

Polio FAQ for polio booster

Following the detection of poliovirus in wastewater samples from Beckton earlier this year, the JCVI has recommended an urgent inactivated polio vaccine booster campaign for all 1-9 year olds in London to supplement the catch-up campaign already underway across London.

The booster dose will be given to children that are up to date with their routine vaccinations. If they are not up to date they will be offered the next poliovirus vaccine in their schedule. The vaccine will be delivered through GP practices and other local providers who will contact parents and carers when they are ready for them to come forwards. The vaccination campaign will begin in the areas where poliovirus has been detected and will then be rolled out rapidly to all London boroughs.

The below is a FAQ to use in response to enquiries you may receive from the public regarding the current situation, the polio booster and how best to protect ourselves.

Polio

What is polio?

Polio is an infection caused by a virus that attacks the nervous system – it can cause permanent paralysis of muscles. Before the polio vaccine was introduced, there were as many as 8,000 cases of polio in the UK in epidemic years. Because of the success of the polio vaccination programme, there have been no cases of natural polio infection in the UK for over 30 years (the last case was in 1984) and polio was eradicated from the whole of Europe in 2003

Why is polio back in the news?

Polio is not back in England. There have been no clinical cases of wild polio in England. The last case of wild polio in the UK was in 1984 and the UK was declared polio-free by the WHO in 2003.

Since February 2022 traces of type 2 poliovirus have been detected in sewage samples in North and East London. It has been detected in sewage in Barnet, Brent, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest.

As part of routine surveillance, it is normal for 1 to 3 'vaccine-like' polioviruses to be detected each year in UK sewage samples when an individual vaccinated overseas with the live oral polio vaccine (OPV) returned or travelled to the UK and briefly 'shed' traces of the vaccine-like poliovirus in their faeces.

However several closely related viruses have been found in sewage samples taken between February and May. The level of poliovirus found and the high genetic diversity among the PV2 isolates suggests that there is some level of virus transmission in these boroughs which may extend to the adjacent areas. This suggests that transmission has gone beyond a close network of a few individuals.

The virus has continued to evolve and is now classified as a 'vaccine-derived' poliovirus type 2 (VDPV2), which on rare occasions can cause serious illness, such as paralysis, in people who are not fully vaccinated.

The polio virus found in London should not pose any risk to those who are fully vaccinated. However, whilst it is spreading, there is a small chance that those who have not been fully vaccinated, or those who cannot respond well to vaccines, could be at risk of catching polio. The good news is that we have picked this virus up early and we want to act now to protect as many people as we can. It is

important that children are vaccinated against polio so they are protected and to reduce the risk of the virus continuing to spread. Please come forward as soon as your child is invited.

Has polio been detected outside of London?

Type 2 poliovirus has so far only been detected in North and East London. The UKHSA, working with the MHRA, has enhanced the sewage surveillance to assess the extent of spread of the virus. They plan to stand up 10 -15 sites nationally to determine if poliovirus is spreading outside of London.

Is what we are seeing in London linked to cases of polio seen in Israel and New York?

UKHSA are working closely with health agencies in New York and Israel alongside the WHO to investigate the possible links between the poliovirus detected in London and recent polio incidents in these two other countries.

How concerned should I be about polio?

The risk to the population is extremely low. The majority of the UK population has already been immunised against polio. The polio virus found in London should not pose any risk to those who are fully vaccinated, which most Londoners are. However, whilst it is spreading, there is a small chance that those who have not been fully vaccinated, such as young children who are only part way through their polio vaccination schedule or those who have missed their routine vaccinations could be at risk of catching polio and getting ill. UKHSA have confirmed that the overall risk is still very low and the NHS is ensuring that all children in London aged 1-9 are offered a polio vaccine, either to catch up where a routine vaccine has been missed or an additional dose for those that are up to date.

What are the symptoms of polio?

Most people with polio won't have any symptoms and will fight off the infection without even realising they were infected. A small number of people will experience a flu-like illness 3 to 21 days after they're infected.

Symptoms can include:

- a high temperature (fever) of 38C (100.4F) or above
- a sore throat
- a headache
- abdominal (tummy) pain
- aching muscles
- feeling and being sick

These symptoms will usually pass within about a week without any medical intervention.

In a small number of cases, between 1 in 100 to 1 in 1000 infections, infection can cause paralysis, usually in the legs, that develops over hours or days. If the breathing muscles are affected, it can be life threatening. Symptoms include rapid onset of weakness in a limb which will be flaccid (or floppy). The weakness most often involves the legs, but sometimes affects the muscles of the head and neck or breathing.

What should you do if you experience any polio symptoms?

If you or your child are experiencing symptoms of polio then we advise you to ask for an urgent GP appointment.

Protection from polio

What should people do to protect themselves against polio if they live in London?

In London, all children aged 1-9 years need to have a dose of polio vaccine now - whether it's an extra booster dose if they are up to date with their routine vaccinations or the next dose in their routine vaccination schedule. The NHS in London will contact parents when it's their child's turn to come forward for a booster or catch-up polio dose.

I'm a clinically vulnerable/elderly adult – what's my risk? Why am I not being offered an extra booster?

The risk to the population is extremely low as the majority of the UK population has already been immunised against polio. If you are up to date with your routine immunisations, you will be protected against polio and your risk of getting ill from polio will be low. The reason children are being offered a booster dose in London is because this is where poliovirus has been detected and between ages 1-9 they have not received their full course of polio vaccinations and so are only partially protected. If you are not up to date with your routine immunisations you can catch up for free on the NHS at any time.

What should people do to protect themselves against polio if they live outside of London?

The best way to prevent polio is to make sure you and your child are up to date with your vaccinations. If you are not in London, whilst your child will not proactively be offered a booster dose, you can contact your GP to check if you, or your child, are up to date with your polio vaccinations. For children and babies, you can also check their personal child health record (red book). It is never too late to catch up and you can catch up for free on the NHS at any time by booking an appointment with your GP surgery.

When would my child have been vaccinated against polio?

The polio vaccine is free and given as part of combined jabs to babies, toddlers and teenagers. Children need all five doses of the vaccine to be fully protected against polio. The polio vaccine is given when a child is:

- 8, 12 and 16 weeks old as part of the 6-in-1 vaccine (DTaP/IPV/Hib/HepB)
- 3 years and 4 months old as part of the 4-in-1 (DTaP/IPV) pre-school booster
- 14 years old as part of the 3-in-1 (Td/IPV) teenage booster

What do I do if myself or my child have not been vaccinated against polio?

The booster programme is part of the incident response and is available to everyone in London, however routine polio vaccination is available to everyone in England. It is never too late to catch up for free on the NHS at any time. People should also get vaccinated even if they've had polio before as the vaccine protects against three different types of poliovirus. In London, the NHS will contact you when it is your turn to come forwards.

What is being offered to children aged 1 to 9 in London?

In London, all children aged 1-9 years are being offered a dose of polio vaccine - whether it's an extra booster dose or the next dose in their routine vaccination schedule. This is part of the incident response to ensure a high level of protection from paralysis and to help stop the virus spreading

further. The booster dose will be offered to children in the areas where type 2 poliovirus has been detected in wastewater first and then offered to all London boroughs.

Why are children that are up to date with their routine vaccinations being offered an additional dose in London? Are all 1-9 year olds being offered a polio booster?

Experts have advised that, as a precaution, all children aged one to nine years in London should be offered a dose of polio vaccine now to ensure that they are protected against polio and to stop any further spread of poliovirus in London. This is because children in this age range have not received the full programme of vaccination so they are not yet fully protected against polio. By getting a dose now this will boost their protection against polio. In London, all children aged 1-9 years are being offered a dose of polio vaccine. This will either be a top up dose in children that are fully up to date with their routine vaccinations or the next polio dose in their vaccine schedule.

Is this an extra jab? Will children that need to catch up with their missed routine vaccination/s then get an additional dose on top of that?

We need to protect children against polio now. Bringing a child up to date now will achieve the same effect as the offer of an additional booster - so those who are brought up to date don't need an extra dose further down the line.

For children that are fully up to date with their routine vaccinations, this will be an additional polio vaccine to enhance their protection against polio whilst it is being detected in wastewater samples. If your child is not up to date with their routine vaccinations they will be given the next polio dose in their vaccine schedule so it will not be an additional dose.

Is there anyone who cannot have a polio vaccine?

There are very few reasons why children cannot receive the polio vaccine. If your child had a serious allergic reaction to a previous vaccination or to certain uncommon antibiotics (neomycin, polymyxin or streptomycin) you may want to check with your doctor.

Is there anyone who does not need to get a polio dose now?

The only small group of children in London who don't need a dose now are those who had a pre-school booster (at 3yrs 4m) in the last 12 months, but if they get an extra booster in error it won't cause any harm.

If you are not in London, your child will not proactively be offered a booster dose, however you can contact your GP to check if you, or your child, are up to date with your polio vaccinations. For children and babies, you can also check their personal child health record (red book). It is never too late to catch up and you can catch up for free on the NHS at any time by booking an appointment with your GP surgery.

Will my child still need their regular dose at 3yrs 4 months if they received the booster?

Even after your child receives an extra dose, you need to complete the routine doses at the recommended age. Check with your GP surgery.

If my child is up to date with their routine vaccinations and due to get their pre-school booster will they be offered a dose of polio vaccine?

It is important that children aged 1 to 9 years in London get vaccinated against polio now. When you are contacted by the NHS you should come forwards to ensure that your child is protected and they will advise on what vaccine your child receives.

Why can't my child just wait for their regularly timed vaccine?

Getting a dose of polio vaccine now will immediately boost your child's protection against polio. This will ensure that they are protected against polio and to stop any further spread of poliovirus in London. Children in this age range have not received the full programme of vaccination so they are not yet fully protected against polio.

If no cases of polio have been reported, what is the need to get a polio vaccine?

This response has been advised by experts on the JCVI who also advised on the COVID-19 response. The suggestion for all children aged one to nine to get a dose of polio vaccine now has been advised as a precaution to ensure that they are protected, particularly in the areas where type 2 poliovirus has been detected in sewage samples. Children in this age range have not received the full programme of vaccination so they are not yet fully protected against polio. By getting a dose now this will boost their protection against polio. It will also help to stop any further spread of poliovirus in London.

How can my child get the polio booster?

The NHS will contact you to ask you to book an appointment.

Where do I get my child's vaccine?

Your child will get their dose of polio vaccine, whether it be a catch up or additional dose, at their GP surgery.

Can I get the vaccination anywhere apart from my GP surgery?

The NHS will let you know when you can book your appointment. Additional vaccination providers are being agreed on a borough by borough basis and this information will be shared soon.

What should I do if I am not registered with a GP?

Anyone in England can register with a GP surgery. It's free to register. You do not need proof of address or immigration status, ID or an NHS number. You can find a GP online and can either register online or call or email the GP surgery and ask to be registered as a patient. Once you are registered the NHS will let you know when you can book your polio appointment. For the booster campaign, additional vaccination providers are being agreed on a borough by borough basis and this information will be shared soon.

What vaccine will be given to my child?

For children that are not up to date with their routine immunisation, they will be offered the vaccine that they need to catch up on.

For children that are up to date that are offered an additional dose, we are using 4 different types of vaccines that all provide excellent protection against polio – they are already used in the routine programme and safely given to millions of children each year. The only difference between the vaccines is the other infections that they cover. They all provide protection against polio, tetanus and diphtheria, but some may also top up protection against whooping cough, Haemophilus

influenzae type B (Hib) and hepatitis B. The table below shows which vaccines will be used as a booster dose depending on your child's age:

Age group	Polio vaccinations your child should have already had	Recommended polio vaccinations for this campaign*
1 to less than 3 years and 4 months	3 doses of polio vaccine	A single polio booster vaccine – (Infanrix hexa or Vaxelis). At least 4 weeks after their last dose
3 years 4 months to 9 years	4 doses of polio vaccine	A single polio booster vaccine – (Boostrix-IPV or Revaxis) unless they had received their pre-school booster in the past 12 months

Are all the polio vaccine doses the same? What exactly is in the booster dose?

All polio vaccines are already used in the routine programme and safely given to millions of children each year.. You can read the *Infanrix Hexa* or *Vaxelis* product information leaflets (PIL), the *Boostrix-IPV* PIL or the *Revaxis* PIL for more details on your vaccine

What are the side effects of the vaccine?

Your child may have some redness, swelling or tenderness in the arm where they had the injection, this will usually disappear in a few days. A hard lump may appear in the same place but this will also resolve on its own, usually over a few weeks. Occasionally, children may be unwell and irritable and develop a temperature and a headache.

Will additional doses on top of the routine vaccinations be rolled out to other areas of the country or other age groups?

There are currently no plans to. Poliovirus has only been detected in North and East London so far. If you are not in London, whilst your child will not proactively be offered a booster dose, you can contact your GP to check if you, or your child, are up to date with your polio vaccinations. For children and babies, you can also check their personal child health record (red book). It is never too late to catch up and you can catch up for free on the NHS at any time by booking an appointment with your GP surgery.

Is it safe for my child to have so many vaccines – won't they all overload their system?

Studies have shown there are no harmful effects from having several vaccines at the same time. This also means babies are protected from a wider range of infections from an earlier age and will require fewer trips to the doctor.