excessive irritability
- Distended abdomen or diarrhoea.

If any of these signs are present then the child should be reviewed by a doctor urgently even if they have been checked earlier in the illness.

What is the public health response?

Parechovirus is not a notifiable condition under the Public Health Act. NSW Health works with clinicians to monitor outbreaks of severe cases.

Further information

For further information please call your local public health unit on 1300 066 055.