



UK Health
Security
Agency

Resource pack for immunisers: Identification of poliovirus in London sewage samples

Immunisation and Vaccine Preventable Diseases Division 01/07/2022

Identification of poliovirus in London sewage samples – summary

- Genetically-related polio virus was found in sewage samples taken between February and June.
- 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.
- This suggests **it is likely there has been some spread** between closely-linked individuals in North and East London and that they are now shedding the type 2 poliovirus strain in their faeces.
- The virus has only been detected in sewage samples and **no associated cases of paralysis** have been reported – but investigations will aim to establish if any community transmission is occurring.
- The last case of wild polio contracted in the UK was confirmed in 1984. The UK was declared polio-free in 2003.
- **Vaccine-derived poliovirus is rare and the risk to the public overall is extremely low.**
- It is important that anyone who is not up to date with their polio vaccinations is caught up.

Identification of poliovirus in London sewage samples – key messages for health professionals

- UKHSA sent out a public health message via the CAS system – **letter for health professionals**: <https://www.gov.uk/government/publications/polio-detection-of-vdpv2-in-london-sewage-samples>
- You can find a brief **explainer video** here: <https://youtu.be/L19rc7vdYVA>
- The UK is committed to global polio eradication and key to achieving this is **maintaining high vaccine coverage >= 95% in the routine childhood immunisation programme.**
- To reduce the risk of importations (including of vaccine-like poliovirus) leading to transmission in under-vaccinated communities and paralytic presentations occurring it is essential to maintain high uptake at the national, regional and local levels.
- Particular **actions for primary care colleagues, school aged immunisation providers and immunisers** are:
 - a) strengthen ongoing work to improve uptake in the routine childhood programme
 - b) opportunistically check immunisation status and **catch-up** people who are not up to date with their routine polio vaccinations
 - c) in London an **active call-recall** of unvaccinated and partially vaccinated children under the age of 5 years will be undertaken and will be extended to other age groups in a phased manner
 - d) all children and adults **newly registered with a GP** practice should have their immunisation status checked and brought up to date with the UK schedule, **especially new migrants, asylum seekers and refugees**

UK polio vaccination schedule

Polio vaccine is part of the NHS routine childhood vaccination schedule.

It's given to babies and children when they are:

- 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 **pre-school booster** (DTaP/IPV)
- 14 years old as part of the 3-in-1 **teenage booster** (Td/IPV)

You need to have all of these vaccinations to be fully vaccinated against polio.

If you have missed out for any reason, you can have polio vaccination for free on the NHS at any age.

You should get vaccinated even if you've had polio before as the vaccine protects against different types of polio.

Routine childhood immunisations

from February 2022

When	Diseases protected against	Vaccine given and trade name		Usual site ¹
Eight weeks old	Diphtheria, tetanus, pertussis (whooping cough), polio, <i>Haemophilus influenzae</i> type b (Hib) and hepatitis B	DTaP/IPV/Hib/HepB	Infanrix hexa or Vaxelis	Thigh
	Meningococcal group B (MenB)	MenB	Bexsero	Left thigh
	Rotavirus gastroenteritis	Rotavirus	Rotarix ²	By mouth
Twelve weeks old	Diphtheria, tetanus, pertussis, polio, Hib and hepatitis B	DTaP/IPV/Hib/HepB	Infanrix hexa or Vaxelis	Thigh
	Pneumococcal (13 serotypes)	PCV	Prevenar 13	Thigh
	Rotavirus	Rotavirus	Rotarix	By mouth
Sixteen weeks old	Diphtheria, tetanus, pertussis, polio, Hib and hepatitis B	DTaP/IPV/Hib/HepB	Infanrix hexa or Vaxelis	Thigh
	MenB	MenB	Bexsero	Left thigh
One year old (on or after the child's first birthday)	Hib and MenC	Hib/MenC	Menitorix	Upper arm/thigh
	Pneumococcal	PCV booster	Prevenar 13	Upper arm/thigh
	Measles, mumps and rubella (German measles)	MMR	MMRvaxPro ³ or Priorix	Upper arm/thigh
	MenB	MenB booster	Bexsero	Left thigh
Eligible paediatric age group ⁴	Influenza (each year from September)	Live attenuated influenza vaccine LAIV	Fluenz Tetra ^{3,5}	Both nostrils
Three years four months old or soon after	Diphtheria, tetanus, pertussis and polio	dTaP/IPV	Boostrix-IPV	Upper arm
	Measles, mumps and rubella	MMR (check first dose given)	MMRvaxPro ³ or Priorix	Upper arm
Boys and girls aged twelve to thirteen years	Cancers and genital warts caused by specific human papillomavirus (HPV) types	HPV (two doses 6-24 months apart)	Gardasil	Upper arm
Fourteen years old (school Year 9)	Tetanus, diphtheria and polio	Td/IPV (check MMR status)	Revaxis	Upper arm
	Meningococcal groups A, C, W and Y	MenACWY	Nimenrix	Upper arm

Checking for polio vaccination in the red book

Since 2004, all polio vaccines have been given as combined products, so you may not see the word polio in the record. The vaccinations can be labelled as any of the following.

Babies

Primary course of polio vaccine consists of **three doses** given at **8, 12 and 16 weeks of age:**

6-in-1 DTaP/IPV/Hib/HepB [used since September 2017]

OR

5-in-1 DTaP/IPV/Hib [used prior to September 2017]

Toddlers

Pre-school booster at 3 years and 4 months:

4-in-1 DTaP/IPV

Teenagers

Teenage booster given in School Year 9 or 10, at around 14 years of age:

3-in-1 Td/IPV



There is also an ELECTRONIC red book: [eRedbook - The Digital Red Book For Parents](#)

If you were vaccinated before 2004, you will have received the **oral polio vaccine (OPV)** which was given as drops in the mouth, rather than an injection.

Advice for health professionals: polio, uncertain or incomplete immunisation schedule

- Please follow algorithm for: [Vaccination of individuals with uncertain or incomplete immunisation status \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

Children aged from 2 months of age up to 3 years and 4 months	Children from 3 years and 4 months up to 10 th birthday	From 10 th birthday onwards
<p><u>Primary course:</u> Three doses of DTaP/IPV/Hib/HepB with a 4 week gap</p>	<p><u>Primary course:</u> Three doses of DTaP/IPV/Hib/HepB with a 4 week gap</p>	<p><u>Primary course:</u> Three doses of Td/IPV with a 4 week gap</p>
	<p><u>First booster</u> of DTaP/IPV can be given as early as 1 year following completion of primary course to re-establish on routine schedule.</p> <p>Additional doses of DTaP-containing vaccines given under 3 years of age in some other countries do not count as a booster to the primary course in the UK and should be discounted.</p>	<p><u>First booster</u> of Td/IPV: Preferably 5 years following completion of primary course</p> <p><u>Second booster</u> of Td/IPV: Ideally 10 years (minimum 5 years) following first booster</p>

Patients should be brought up to date with ALL vaccines they are eligible for according to age at the earliest opportunity

Useful resources – polio and routine immunisation

- **Polio Green Book chapter:** [Polio: the green book, chapter 26 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362222/Polio-the-green-book-chapter-26.pdf)
- **NHS webpages:**
 - [Polio - NHS \(www.nhs.uk\)](https://www.nhs.uk/conditions/polio/)
 - [NHS vaccinations and when to have them](https://www.nhs.uk/conditions/nhs-vaccinations-and-when-to-have-them/)
 - [6-in-1 vaccine](https://www.nhs.uk/conditions/6-in-1-vaccine/)
- **Complete routine immunisation schedule:** [Complete routine immunisation schedule - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362222/Polio-the-green-book-chapter-26.pdf)
- **This algorithm is aimed at helping health professionals bring individuals up to date with the UK schedule according to their age:** [Vaccination of individuals with uncertain or incomplete immunisation status \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/362222/Polio-the-green-book-chapter-26.pdf)
- **Vaccine coverage statistics:**
 - Vaccine coverage for routine programme in children aged 1, 2 and 5 years can be found here (**Quarterly COVER data** - Source: UKHSA): [Vaccine uptake guidance and the latest coverage data - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362222/Polio-the-green-book-chapter-26.pdf)
 - Vaccine coverage for **school-aged Td/IPV immunisation programme** - 2020/21 academic year (Source: UKHSA): [School leaver booster \(Td/IPV\): vaccine coverage estimates - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362222/Polio-the-green-book-chapter-26.pdf)

Useful resources – migrant health

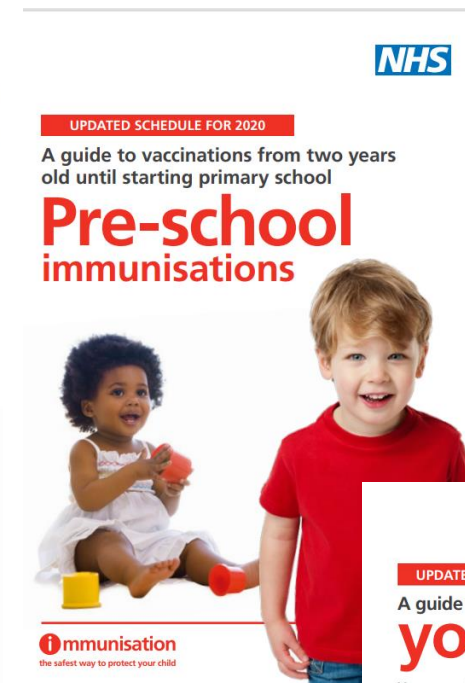
- It is very important to **check newly registered children and adults** are up to date with the UK schedule, especially new **migrants, asylum seekers and refugees**
- UKHSA have developed a tool to help health professionals check immunisation status of new entrants into the UK: **[UK and international immunisation schedules comparison tool](#)**
- **Migrant health guide** immunisation section: **[Immunisation: migrant health guide - GOV.UK \(www.gov.uk\)](#)**
- **Immunisation information for migrants:** **[Immunisation information for migrants - GOV.UK \(www.gov.uk\)](#)**



Leaflets for parents / carers

Copies of these leaflets are available free to order from the Health Publications order line 0300 123 1002 or Home - Health Publications

1. **Primary course** Immunisations at one year of age - GOV.UK (www.gov.uk) Product code 2022QG1EN
2. **Pre-school booster** Pre-school vaccinations: guide to vaccinations from 2 to 5 years - GOV.UK (www.gov.uk) Product code 3197560P
3. **Teenage booster** Immunisations for young people - GOV.UK (www.gov.uk) Product code 2902598B



Immunisation stickers – order for free

- Immunisation stickers **bear design:**
<https://www.healthpublications.gov.uk/ViewArticle.html?sp=Simulationstickers5yearstoadultbear design>
- Immunisation stickers **butterfly design:**
<https://www.healthpublications.gov.uk/ViewArticle.html?sp=Simulationstickers5yearstoadultbutterfly design>



Social media assets

- Social media routine immunisation schedule <https://publichealthengland-immunisati.box.com/s/cv3yhtkxxqufovgc8ke4l0ytlkzfb25y>
- Three animations to promote immunisation to 0 to 1, 1-2, 0 to 5 years <https://publichealthengland-immunisati.box.com/s/2gd8iif6eu8w9djwkkxfli4vm969luer>
- Measles mumps and rubella teenage social banners <https://publichealthengland-immunisati.box.com/s/rhrtl6io3fuimougtp6zt2xj3ue8jdgTeenage>
- Banners for HPV, MenACWY and Teenage booster (for Tetanus, diphtheria and polio) <https://publichealthengland-immunisati.box.com/s/4097xmmxvbjcjobks4e14bbpuwfkpei>
- Teenage banners as above but square for Facebook/Meta <https://publichealthengland-immunisati.box.com/s/t6a15kb84zib64wqebnsvomdjul27ok>
- Teenage social – missed your teenage booster, MMR, MenACWY Call to action <https://www.healthpublications.gov.uk/ViewArticle.html?sp=Sroutinevaccinationforteenagersandyoungpeoplesocialmediacard>

