

# Rotavirus Immunisation

## What is rotavirus?

Rotavirus is one of the most common viral causes for severe gastroenteritis in infants and children in Australia. The symptoms may be mild with watery diarrhoea for a couple of days or severe with dehydrating vomiting, diarrhoea, fever and shock.

Before the introduction of the rotavirus vaccine, almost every child in Australia had been infected by the age of 5 years and there were up to 10,000 hospitalisations per year. On average there was one childhood death from rotavirus per year. Since the introduction of the vaccine there has been a 70% decline in annual rotavirus hospitalisations in the under 5 year age group. A faecal test is required to diagnose rotavirus infection.

## When is the vaccine given?

The vaccine is currently only recommended for children up to 6 months of age. The first dose of the vaccine is given with your child's 2 month old vaccines and it is important that the vaccine is given close to this age. The vaccine is a medication given orally (by the mouth).

For premature neonates who receive their first vaccinations (6-8 weeks of age) in the hospital, the Rotavirus immunisation will be given on the day of discharge home, not at the time of the other vaccines. The vaccine will only be given if your baby is between 6 and 14 weeks of age at the time of discharge from hospital.

## How effective is the vaccine?

The vaccine is very good at preventing severe diarrhoea and vomiting caused by rotavirus. If vaccinated children still get rotavirus it is generally a milder form. The vaccine does not prevent infection from other viral or bacterial causes of gastroenteritis.

## What if my child has already had rotavirus?

Vaccination is still generally recommended, as one rotavirus infection provides a child with only partial protection. There is no increased risk of side effects from the vaccine if your child has already had the disease or has previously been immunised.

## Are there side effects from receiving the vaccine?

Infants who have received the vaccine may have a slightly increased risk (1-3%) of developing diarrhoea or vomiting in the week after receiving the vaccine. Serious side effects are very rare. There is a slightly increased risk of intussusception (telescoping of the bowel causing a blockage) associated with rotavirus immunisation, however this risk is outweighed by the benefits of the vaccine. The risk of rotavirus infection is many times higher than the very small risk of intussusception.

The risk of intussusception is considered to occur within the first 1-7 days after the first dose of the immunisation. Studies are still ongoing as to whether there is ongoing risk after 7 days or with subsequent doses of the vaccine. In most cases of intussusception in babies the cause is unknown with no link to the vaccine. Intussusception is rare and occurs in the whole of Australia in only 200 babies per year less than 1 year of age. It generally occurs most commonly between 5-10 months of age and is more common in

boys. It is thought that the increased risk following rotavirus vaccine would result in only 6 extra cases per year.

### **How do I know if my baby has intussusception?**

Babies with intussusception present with abdominal pain that is like very severe colic with bouts of crying. Your baby would look pale with these episodes and draw their legs up to their stomach. Initially your baby may be fine until the next episode but then will continue to remain unsettled and may start vomiting. You may also note blood in the bowel motions. If you have any concerns about your baby having these symptoms you should seek medical review.

Most babies will completely recover from an intussusception, but it may recur in up to 10% of cases. If treatment is not prompt complications can occur and an operation may be required to repair an affected area of the bowel. No deaths have been reported from intussusception in the past 15 years in Australia.

### **My baby has had intussusception. Should my baby have rotavirus vaccine?**

No. Rotavirus vaccine should not be given to a baby with a history of intussusception due to the risk of the condition recurring.

### **Is rotavirus vaccine still recommended for babies?**

Yes. The overall benefits of preventing gastroenteritis from rotavirus are much greater than the small risk of intussusception. Both rotavirus vaccines used in Australia continue to be registered by the Therapeutic Goods Administration (TGA). The Australian Technical Advisory Group on Immunisation (ATAGI) recommends that these vaccinations should continue to be used in the National Immunisation Program.

### **Where can I get more information about rotavirus vaccination?**

More information regarding rotavirus vaccination and intussusception is on the Immunise Australia website

[www.immunise.health.gov.au/internet/immunise/publishing.nsf/content/immunise-rotavirus](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/content/immunise-rotavirus) or through the Immunise Australia Information Line on 1800 671 811 (between 8.30-5pm Eastern Australian Time).

### References:

Australian Government, Dept of Health and Ageing – Rotavirus Immunisation – Information for Parents and Guardians

Australian Government, Dept of Health and Ageing – Rotavirus vaccine and intussusception – Information for Parents February 2011

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