



Maintaining routine immunisation programmes during COVID-19

November 2020, updated June 2021

General principles

The national NHS immunisation programme is highly successful in reducing the incidence of serious and sometimes life-threatening diseases such as pneumococcal and meningococcal infections, whooping cough, diphtheria and measles. It remains important to maintain the best possible vaccine uptake to prevent a resurgence of these infections. This will also prevent increasing further the numbers of patients requiring health services, as well as outbreaks of vaccine-preventable diseases, and allow us to provide important protection to children and other vulnerable groups. Where possible, the routine immunisation programmes should be maintained and offered in a timely manner.

Most vaccine preventable diseases are spread from person to person and so it is likely that social distancing to prevent COVID-19 will also reduce but not abolish the risk of some vaccine preventable diseases. Other factors, such as reduced travel overseas, may also reduce the overall risk. However, many vaccine preventable diseases are more infectious than COVID-19, and so vaccination is the only reliable way to avoid infection. In addition, for some vaccine preventable diseases, people can carry the organism for months or even years. Infections such as meningococcal, haemophilus influenzae type b (Hib), and pneumococcal infection are therefore most commonly acquired from other people in the same household. Timely vaccination is an important way of keeping people safe.

N.B. While some of the below guidance is applicable to all immunisations, this document is intended to support the administration of the routine NHS immunisation programme delivered in primary care and schools. Separate additional guidance to support the delivery of the COVID-19 vaccination programme is made available as appropriate.

Routine vaccinations

The routine NHS immunisation programme should be maintained.

Babies, toddlers and pre-school children in particular need vaccinations to protect them from measles, mumps, rubella (MMR), rotavirus, diphtheria, whooping cough, meningitis, polio, tetanus, hepatitis B, and flu.

Some children will also need to be protected with neonatal BCG and complete course of hepatitis B vaccination. Both BCG and all doses of targeted hepatitis B vaccines should be offered in a timely manner.

Non-scheduled vaccinations should still be given, for example for control of outbreaks of vaccine preventable conditions as well as opportunistically, for example missing doses of MMR, and shingles.

To reduce adverse impact on groups that experience particular health inequalities, healthcare workers such as midwives, health visitors and general practice staff should encourage those from underserved communities and groups to engage with the vaccination programme.

Anyone who has missed their appointment because of COVID-19 or any other reason and would still clinically benefit from vaccination should be invited for vaccination as soon as possible.

Immunisation should proceed providing those attending for vaccination (including parents and carers) are well, are not displaying symptoms of COVID-19 or other infections and are not self-isolating because they are contacts of suspected or confirmed COVID-19 cases.

Anyone with an acute febrile illness should not be immunised until the condition has resolved.

Child health surveillance (NIPE infant check)

Neither the first set of childhood immunisations given at 8 weeks, nor the NIPE check at 6 to 8 weeks should be delayed given their importance.

Advice for healthcare workers where parents or patients have concerns about attending for immunisation and exposure to COVID-19

Parents, carers and patients may be worried they or their baby or child may be exposed to COVID-19 when attending for vaccination. Individuals and carers should be informed that, despite the COVID-19 pandemic, starting and completing routine childhood immunisations on time is important. This will help protect the infant or child from a range of serious and

sometimes life-threatening infections. The much-reduced incidence of infections such as invasive pneumococcal and meningococcal disease is the result of high levels of vaccination. To prevent resurgence, it is important that infants continue to be protected through vaccination. Pertussis still circulates at elevated levels and pregnant women must continue to be offered the pertussis vaccine, and their babies vaccinated against this and other infections from 8 weeks of age.

Diseases such as pertussis, Hib, MenB, and pneumococcal infection are more common or more serious in infants and so it is important not to delay vaccines. Measles can be a very serious disease and is still circulating so timely immunisation is important.

Providers should reassure individuals that the most up-to-date guidance on maintaining social distance in waiting areas and decontamination of premises and equipment is being strictly followed in line with [Public Health England guidance on infection prevention and control](#) (IPC). In practice, this may be achieved by adjusting appointment times to avoid waiting with others. In some areas, general practices may also be working with neighbouring practices to deliver COVID-19 and non-COVID-19 activity on separate sites (please see below for additional information).

Compliance with national advice on preventing spread of COVID-19 through appropriate infection control measures will help ensure children, parents, carers and pregnant women feel confident that it is safe to attend for vaccination.

Further information on COVID-19 precautions for primary care is available on the [NHS England Coronavirus guidance for clinicians and NHS managers](#) pages.

Parents and carers may be concerned that their baby's or child's immune system cannot cope with both COVID-19 and immunisations and that in responding to vaccines, their ability to fight COVID-19 will be reduced or affected.

Parents and carers should be reassured that as vaccines contain either weakened viruses or only a small amount of the inactivated organism or toxoid, the response uses only a tiny proportion of the capacity of an individual's immune system. Vaccination will not overload their immune system, does not make them more susceptible to other infections and, if they do contract an infection in the immediate post-immunisation period, or were already incubating one when they were vaccinated, their immune system will still respond to it.

Vaccinating babies and children reduces the chances of co-infection with COVID-19 and a serious vaccine-preventable disease.

Both live and inactivated vaccines should continue to be given when due.

Post immunisation fever and other adverse reactions in the context of the COVID-19 pandemic

A fever can occur after the administration of **ANY** vaccine. Patients usually present within 48 hours and the fever is short-lived, normally lasting less than 48 hours. See specific advice below regarding timing of fever in relation to MMR vaccination.

In infants who do develop a fever after vaccination, this tends to peak around 6 hours after vaccination and nearly always resolves completely within 2 days.

Unless there are clinical or epidemiological reasons to suspect COVID-19 infection, post-immunisation fever on its own, is **not** a reason for the vaccine recipient and their household contacts to start self-isolation and access COVID-19 testing.

As has always been recommended, any fever after vaccination should be monitored and if individuals are concerned about their or their child's health at any time, they should seek advice from their GP or NHS 111.

A broad range of other mild adverse reactions are expected after vaccination. They are usually short-lived, resolving without the need for intervention. [Public Health England's guidance on what to expect after vaccinations](#) gives further information for parents.

COVID-19 symptoms are: a high temperature, a new, continuous cough, or a loss or change to your sense of smell or taste. If someone experiences any of these symptoms, they should get tested. Vaccinations will not interfere with testing for COVID-19.

Parents can be directed to the [NHS information on symptoms of coronavirus](#) to check if they or their child has coronavirus symptoms.

This advice applies to recently vaccinated people of all ages.

Given the risk of the serious infections that the vaccines protect against, routine immunisations should not be delayed.

MMR vaccine

MMR vaccine contains three antigens (measles, mumps and rubella). Each of these components can cause reactions at different times and to varying degrees. Six to ten days after the MMR vaccine, the measles component may cause a fever, a measles-like rash and loss of appetite. Individuals with vaccine-associated symptoms are not infectious to others.

Two to three weeks after MMR vaccination, the mumps component may cause mumps like symptoms in a very small minority of children (fever and swollen glands).

MenB vaccine

Fever is more common when MenB vaccine (Bexsero) is administered at the same time as other vaccines at 8 and 16 weeks of age. Parents should follow existing [Public Health England \(PHE\) guidance on the prophylactic use of liquid infant paracetamol following MenB vaccination](#).

Parents may be unable to obtain liquid infant paracetamol

While parents should continue to try to obtain and administer infant paracetamol where possible, infant vaccines can and should still be given even if they do not have prophylactic paracetamol to hand.

Where parents have been unable to obtain infant paracetamol, the following advice is for clinical staff in primary care and parents.

Ibuprofen can alternatively be used to treat a fever and other post-vaccination reactions. Prophylactic ibuprofen at the time of vaccination is not effective. Ibuprofen is not licensed for infants under the age of 3 months or with a body weight under 5kg. However, the [BNF for Children information on ibuprofen](#) advises that ibuprofen can be used for post-immunisation pyrexia in infants aged 2 to 3 months, on doctor's advice only, using 50mg for one dose, followed by 50mg after 6 hours if required.

Information about treating a fever in children is available from the [NHS webpage on fever in children](#).

If an infant still has a fever 48 hours after vaccination, or if parents are concerned about their infant's health at any time, they should be advised to seek help from their GP or ring NHS 111.

The diseases that the vaccines protect against are very serious and therefore vaccination should not be delayed because of concerns about post-vaccination fever.

What about those individuals who do not attend for vaccination?

Those who miss the opportunity to be vaccinated still require their missing vaccinations. Without these they remain unprotected against vaccine-preventable disease. This makes the retention of accurate records of unvaccinated individuals important, and their appointments should be rescheduled as soon as is reasonably practical. If a child is attending general practice for any reason, their immunisation status should be checked and, if there are no contraindications, the child should be immunised. This applies equally to adults, particularly for flu and pneumococcal vaccines, as people eligible for these vaccinations are also at high risk of COVID-19.

What personal protective equipment (PPE) should be worn when administering vaccines?

Individuals who are well should attend for vaccination (with parents or carers) at premises that are following the recommended infection prevention and control (IPC) guidance [NHS England and PHE COVID-19 guidance for maintaining services within health and care settings: infection prevention and control recommendations](#). This guidance includes advice on hand hygiene, use of sessional facemasks and patient and procedure risk assessment.

Those displaying symptoms of COVID-19, other infections, or who are self-isolating because they are contacts of suspected or confirmed COVID-19 cases, should not attend.

If further help is needed, vaccinators should consult with their infection prevention and control team.

Can practice nurses use patient group directions (PGDs) in primary care networks (PCNs) at various general practice sites where they will be vaccinating children?

NHS Specialist Pharmacy Services (SPS) has published guidance on [patient group direction use in primary care networks](#).

What should I do about vaccine ordering during the COVID-19 pandemic?

Continue to order vaccines through the usual routes and ensure that no more than 2 weeks supply is maintained as stock in your vaccine fridge. This will help to avoid vaccine shortages and reduce wastage. Vaccines near their expiry date should be used first.

How do I maintain vaccine cold chain across general practices where one site may be closed?

Cold chain guidance is available in [Chapter 3 of the Green Book](#) and should be adhered to.

Can I transfer vaccines between different branches of the same practice?

Where the same practice has more than one site or branch, vaccines can be transferred to the operational site, providing the cold chain is maintained.

Can I transfer vaccines between completely different practices (different legal entities)?

NHS England has recently published guidance on transferring vaccine stock between providers. In summary, the Medicines and Healthcare Products Regulatory Agency (MHRA)

has confirmed that it would not prevent the transfer of locally held vaccine stock from the NHS routine immunisation services during COVID-19, provided that:

- the CCG, PCN or general practice believes the transfer of vaccines is necessary to support the continued delivery of routine immunisations in primary care during the COVID-19 response and will ensure the effective use of available resource
- the CCG, PCN or general practice holding the vaccine stock has assurance that the vaccine has been stored in the correct temperature-controlled conditions
- confirmed daily record-keeping of temperature monitoring is available
- the CCG, PCN or general practice requiring locally held vaccine supply can verify the assurances given, and
- the vaccines can be transported appropriately under the right cold chain conditions.

Regional NHS England and NHS Improvement commissioners should be informed of any incidents, including cold chain breaches during transfer of vaccines. CCGs, PCNs and primary care providers should refer to Public Health England's protocol for the ordering, storing and management of vaccines.

Further details can be found in the [NHS England and NHS Improvement COVID-19 primary care bulletin](#).

What information should I provide parents or carers about vaccinations administered?

It is important that parents and carers have a contemporaneous record of all immunisations administered. If the Red Book (personal child health record) is not brought to the appointment, the immuniser should provide sufficient information about the vaccines given to the parent or carer to update the record themselves. For example, a print-out, text message, email with vaccine details.

What should I do to inform my local Child Health Information Services (CHIS) about vaccines administered?

It is important to share clinical data with CHIS. CHIS's purpose, and that of the systems that support it, is to ensure that each child in England has an accurate, active record supporting delivery of public health interventions, including screening, immunisation and other Healthy Child Programme services. CHIS providers will continue to deliver these vital services as 'business as usual' during the COVID-19 incident. It is therefore important that all clinical colleagues contribute to ensuring that each child's CHIS record is up to date by transferring data from clinical systems in a timely manner to the local CHIS provider. This will ensure that those involved in the care of young children have access to the contemporaneous health

record to support any rescheduling and catch-up programmes for those who miss appointments for public health programmes.

CHIS is the definitive source of immunisation uptake and coverage data in England and, as such, is essential in limiting the spread of communicable diseases. This data is particularly important for monitoring and ensuring uptake levels during the COVID-19 pandemic. In the event of a cluster or an outbreak of a vaccine-preventable disease, CHIS is the primary source of information to help target resources.

When will young people get their school-age vaccinations?

NHS school-age vaccination providers are working to restore vaccination programmes, in line with local needs and arrangements, and any outstanding immunisations will be delivered during the 2020/21 school year. Most routine secondary school immunisations (HPV, Td/IPV and MenACWY) paused for the delivery of annual flu vaccinations 2020/2021 and have recommenced following completion of the flu programme in February 2021.

APPENDIX

References used in the document are included below for ease. Please note, references are correct at time of publication but may be subject to change.

Infection prevention and control guidance: www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control

Further information on COVID-19 precautions for primary care: www.england.nhs.uk/publication/coronavirus-standard-operating-procedures-for-primary-care-settings/

Information for parents on what to expect after vaccination: www.gov.uk/government/publications/what-to-expect-after-vaccinations

Guidance on paracetamol after MenB vaccine: www.gov.uk/government/publications/menb-vaccine-and-paracetamol

Guidance on ibuprofen for children after immunisation: <https://bnfc.nice.org.uk/drug/ibuprofen.html#indicationsAndDoses>

Information on treating fever in children: www.nhs.uk/conditions/fever-in-children/.

Information on side effects of the injectable flu vaccine: www.nhs.uk/conditions/vaccinations/flu-vaccine-side-effects/

Information on side effects of the nasal spray flu vaccine: www.nhs.uk/conditions/vaccinations/child-flu-vaccine/

To check for coronavirus symptoms: www.nhs.uk/conditions/coronavirus-covid-19/symptoms/

NHS Specialist Pharmacy Services (SPS) guidance on use of PGDs: www.sps.nhs.uk/articles/patient-group-direction-use-in-primary-care-networks/

Chapter 3 of the Green Book on vaccine cold chain: www.gov.uk/government/publications/storage-distribution-and-disposal-of-vaccines-the-green-book-chapter-3

20 April 2020 Primary Care Bulletin reference to management of locally held vaccine stock in primary care and the use of Patient Group Directions in Primary Care Network: <http://createsend.com/t/d-E5434ABA283BEA792540EF23F30FEDED>

Update information

June 2021: the guide was updated to reflect current practice and service delivery.

November 2020: hyperlinks in this document were updated when the suite of guidance was moved from NHS England to NICE.