New estimates show 1 in 7 five year olds have yet to be fully immunised against MMR

Parents of primary school starters urged to check immunisation records

As hundreds of thousands of parents across England prepare their children to start primary school in the next few weeks, Public Health England (PHE) is warning that 1 in 7 five year olds may not be fully up-to-date with some routine immunisations, with the figure rising to around 1 in 4 children in London.

The stark estimates, released as part of PHE’s Value of Vaccines campaign, show that some 4 and 5 year olds are starting school at unnecessary risk of serious diseases compared to the majority of their classmates, prompting a call for parents to check their child’s Red Book to ensure their children are up-to-date with scheduled immunisations.

In the UK, dose 1 of the MMR vaccine (weblink 1), which protects against Measles, Mumps and Rubella, is usually given to infants at around 12 months of age. A second dose is given before school, usually at 3 years and 4 months of age, to ensure best protection. Two doses of MMR in a lifetime are needed for a person to be considered fully protected. The 4-in-1 pre-school booster (weblink 2) is also usually offered at 3 years and 4 months of age and protects against diphtheria, whooping cough, tetanus and polio.
Around 680,000 five-year-olds start school in England each year according to Department for Education figures (weblink 3). Based on percentage uptake from latest vaccination coverage figures (weblink 4) PHE estimates that:

**Over 30,000** (around 1 in 19) five year olds may still need to receive their first dose of MMR, leaving them significantly more at risk compared to pupils who are fully vaccinated.

**Around 90,000** (around 1 in 7) five year olds in England may still need to receive their second dose of MMR vaccine (weblink 1). Almost 30,000 of these children are in London, meaning that around 1 in 4 primary school starters in the capital don’t have the full protection that the MMR vaccine offers.

**Around 100,000** (around 1 in 8) five year olds in England may still need their 4-in-1 pre-school booster (weblink 2) that protects against diphtheria, whooping cough, tetanus and polio.

These estimates show more than 5% of five year olds are starting reception year having not received any MMR. This leaves them at high risk of measles at a time when outbreaks of the disease are occurring across the country.

Dr Mary Ramsay, Head of Immunisation at PHE, said: “It’s a real concern that so many young children – as many as a quarter of a reception class in some areas – could be starting school without the full protection that the NHS childhood immunisation programme offers for free. We know that parents want the best protection for their children and so many may be unaware that their child is not up-to-date. We’re urging all parents of primary school starters to check their child’s Red Book now to make sure there is a record of two MMR doses and the 4-in-1 booster vaccine. If not, parents should contact their GP practice to arrange any further vaccinations that are needed.

We’re particularly concerned about children being at greater risk of measles. We’re continuing to see outbreaks of the disease occurring in communities across the country, many linked to visiting European countries over the summer holidays. The vast majority of those affected are not fully immunised and vaccine preventable diseases spread more easily in schools. It’s crucial that children have maximum protection as they begin to mix with other children at the start of their school journey.

We often think that these diseases are confined to the past, but the World Health Organisation has recently confirmed that measles is no longer eliminated in England. Whilst tetanus and polio are still rare thanks to the success of the NHS childhood immunisation programme, over the past few years we’ve also seen cases of whooping cough and diphtheria in school-aged children.”
To check that your child has received all their vaccines on schedule, go to the NHS vaccination schedule (weblink 5) and refer to your child’s Red Book. If in any doubt, contact your GP practice. It’s never too late for a child to be immunised. PHE’s catch-up call for primary school starters follows the issue of a new GP contract from NHS England and Improvement which also encourages 10 and 11 year olds to be caught up with any missing MMR vaccinations prior to them reaching secondary school age.

MMR catch up: for 10 and 11 year olds
Measles activity has increased globally, including in the UK, since 2017. It is important that efforts are stepped up to ensure that everyone is up to date with their MMR vaccination. In April 2019, NHS England and the BMA General Practitioners Committee (GPC) agreed to a catchup campaign for the Measles, Mumps and Rubella (MMR) vaccine. A per patient item of service payment of £5 will be made to GPs for the extra cost of an MMR catch-up campaign for children who reached the age of 10 or 11 years on or after 1st September 2018 but who have not yet reached the age of 12 years. The campaign includes checking and updating the child’s computerised records, and inviting those children missing one or both doses of the MMR to make an appointment. Practices can claim the fee on vaccination or where they have tried but have been unable to vaccinate a child according to the criteria set out in the SFE (weblink 1). This flyer is available to download at weblink 31.

NHS website – vaccination pages – take a look!
We made our vaccine content clearer and easier to navigate: When we looked at the performance of our existing content, we found that almost nobody was getting to the bottom of our pages because they were much too long. There were also pages that had either misleading titles or duplicated content, which users found confusing when they were looking for information – particularly on mobile, which is where most of our traffic now comes from. Our new content gets across information more clearly and is better organised. We saw improved performance when we asked users to find specific pieces of information.

We tested the language we use and approach to displaying vaccine information to users: As well as cutting down on jargon where users told us certain words were confusing, we looked at how we used statistics in our content. We found that although many users said they wanted to see statistics about vaccine safety and effectiveness, they often found them difficult to interpret correctly. With this in mind, our new content uses statistics in easier to interpret formats (e.g. tables), and uses clearer explanations.

We used a video to reinforce the fact that GPs and other HCPs are friendly and approachable sources of expert information about vaccines: Some of our users told us they were hesitant to ask their GP questions about vaccination. Our video, featuring a real mum and GP, reassures parents that it’s normal to have questions about vaccination, and that HCPs are there to provide answers in a completely non-judgemental way. We are keen to get as much feedback on the NHS website (weblink 6) and the Immunisation collection (weblink 7) if you have any comments or feedback please can you send them to Immunisation@phe.gov.uk and look out for our digital audit survey coming soon. To see a guide on vaccinations, please visit weblink 6.
It’s time to take a look at the recently published vaccination publications

New Orderline website coming soon

Please can everyone take a look at the DH Health and Social Care Orderline and make sure that you have bookmarked this page. The new website is coming soon.

When it is live, you will be asked to register with a new password and then you will be able to use all the new features, find out about new campaigns and order all of your resources in a modern website that will offer an improved search function to help you find what you need quickly and efficiently. If you have already bookmarked the page, you will be redirected to the new site (weblink 8).

A level results day!

All young people need to be up to date with their routine vaccinations, so whatever the results, encourage them to check if they are up to date. Starting university for the first time? Please advise all students who are starting university to have their two doses of MMR. They should also check if they have had their MenACWY vaccine, many younger students will have had it whilst at school. Some freshers may have missed it. There is still time to make an appointment at their GP practice and get protected before they leave for university. Remind students about the signs and symptoms of meningitis and septicaemia. Visit weblink 27 and weblink 28.

All universities and further education colleges should order copies of Think measles – it’s not just a kids problem leaflet and poster as well as the meningitis and septicaemia leaflet for university students. The leaflets and posters can be ordered free of charge from the DH health and social care order line (weblink 8).

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Meningitis and septicaemia leaflet

Product code: 2748602
See weblink 30

Think measles – it’s not just a kids problem leaflet

Product code: 3205760
See weblink 29
Algorithm – Vaccination of individuals with uncertain or incomplete immunisation status

This single page reminder based on Immunisation against infectious disease: the Green Book (weblink 9) helps health professionals vaccinate people correctly to protect them and their families from disease. It has been updated to include additional guidance on the HPV universal and the MMR programmes. Please download and print your copy today. Always make sure you use the most recent algorithm at weblink 10.

Vaccination of individuals with uncertain or incomplete immunisation status

For online Green Book, see www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book • For other countries’ schedules, see weblink 10

Infants from two months of age up to first birthday

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

• A child who has already received one or more doses of primary series, whatever the vaccine course or schedule. Any missing doses of the primary route should be given on the UK schedule and not the红楼梦/vaccines schedule.
• Doses of PCV and MenB should ideally be given at least one month apart and the two-month interval if necessary to ensure the two dose schedule is completed (i.e. if schedule started at 12m of age).
• Vaccination with vaccines should not be started for infants aged 12 weeks or less who have received a primary course within the last 2 months.
• First dose has been given only if infant is more than 8 weeks and under 12 weeks.
• Second dose to be given only if infant is more than 12 weeks old.

Boosters & subsequent vaccination

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

DTaP/IPV/Hib/ACWY + PCV + MenB ^ + IPV

• First dose to be given 4 weeks after primary series.
• Second dose to be given 4 weeks after primary series.
• Third dose to be given 4 weeks after second dose.
• Fourth dose to be given 4 weeks after third dose.
• Fifth dose to be given 4 weeks after fourth dose.
• A minimum of one month should be left between the first and second dose of MMR.
• A minimum of two months should be left between PCV and MenB.
• A minimum of one month should be left between DTaP/IPV/Hib/HepB and MMR.

Flu vaccine

• A minimum of one month should be left between 1st and 2nd dose of MMR.
• A minimum of one month should be left between PCV and MenB.
• A minimum of two months should be left between DTaP/IPV/Hib/HepB and MMR.

Flu vaccine (dosing for 2 seasons)

• Those aged 85yrs and older (including those turning 85 years of age during the current flu season).
• Children aged from 10 years up to 25 years who have been previously vaccinated for influenza whilst aged 5 years or younger and are due a catch-up dose.

Inactivated influenza vaccines guidance for healthcare professionals – 2019 to 2020 flu season

This document about the inactivated influenza vaccine (weblink 11) is intended for healthcare practitioners and includes detailed information on:

• the background of the programme
• the different types of inactivated influenza vaccine
• influenza vaccine recommendations and eligibility
• contraindications and precautions
• vaccine administration issues

Subscribe to Vaccine update here. Order immunisation publications here. For centrally-supplied vaccine enquiries, email: vaccinesupply@phe.gov.uk
The vaccines and porcine gelatine leaflet has been revised

Although some faith groups accept the use of porcine gelatine in medical products, we understand some Muslim families feel uncomfortable about it being in the nasal spray. If they have questions, parents should seek advice from their doctor, nurse or pharmacist. We are updating our documents to make clear that PHE recommends using scientific evidence to help when deciding whether or not to vaccinate.

**The vaccines and porcine gelatine leaflet is at weblink 26.**
Vaccine supply (centrally supplied)

Centrally supplied vaccines can be used for the purposes defined in chapter 3 of the Green Book (weblink 18), and in the ‘Vaccines available on ImmForm’ helpsheet.

August bank holiday deliveries warning notice
Due to the August Bank Holiday, there will be no deliveries by Movianto UK on Monday 26 August 2019. Customers with a standard delivery day of a Monday will have received a reminder from ImmForm that after Monday 19 August 2019, the next available delivery day will be Monday 2 September 2019.

Please be advised that Emergency or “Out of Schedule” deliveries cannot be arranged for failure to place orders in good time.

Ordering additional Gardasil for the universal HPV immunisation programme
From 1 September 2019, the human papillomavirus (HPV) vaccine will be offered to boys, in addition to girls, as part of the routine school aged immunisation schedule. ImmForm customers can now begin to order the additional required volumes of Gardasil.

Update on MMR vaccine ordering restriction
There are currently two different vaccines available to order for the MMR programme, MMRvaxPRO® and Priorix®. Orders for Priorix® are capped at 20 packs per order per week for accounts in England and Wales. Controls are also in place for Scottish customers. This is needed to rebalance central supplies.

The alternative MMR vaccine, MMRvaxPRO®, remains available to order without restriction. If you specifically require additional Priorix® stock, for example because you serve communities that do not accept vaccines that contain porcine gelatine then please contact the ImmForm Helpdesk for assistance at helpdesk@immform.org.uk or 0844 376 0040.

Unused Fluenz Tetra vaccine in the 2018/19 children’s flu programme
Between September 2018 and March 2019 influenza vaccine was offered to all children in England aged 2-9 years old (school year 5) and all children in clinical risk groups from 6 months up to less than 18 years. The 2018-19 flu vaccination period saw more children than ever in England vaccinated against flu. This winter will see the programme expand further, adding the final cohort of primary school aged children (school year 6).
Each year PHE monitors the amount of Fluenz Tetra that is ordered by NHS providers (GPs and school teams) for children, but not administered as part of the national programme. This is referred to as ‘overage’.

As a percentage of the volume distributed across England, the amount of overage has reduced from 20% in 2015/16 to 10% in 2018/19. This is a great achievement by everyone! However, in 2018/19 overage remained in excess of 350,000 doses, so there is still room for improvement. We ask that providers continue to work with us to minimise the amount of Fluenz Tetra that is ordered but not used, which will both save the NHS money and ensure that vaccine is available to those who need it.

**Flu vaccine information and availability for 2019/20**

As in previous years PHE has centrally procured flu vaccine for children included in this year’s flu programme, i.e. all children who are aged 2-10 years old on 31 August 2019, and those aged from six months to less than 18 years old in clinical risk groups. It is the responsibility of GP practices and other providers in England to order sufficient flu vaccine directly from manufacturers for eligible patients aged 18 years and over. The following vaccines will be available to providers of the children’s flu programme in 2019 in England via the ImmForm website.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Manufacturer</th>
<th>Anticipated order opening for Schools providers</th>
<th>Anticipated order opening for GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluenz Tetra®</td>
<td>AstraZeneca</td>
<td>Early October</td>
<td>Mid-October</td>
</tr>
<tr>
<td>Quadrivalent Influenza Vaccine (split virion, inactivated) (QIV)</td>
<td>Sanofi Pasteur</td>
<td>September</td>
<td></td>
</tr>
</tbody>
</table>

These preliminary timings are subject to change. We advise that your plans for vaccination sessions in both schools and general practices take account of this. It may be necessary to open ordering of Fluenz Tetra to providers of the schools programme in advance of GP practices, to ensure that initial availability of vaccine does not impact on the ability of the school providers to complete the programme.

As in previous years, because of the short shelf-life of Fluenz Tetra we will put in place order controls to reduce the amount of vaccine that is ordered at any one time. Vaccine will be available to order throughout the season. Further details on the availability of flu vaccines for children and updates to order controls will be published on ImmForm, and in future editions of Vaccine Update. Please refer to guidance from your respective health departments for arrangements in Scotland, Wales and Northern Ireland.

**Information on influenza vaccines marketed for the 2019/20 season**

Information on all influenza vaccines that have been marketed in the UK for the 2019/20 season are available at [weblink 19](#). Please refer to the flu letter ([weblink 20](#)) for information on which vaccines are eligible for reimbursement in the 2019/20 season.
The EU Falsified Medicines Directive (FMD) and Delegated Regulation as applicable to PHE supplied vaccines for the national immunisation programme

Full information on FMD as it applies to centrally supplied vaccines for the National Immunisation Programme can be found in the April 2019 edition of Vaccine update (weblink 21).

ImmForm vaccines in FMD-compliant packs (i.e. subject to the requirements of the Delegated Regulation) are starting to be distributed for some products. We would encourage all of our customers to visit the GOV.UK page on FMD (weblink 22) and spend some time becoming familiar with the content and links to various other guidance documents on the implementation of the legislation.

Further products in FMD-compliant packs will start to be issued throughout the summer. The exact start dates will be different for different products (the month is indicated in the table below for each product). We will continue to update this information as forecasts become more accurate so please check for updates via the ImmForm news pages regularly (weblink 23).

Please note that both vaccines supplied by PHE for the 2019/20 children’s flu programme will be issued in FMD-compliant packs and will be subject to the requirements of the Delegated Regulation.

PHE are already issuing many of the products listed below in FMD-barcoded packs that were manufactured before the legislation came into force. These packs are not required to be verified and decommissioned, but this can be done optionally.

If you have identified yourself to PHE as being exempt from decommissioning under Article 23 of the Delegated Regulation and this has been agreed, then you will be supplied with decommissioned vaccine.

Please see our guidance for more information on the roles and responsibilities in relation to FMD and the Delegated Regulation, regarding vaccines and other medicines centrally supplied by PHE to the NHS and other customers.

This document is accessible via GOV.UK at weblink 24.
<table>
<thead>
<tr>
<th>Product</th>
<th>Brand name</th>
<th>Month FMD-compliant packs will be issued which require verification and decommissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcal conjugate vaccine (PCV)</td>
<td>Prevenar13</td>
<td>Live</td>
</tr>
<tr>
<td>DTaP/IPV vaccine for pregnant women</td>
<td>Boostrix-IPV</td>
<td>Live</td>
</tr>
<tr>
<td>Meningococcal Group ACWY vaccine</td>
<td>Nimenrix</td>
<td>Live</td>
</tr>
<tr>
<td>Measles-Mumps-Rubella (MMR) vaccine</td>
<td>MMR VaxPRO</td>
<td>Live</td>
</tr>
<tr>
<td>DTaP/IPV/Hib/HepB vaccine</td>
<td>Infanrix Hexa</td>
<td>Live</td>
</tr>
<tr>
<td>Tuberculosis vaccine (BCG)</td>
<td>BCG Vaccine AJV</td>
<td>August 2019</td>
</tr>
<tr>
<td>Meningococcal Group B vaccine</td>
<td>Bexsero</td>
<td>August 2019</td>
</tr>
<tr>
<td>Shingles (Herpes zoster) vaccine</td>
<td>Zostavax</td>
<td>September 2019</td>
</tr>
<tr>
<td>Hib/MenC vaccine</td>
<td>Menitorix</td>
<td>September 2019</td>
</tr>
<tr>
<td>Measles-Mumps-Rubella (MMR) vaccine</td>
<td>Priorix</td>
<td>October 2019</td>
</tr>
<tr>
<td>DTaP/IPV vaccine for infants</td>
<td>Repevax</td>
<td>October 2019</td>
</tr>
<tr>
<td>Rotavirus vaccine</td>
<td>Rotarix</td>
<td>October 2019</td>
</tr>
<tr>
<td>Td/IPV vaccine</td>
<td>Revaxis</td>
<td>Beyond October 2019, please check back soon</td>
</tr>
<tr>
<td>Human papillomavirus (HPV) vaccine</td>
<td>Gardasil</td>
<td>Beyond October 2019, please check back soon</td>
</tr>
<tr>
<td>Live Attenuated Influenza Vaccine</td>
<td>Fluenz Tetra</td>
<td>When available</td>
</tr>
<tr>
<td>Quadrivalent Inactivated Influenza Vaccine</td>
<td>Quadrivalent Influenza Vaccine (split virion, inactivated)</td>
<td>When available</td>
</tr>
<tr>
<td>Purified protein derivative (Mantoux test)</td>
<td>Tuberculin PPD-2TU</td>
<td>All stock will be in non-FMD packs (as it is unlicensed in UK)</td>
</tr>
</tbody>
</table>
Vaccine supply
(non-centrally supplied)

Vaccine supply for the non routine programme

CHOLERA VACCINE
- VALNEVA: Dukoral is available
- DUKORAL: 2 dose 2 x 3ml vial + 5.6g sachet

HEPATITIS A VACCINE
Adult
- GSK: Havrix Adult PFS singles and packs of 10 are available
- Sanofi Pasteur: Avaxim is available
- MSD: VAQTA Adult is available

Paediatric
- GSK: Havrix Paediatric PFS singles is unavailable. Resupply expected end of August 2019
- GSK: Havrix Paediatric PFS packs of 10 are currently available
- MSD: VAQTA Paediatric is available

HEPATITIS B VACCINE
Adult
- GSK: Engerix B PFS singles and packs of 10 are available
- GSK: Engerix B vials singles are available
- GSK: Engerix B vial packs of 10 are unavailable
- GSK: Fendrix is available
- MSD: HBVAXPRO 10 µg is unavailable until further notice
- MSD: HBVAXPRO 40 µg is unavailable until further notice. Please see MSD statement for further information on supply of HBVAXPRO vaccines at weblink 25

Paediatric
- GSK: Engerix B Paediatric singles are available
- MSD: HBVAXPRO 5µg are available

COMBINED HEPATITIS A & B VACCINE
- GSK: Twinrix Adult packs of 10 are available
- GSK: Twinrix Paediatric is available
- GSK: Ambirix is available

COMBINED HEPATITIS A & TYPHOID VACCINE
- Sanofi Pasteur: Viatim is available

JAPANESE ENCEPHALITIS VACCINE
- VALNEVA: IXIARO is available
- IXIARO: 1 dose (0.5 ml)
TYPHOID VACCINE
• **Sanofi Pasteur**: Typhim is available
• **PaxVax**: Vivotif is available

RABIES VACCINE
• **GSK**: Limited supply of Rabipur is currently available. Supply issues resulting from manufacturing constraints have now resolved, however, GSK do not expect the situation to fully normalise until late 2019
• **Sanofi Pasteur**: Rabies BP is currently out of stock. An alternative vaccine is available, please contact Sanofi Pasteur directly for more information

PPV (Pneumococcal Polysaccharide Vaccine)
• **MSD**: Pneumococcal Polysaccharide Vaccine vials are currently available
• **MSD**: PNEUMOVAX 23 PFS are currently available.
  Please see weblink 25 for further information

PPV (Pneumococcal Polysaccharide Conjugate Vaccine)
• **Pfizer**: Prevenar 13 is available

VARICELLA ZOSTER VACCINE
• **GSK**: VARILRIX is currently available
• **MSD**: VARIVAX is currently available
• **MSD**: ZOSTAVAX is currently unavailable. Resupply is expected October 2019

DIPHTHERIA, TETANUS AND POLIOMYELITIS (inactivated) VACCINE
• **Sanofi Pasteur**: Revaxis is available

MMR
• **MSD**: MMRvaxPro is currently unavailable. Resupply expected Q4 2019
• **GSK**: Supplies of Priorix are available

HUMAN PAPILLOMAVIRUS VACCINE
• **MSD**: GARDASIL is currently unavailable resupply expected Q4 2019
• **MSD**: Gardasil 9 is currently available
• **GSK**: Cervarix is currently available

MENINGITIS ACWY VACCINE
• **GSK**: Limited supply of Menveo is available
• **Pfizer**: Nimenrix is currently available

YELLOW FEVER
• **Sanofi Pasteur**: Stamaril is available
Weblinks

Weblink 1  https://www.nhs.uk/conditions/vaccinations/mmr-vaccine/
Weblink 2  https://www.nhs.uk/conditions/vaccinations/4-in-1-pre-school-dtap-ipv-booster/
Weblink 5  https://www.nhs.uk/conditions/vaccinations/nhs-vaccinations-and-when-to-have-them/
Weblink 6  https://www.nhs.uk/conditions/vaccinations/
Weblink 7  https://www.gov.uk/government/collections/immunisation
Weblink 12 https://www.gov.uk/government/publications/which-flu-vaccine-should-children-have
Weblinks


Weblink 27  https://www.nhs.uk/conditions/vaccinations/men-acwy-vaccine/

Weblink 28  https://www.nhs.uk/conditions/vaccinations/mmr-vaccine/

