



Public Health  
England



# NHS public health functions agreement 2019-20

Service specification No.5  
Rotavirus immunisation programme

NHS England and NHS Improvement



# **NHS public health functions agreement 2019-20**

## **Service specification No.5 Rotavirus immunisation programme**

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Promoting equality and addressing health inequalities are at the heart of NHS England and NHS Improvement values. Throughout the development of the policies and processes cited in this document, we have::

- Given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic and those who do not share it (as required under the Equality Act 2010); and
- Given due regard to the need to reduce inequalities between patients in access to, and outcomes from, healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities (in accordance with the duties under sections 13G and 13N of the NHS Act 2006, as amended).

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## Service specification No.5

This is a service specification to accompany the 'NHS public health functions agreement 2019-20 (the '2019-20 agreement').

This service specification is to be applied by NHS England and NHS Improvement in accordance with the 2019-20 agreement. Where a specification refers to any other published document or standard, it refers to the document or standard as it existed at the date when the 2019-20 agreement was made between the Secretary of State and NHS England and NHS Improvement Board, unless otherwise specified. Any changes in other published documents or standards may have effect for the purposes of the 2019-20 agreement in accordance with the procedures described in Chapter 3 of the 2019-20 agreement.

Service specifications should be downloaded in order to ensure that commissioners and providers refer to the latest document that is in effect.

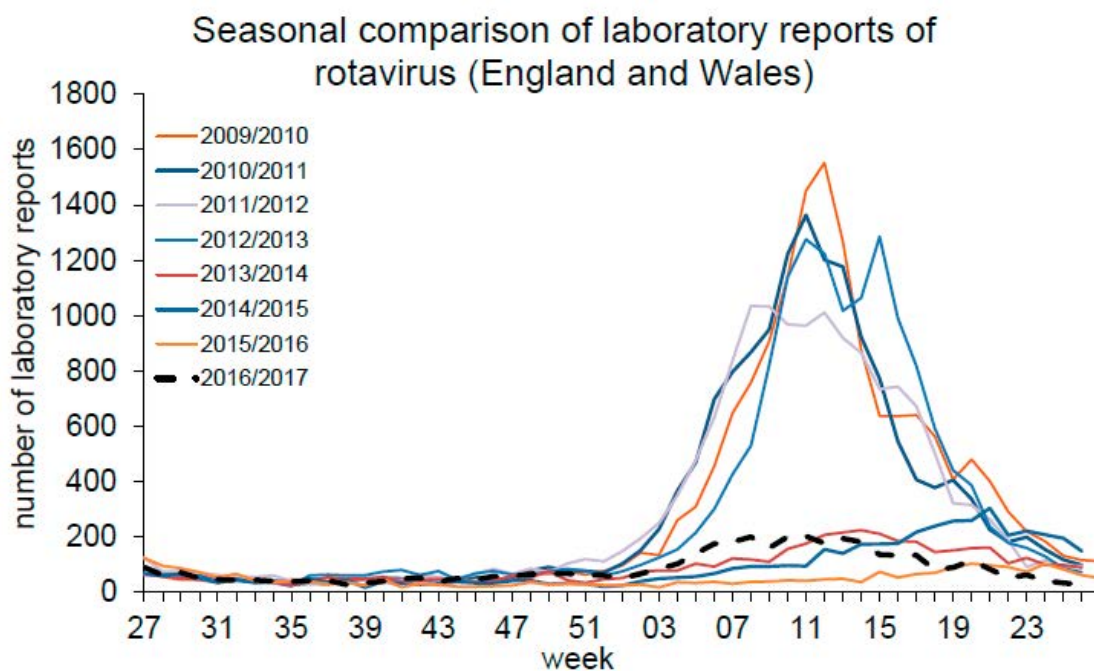
The 2019-20 agreement is available at [www.gov.uk](http://www.gov.uk) (search for 'commissioning public health').

All current service specifications are available at [www.england.nhs.uk](http://www.england.nhs.uk) (search for 'commissioning public health').

This service specification is not intended to replicate, duplicate or supersede any other legislative provisions that may apply. It must always be read in conjunction with [the core service specification](#) and the online version of the [Green Book](#).

# 1 Purpose of rotavirus immunisation programme

- 1.1 This document relates to the rotavirus vaccine given to infants to help protect them from developing rotavirus infection. Rotavirus can cause gastroenteritis which may lead to severe diarrhoea, vomiting, stomach cramps, dehydration and mild fever. If unvaccinated, nearly all children would have at least one episode of rotavirus gastroenteritis before reaching five years of age. The vaccine, given orally, is over 85% effective at protecting against severe rotavirus gastroenteritis. Prior to the introduction of vaccination, an estimated 130,000 children with rotavirus gastroenteritis visited their GP and approximately 12,700 of these children were hospitalised in England and Wales each year.
- 1.2 There has been a significant reduction in the number of laboratory reports of rotavirus in England and Wales since the introduction of the immunisation:



- 1.3 The purpose of this service specification is to enable NHS England and NHS Improvement to commission a rotavirus immunisation programme to a standard which will continue to minimise infections caused by rotavirus. The aim is to achieve high levels of vaccine coverage across England as well as within upper tier local government areas, and within the context of populations with protected characteristics as defined by the Equality Act 2010.
- 1.4 This specification provides a brief overview of the vaccine including the diseases it protects against, the context, evidence base and wider health outcomes, and should be read alongside the core service specification which underpins national and local commissioning practices and service delivery.
- 1.5 Cases of rotavirus infection occur mostly in winter and early spring (January to April). People of any age can be infected by rotavirus but most infections occur in children

between one month and four years of age. The Joint Committee on Vaccination and Immunisation (JCVI) has advised that the health benefit of vaccination means it is a cost effective way of protecting children against rotavirus.

- 1.6 [\*Immunisation against infectious disease\*](#) (known as ‘the Green Book’), issued by Public Health England (PHE) provides guidance and has the latest information on vaccines and vaccination procedures for all the vaccine preventable infectious diseases that may occur in the UK. This service specification must be read in conjunction with the core service specification, the online version of the Green Book, all relevant official public health letters, and with additional evidence, advice and recommendations issued by the Joint Committee on Vaccination and Immunisation (JCVI). <https://www.gov.uk/government/groups/joint-committee-on-vaccination-and-immunisation>
- 1.7 This service specification is not designed to replicate, duplicate or supersede any relevant legislative provisions that may apply, e.g. the Health and Social Care Act 2012. The specification will be reviewed annually and amended in line with any new recommendations or guidance, and in line with reviews of the Section 7A agreement.

## 2 Population needs

### Background

- 2.1 The rotavirus immunisation programme, which commenced in July 2013, plays a key role in preventing young infants from developing this highly contagious infection.
- 2.2 Prior to the start of the immunisation programme, an estimated 130,000 episodes of rotavirus induced gastroenteritis occurred each year in children of less than five years of age in England and Wales and approximately 12,700 of these children were hospitalised. Although deaths from rotavirus in the UK are rare and are difficult to quantify accurately, there may have been approximately three to four a year, prior to vaccination. Rotavirus infections in children and adults lead to severe diarrhoea, vomiting, stomach cramps, dehydration and mild fever and is likely to last approximately three to eight days.
- 2.3 In the UK, there are several different circulating strains of rotavirus, with the strain G1P[8] the most abundant, although distribution of strains change over time. Rotavirus is highly contagious and transmission by the faecal-oral route is the most frequent route, although respiratory transmission may also occur. Although good hygiene measures can help prevent spread of the disease, the robustness of rotavirus and the low minimal infectious dose of 10 – 100 virus particles, renders rotavirus readily transmissible and makes standard sanitary measures to halt transmission of the virus relatively ineffective.
- 2.4 Rotavirus infection in the UK is seasonal, occurring mostly in winter and early spring (January to April). People of any age can be infected by rotavirus but most infections occur in children between one month and four years of age. Infections are often recurrent, and many children experience infection on one or more occasions by three years of age. Symptomatic infections are usually associated with another genotype, although asymptomatic infections can be the result of infection with a strain not previously encountered. Infection in newborns is common but tends to be either mild or asymptomatic because of protection by circulating maternal antibodies. Once someone has had a rotavirus infection they usually develop immunity although it may be short lived.
- 2.5 The introduction of immunisation has had a significant impact on the number of cases of rotavirus infection. The figure at [paragraph 1.2](#) above illustrates the reduced number of laboratory reports since the start of immunisation.

### Rotavirus – key details

- 2.6 The key details are that:
  - Rotavirus vaccination should be offered to infants at age 8 weeks and 12 weeks. Typically rotavirus vaccination should take place at the same time as the other routine infant vaccinations, scheduled to take place at 8 weeks and 12 weeks;
  - the rotavirus vaccine used in the national programme should not be given to an infant who is older than 24 weeks of age;
  - the oral vaccine recommended for use for the national programme is supplied centrally and should be ordered via ImmForm;



- the vaccine is over 85% effective at protecting against severe rotavirus gastroenteritis;
- suspected adverse reactions to the MHR can be made using the Yellow Card reporting scheme; <http://www.mhra.gov.uk/Safetyinformation/Howwemonitorthesafetyofproducts/Medicines/TheYellowCardScheme/>
- The rotavirus vaccine used in the national programme can be given at the same time as other vaccines administered as part of the routine childhood immunisation programme such as DTaP/IPV/Hib/HepB, PCV and MenB;
- vaccine uptake is monitored by a monthly automated GP data collection through ImmForm. Additionally a quarterly COVER data extraction from Child Health Information Systems (CHIS) is being undertaken for children at one year of age.

## 3 Scope

### Aims

- 3.1 The aim of the rotavirus vaccination programme is to prevent young infants from developing rotavirus induced gastroenteritis.

### Objectives

- 3.2 The aim will be achieved by delivering an evidence-based population-wide immunisation programme that:
- identifies the eligible population and ensures effective timely delivery with optimal coverage based on the target population;
  - is safe, effective, of a high quality and is independently monitored;
  - is delivered and supported by suitably trained, competent healthcare professionals who participate in recognised ongoing training and development;
  - delivers, manages and stores vaccine in accordance with national guidance;
  - is supported by regular and accurate data collection using the appropriate returns.

### Direct health outcomes

- 3.3 In the context of health outcomes, the rotavirus vaccination programme aims to:
- provide protection to infants against rotavirus infection;
  - achieve high coverage in the target cohort;
  - minimise adverse physical/psychological/clinical aspects of immunisation (e.g. anxiety, adverse reactions).

### Baseline vaccine coverage

- 3.4 Local services should aim for 100% of relevant individuals being offered immunisation in accordance with the Green Book and other official DH/PHE guidance including performance indicators and key deliverables that are set out in Annex B of the NHS Public Health Functions Agreement (Section 7A) for 2019-20.

## 4 Service description / care pathway

### Local service delivery

4.1 The delivery of immunisation services at the local level is based on evolving best practice. This section of the document specifies the high-level operational elements of the national rotavirus vaccination programme, based on that best practice that NHS England and NHS Improvement must use to inform local commissioning, contracts and service delivery. There is also scope to enable NHS England and NHS Improvement and providers to enhance and build on specifications to incorporate national or local service aspirations that may include increasing local innovation in service delivery. However, it is essential, in order to promote a nationally aligned, high-quality programme focusing on improved outcomes, increasing coverage and local take-up, that all the following core elements are included in contracts and specifications.

### Target population

4.2 Rotavirus vaccination should be offered to infants at age two months and three months. Typically rotavirus vaccination should take place at the same time as the other routine infant vaccinations scheduled to take place at two months and three months. Rotavirus vaccination should not be given to an infant who is older than 24 weeks of age.

### Vaccine schedule

Dose 1	8 weeks old
Dose 2	12 weeks old

4.3 Detailed recommendations on the administration of the vaccine are set out in the rotavirus chapter of the Green Book. This guidance must be followed at all times. <https://www.gov.uk/government/publications/rotavirus-the-green-book-chapter-27b>

### Vaccine ordering

4.4 All centrally procured vaccines must be ordered via the ImmForm online ordering system, details of which are given in the core immunisation service specification.