



Seirbhís Sláinte | Building a
Níos Fearr | Better Health
á Forbairt | Service

Rotavirus Pertussis vaccines in pregnancy Vaccine Information

Dr Lucy Jessop
Director
National Immunisation Office

www.immunisation.ie

Rotavirus

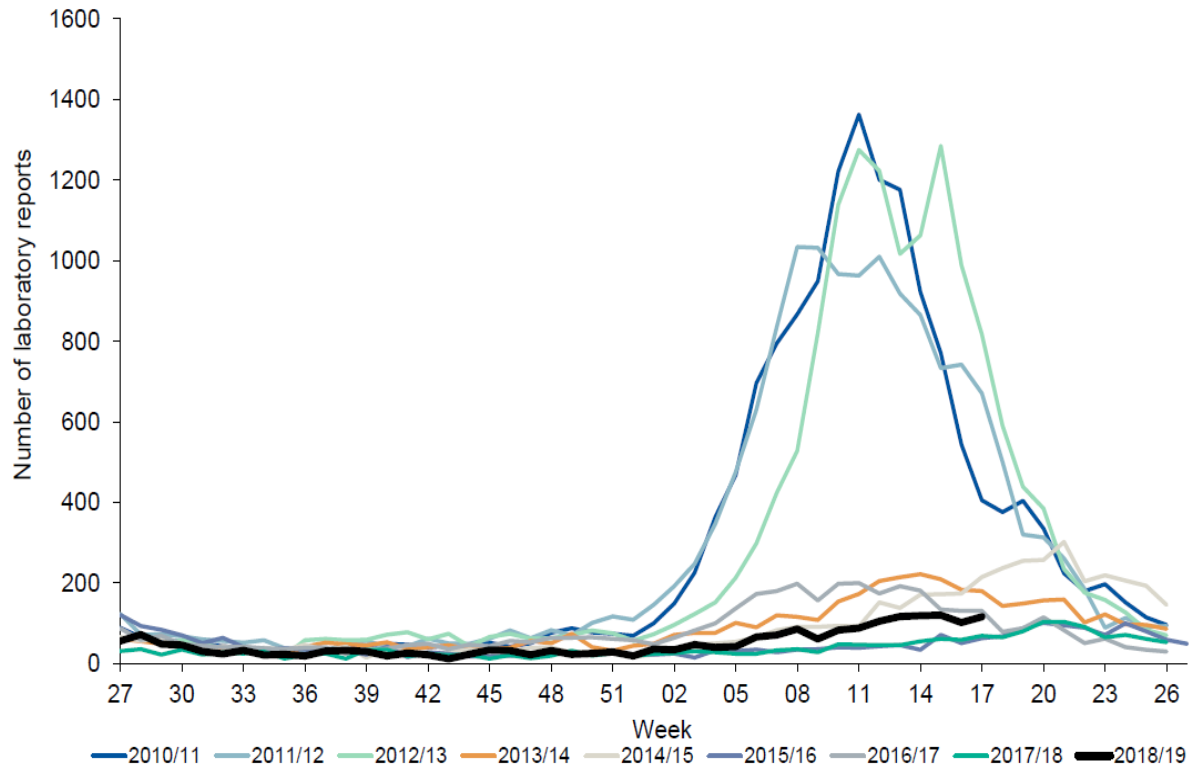
- Rotavirus is a highly infectious virus which causes gastroenteritis and is the commonest cause of gastroenteritis among young children.
- Infections are often recurrent.
- Most children will experience 1 or more rotavirus infections by 5 years of age.
- The gastroenteritis usually lasts from 3 to 8 days and can cause dehydration. This can be very serious, especially in young infants, who may require hospitalisation for intravenous rehydration.

Rotavirus vaccine

- Introduced in July 2013 in the UK
- Given at 2 and 3 months of age
- Uptake England 90%, NI 94% (2017-18)

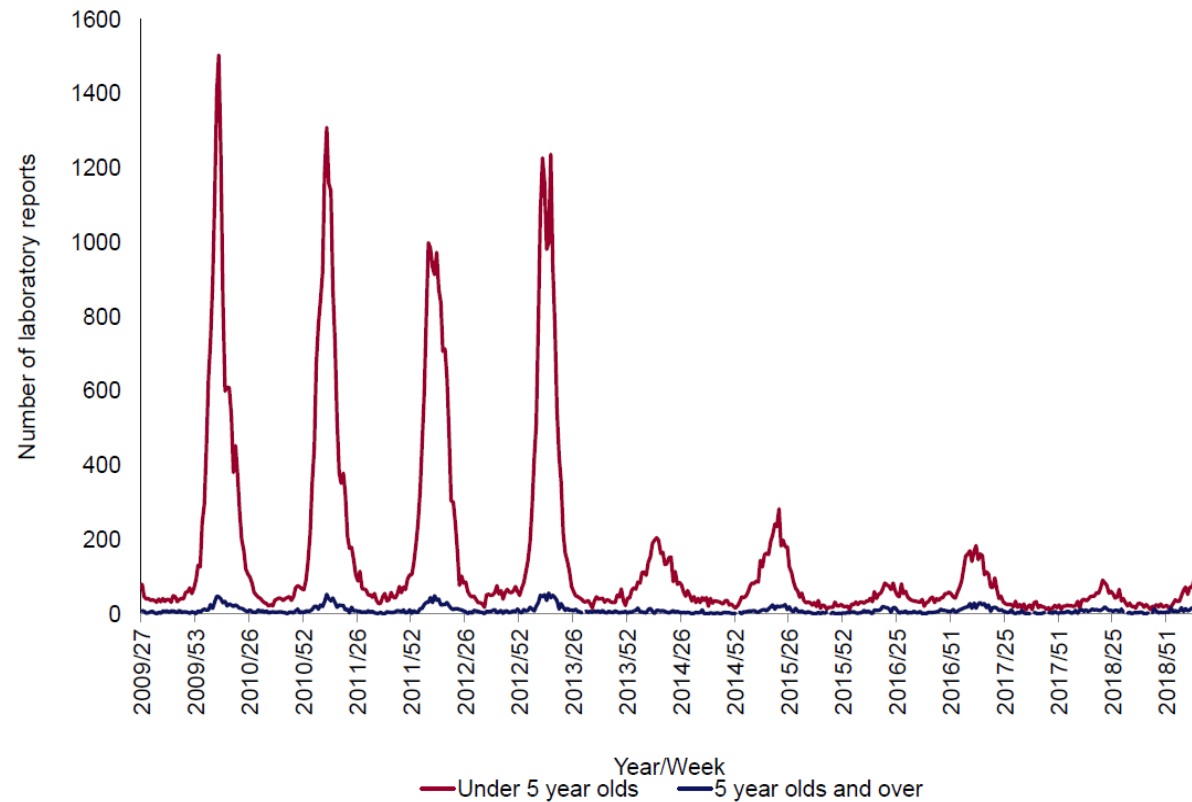
- Introduced in Ireland Oct 2016
- Given at 2 and 4 months of age
- Uptake 89% (but varies between 81 and 95%)
- ? Why are some parents refusing vaccine?

Figure 7: Seasonal comparison of laboratory reports of rotavirus by week 2010/11-2018/19 (England and Wales)



Source: Public Health England
Norovirus and Rotavirus
surveillance report

Figure 8: Laboratory reports of rotavirus by week and age group 2009-2019 (England and Wales)



Source:
Public
Health
England
Norovirus
and
Rotavirus
surveillance
report

Rotarix vaccine



- Live attenuated vaccine
- Oral use only

Rotavirus Oral Vaccine

Frequently Asked Questions

For Health Professionals



<https://www.hse.ie/eng/health/immunisation/hcpinfo/othervaccines/rotavirus/>



Seirbhís Sláinte
Níos Fearr
á Forbairt

Building a
Better Health
Service

Schedule

- Usual 2 and 4 months
- Catch up 2 doses 4 weeks apart

- Give second rotavirus if less than 8 months and 0 days, and there is a minimum of 4 weeks since the first dose of rotavirus vaccine.

- If a baby is 8 months and 0 days of age or older then they should NOT receive any dose of rotavirus oral vaccine.

Contraindications

Rotarix vaccine should not be given to:

- infants with a confirmed anaphylactic reaction to a previous dose of the vaccine
- infants with a confirmed anaphylactic reaction to any components of the vaccine
- infants with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrose-isomaltose insufficiency
- infants with a previous history of intussusception
- infants presenting for the first dose of vaccine at 7 months of age or older
- infants aged 8 months of age or over for second dose
- infants who have a malformation of the gastrointestinal tract that could predispose them to intussusception
- infants with Severe Combined Immunodeficiency (SCID) disorder
- Delay in babies born to mothers that used medical biologicals during their pregnancy – See NIAC advice or NIO factsheet

Adverse Events

- Research from some countries suggests that rotavirus vaccine may be associated with a very small increased risk of intussusception within 7 days of vaccination (less than 2 cases per 100,000 doses given)
- But averts 50,000 hospitalisations for gastroenteritis per year in the UK
- The most common adverse events observed following the administration of Rotarix vaccine are diarrhoea and irritability (1 in 10 or more)

Dr Lucy Jessop | Rotavirus Pertussis vaccine during pregnancy

Pertussis Vaccine



Pertussis in Infants

Complications and hospitalisation are significantly more frequent in infants particularly in those <6 months of age.

Of those hospitalised:

- 50% have apnoea
- 20% have pneumonia
- 3% have seizures
- 1-4% may die
- 0.3% develop encephalopathy

Pertussis vaccine pregnant women

- Provides protection to mother and protection to baby via transfer of transplacental antibodies.
- NIAC recommended Tdap for pregnant women in 2013.
- The HSE provides Boostrix (Tdap) vaccine free to all GPs for pregnant women.
- In October 2018 due to the on-going incidence of Pertussis infection in small babies a national outbreak was declared.
- From 5th November 2018, GPs are able to claim payment, through the PCRS browser for Tdap (Boostrix) vaccine given to pregnant women between 16-36 weeks gestation using the outbreak code.

Why give the vaccine from 16-36 weeks?

- It was previously recommended that the vaccine should be given between 27 - 36 weeks.
- In September 2016 the National Immunisation Advisory Committee (NIAC), updated its advice.
- NIAC now recommends that pregnant women should be given the vaccine between 16-36 weeks.
- Optimal neonatal pertussis antibody concentrations are elicited when the vaccine was given earlier in pregnancy.
- More opportunities for women to be vaccinated.
- Some protection for premature babies
- If miss vaccine it can be given after 36 weeks or post partum but this is to prevent maternal infection to indirectly protect the baby.

Tdap vaccine

- Tdap should not be given if there is a history of anaphylaxis to a previous dose of the vaccine or one of its constituents.
- NIAC recommends that no interval is required between Tdap and any previous tetanus containing vaccine.
- Tdap can be given at the same time as the flu vaccine (or other inactive vaccine in pregnancy).
- Don't delay either flu or Tdap so they can be given together, give at recommended times.
- Need dose of Tdap in each pregnancy to ensure protection of the baby.