



# Vaccine update

## Happy 70<sup>th</sup> Birthday NHS

Here in immunisation we are celebrating vaccinating our population in partnership with the widely admired and trusted NHS. Our immunisation story is part of the NHS at 70's peoples history website, which forms an academic project investigating the cultural history of the NHS at [weblink 1](#).

The global impact of vaccinations has been impressive but despite this, millions of children around the world still miss out on one of their fundamental health rights to protection. Immunisation remains one of the most important life-saving preventative health measures introduced in the last century and here at PHE we are incredibly proud of the programmes that we implement working with all our partners.

By 1956 vaccinations against diphtheria, pertussis (whooping cough), tuberculosis and polio were all provided by the NHS to all eligible children. This is the type of health innovation that has provided wide benefits to the population. It is easy now to overlook the fear and devastation wreaked by all of these diseases and that is all down to vaccines. In the UK we rarely have to worry about Lockjaw, paralysis from polio or death from Diphtheria. Our children will not die from diarrhoea caused by rotavirus, or small pox or measles. We are close to the eradication of polio and that, alongside the eradication of smallpox, shows us that measles elimination is possible. Despite high uptake in the under 5's, pockets of under-vaccinated older children and young adults remain.



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Our Immunisation department working with our NHS colleagues delivers 30 million doses of vaccine annually – a number that is increasing every year.

We know how much our health professionals are trusted and relied on by the public to provide them with high quality care, information and protection from the diseases we can now prevent. The trust that those colleagues have earned during these 70 years has meant that our complex programme is the envy of many countries around the world.

Complexity is one of the issues that face us all every day. The challenges of eligibility, vaccine supply, accessibility and equality of access present the NHS and PHE with difficulties, which we meet with stalwart determination every day, all year round. This year, more than ever, we have been working hard to address these complexities, to find workable solutions and deliver comprehensive guidance often under incredibly tight time frames. Listening to our HCPS, our communications colleagues, our NIN network, the public and our partners and adjusting our approach is one of our key strengths.

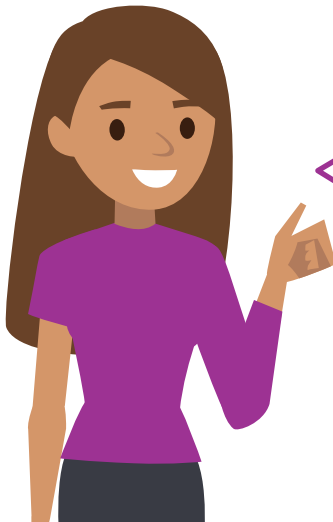
**Protecting your baby against meningitis and septicaemia**  
caused by meningococcal B bacteria

**MenB vaccine now available!**  
Information about the MenB vaccine and recommended paracetamol use

**Immunisation**  
The safest way to protect the health of your baby

High quality provision, requires going that extra mile, and this is something that we pride ourselves on. None of this could be achieved without the dedication of the nurses and doctors working in general practice and schools. In recent years they have been asked to do more and more and have been ably supported by their professional colleagues in local pharmacies.

Here in the UK we have been at the forefront of vaccine programme development with our recent Men B campaign implemented in record time and last year we introduced the hexavalent vaccine providing additional protection against Hepatitis B to all children in the UK.

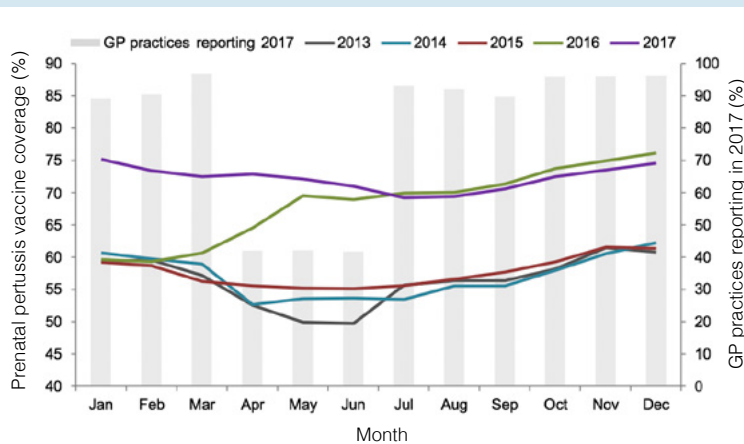


School based immunisation programmes have proved very successful with first the introduction of rubella and BCG in schools and in recent years the HPV for girls programme, MMR and MenACWY. These and the catch up programmes have provided millions of our children with protection.

Maternal immunisation has also been introduced offering protection to pregnant women and their babies against flu and whooping cough.

There is much to celebrate on this anniversary, and yet still much to do and we could not do it without the trust of our public and all the wonderful HCPs who read Vaccine Update every month and use all of our resources to implement the programmes.

### Monthly pertussis vaccination coverage (%) in pregnant women: England, 2013-2017



1. New IT specification implemented in March/April 2016 [11]; coverage reported prior to this date is likely to have been underestimated.
2. Women first offered pertussis vaccine from 20 weeks gestational age in April 2016 would have been expected to deliver in August 2016.

If the NHS was a person, they would now be eligible for their shingles vaccination! We know many of you are working hard to get the shingles message out to all eligible older adults. Shingles vaccination can now be offered all year round. Everyone having a 70th birthday this year like the NHS, should ask their GP practice for their shingles vaccine – a great present that allows the recipient to get on with enjoying all the things that make them happy without the pain of shingles.



Despite our high coverage we still have outbreaks of measles, so our birthday message for all children and young people:

### Whenever your birthday is, are you up to date with your routine vaccinations?

You can check if you or your children are up to date by looking in the PCHR redbook or checking with your GP practice.

By reducing the burden of disease on individuals, we also help the NHS – it is there whenever we need it, we can all take personal responsibility and have all our routine immunisations on time. Having our flu vaccination each year is a key way to demonstrate protecting the vulnerable.

# 70 YEARS OF THE NHS 1948 - 2018

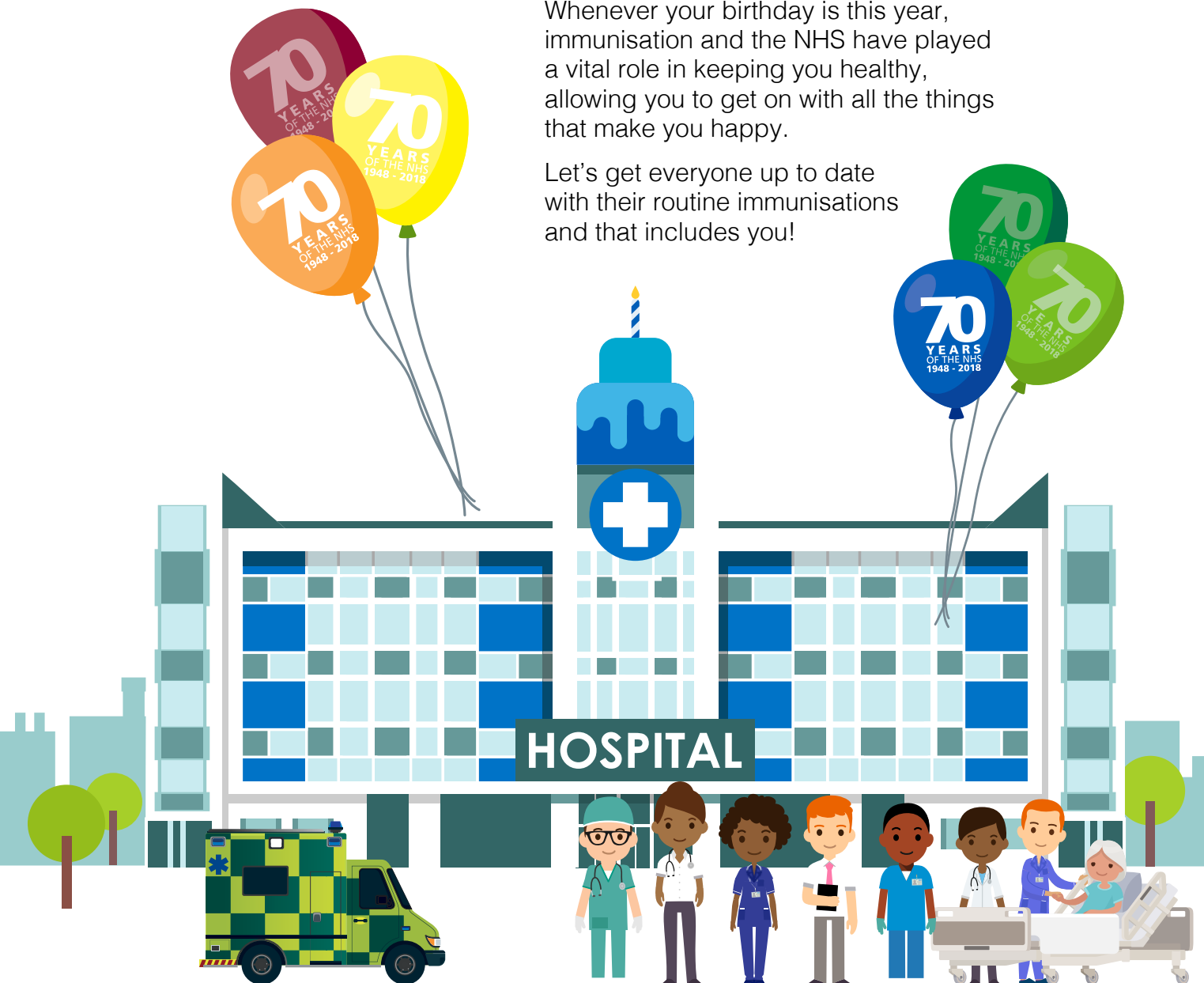
## HAPPY BIRTHDAY NHS – WE ARE WITH YOU!

By working together we can protect all those individuals who are unable to have their own vaccinations, often because they may be seriously ill. In this way we really can help to protect everyone, at every age.

So as we look back at the successes of the last 70 years, we also look forward to a future where measles vaccine coverage is over 95% and becomes a disease of the past, all of us working together to disrupt the spread of serious diseases to the vulnerable.

Whenever your birthday is this year, immunisation and the NHS have played a vital role in keeping you healthy, allowing you to get on with all the things that make you happy.

Let's get everyone up to date with their routine immunisations and that includes you!



## Are you up to date with your MMR vaccine?

In light of the ongoing measles outbreak in England<sup>1</sup> GP employers are reminded of their responsibility to ensure that all their staff are up to date with their MMR and other vaccines.



Image shows infant born with skin lesions due to congenital rubella syndrome, image courtesy of CDC at [weblink 2](#).

A recent editorial in the British Journal of General Practice<sup>2</sup> highlighted why measles is still a threat to the UK. There continue to be multiple exposures in healthcare settings that have led to measles cases in healthcare workers with the associated risk of transmission to vulnerable contacts.

Measles is highly infectious and can lead to serious complications, particularly in immunosuppressed individuals and young infants. It is also more severe in pregnancy, and increases the risk of miscarriage, stillbirth or preterm delivery.

Practices must ensure that staff receive the immunisations that are appropriate to their role. The Care Quality Commission has recently published a helpful guide on immunisation of healthcare staff for primary care colleagues at [weblink 3](#).

*“GP practices should be able to show that an effective employee immunisation programme is in place. This includes demonstrating how they arrange and pay for this service.*

- *all employees should be able to have an occupational health assessment*
- *new employees should have a pre-employment health assessment”*

These assessments should include a review of their immunisation needs. Everyone who has direct contact with patients, including reception staff, should be up to date with their routine immunisations.

Evidence of satisfactory immunity to measles is either:

- two documented doses of the MMR vaccine, or
- a positive antibody test to measles (and rubella)

It is also important to ensure good information systems so that when staff are exposed to measles cases, it is possible – without delay – to establish whether the staff members are known to be immune.

<sup>1</sup> PHE News item. Measles outbreaks across England. Accessed 13/07/2018: <https://www.gov.uk/government/news/measles-outbreaks-across-england>

<sup>2</sup> Mohen M, Phillips A, Saliba V, Harding N, and Sibal B. BJGP. <http://bjgp.org/content/early/2018/07/02/bjgp18X697961/tab-pdf>

## Updated guidance on use of Varicella Zoster Immunoglobulin (VZIG) during supply shortage

Chickenpox is a common and generally mild childhood illness although infection in immunosuppressed individuals, newborns and pregnant women can result in severe and even life threatening disease. To prevent severe infection in these at risk individuals, varicella-zoster specific immunoglobulin (VZIG) is recommended according to national guidelines at [weblink 4](#)<sup>1</sup>. The rationale for offering prophylaxis to these groups is to attenuate disease and reduce the risk of complications such as pneumonitis, rather than to prevent infection.

Chickenpox in pregnancy can lead to complications for both the mother and her baby, depending on the timing of infection. During the first 20 weeks of pregnancy there is a risk of fetal varicella syndrome occurring; from 20 weeks the greatest risk is of maternal complications including pneumonia. The use of VZIG in pregnant women is therefore twofold: reducing severity of maternal infection and potential reduction in the risk of fetal infection. Maternal chickenpox can still occur despite VZIG prophylaxis and therefore it is important that women are informed to seek prompt treatment (with aciclovir) for those developing a rash.

Current guidance recommends VZIG (4 vials; 1000mg) for susceptible pregnant women at any stage of pregnancy, providing VZIG can be administered within 10 days of contact. Varicella zoster Immunoglobulin (VZIG) is a scarce blood product that is centrally procured and issued by Public Health England. When supplies of VZIG have been short in the past, restrictions have been placed on its use in pregnant women.

In response to a significant shortage of VZIG due to manufacturing issues, from 6th July 2018, VZIG will only be issued to susceptible pregnant women who have had a significant exposure to chickenpox/shingles in the first 20 weeks of pregnancy. This urgent advice has been considered and agreed between PHE experts and the chair of the JCVI varicella subcommittee. This group have also advised that, based on extensive safety evidence, pregnant women who are exposed after 20 weeks, should be offered the oral anti-viral drug, aciclovir (800mg four times a day from day 7-14).

As oral aciclovir is not licensed for use in pregnancy, prescribing for pregnant women would constitute 'off-label' use. Clinicians are able to prescribe medicines outside the terms of the licence (i.e. 'off-label') when this is in the best interests of the patient on the basis of available evidence. Further advice on off-label prescribing is on the MHRA website at [weblink 5](#).

Recommendations for VZIG for immunosuppressed contacts and neonates remain unchanged and risk assessment should proceed according to national guidelines at [weblink 4](#)<sup>1</sup>.



<sup>1</sup> PHE Guidance for issuing varicella zoster immunoglobulin. August 2017.

## Updated guidelines on the management of tetanus prone injuries and use of Tetanus Specific Immunoglobulin (TIG) during supply shortage

For tetanus-prone injuries, based on a risk assessment on the nature of the wound and immunisation status of the individual, a reinforcing dose of tetanus containing vaccine and/or of a prophylactic dose of tetanus specific immunoglobulin (TIG), given intra-muscularly is recommended. The use of normal preparations of immunoglobulin (Subgam) has been recommended as an alternative to intramuscular TIG (IM TIG).

Public Health England has recently become aware of a severe shortage of IM TIG and Subgam available in the NHS for the management of tetanus prone wounds. Furthermore the alternative HNIG products that are approved for use by NHS England are also in limited supply. As a consequence, PHE have urgently reviewed the existing evidence to prioritise the use of TIG /HNIG for susceptible individuals who have sustained high risk injuries and are at greatest risk. These updated guidelines are available at [weblink 11](#).

## Vaccine supply (centrally supplied)

### Supply of UK-licensed BCG vaccine manufactured by AJ Vaccines (formerly the Statens Serum Institut (SSI)) for the national BCG programme

AJ Vaccines has resumed supply of the sole UK-licensed BCG vaccine to Public Health England's (PHE's) central stockholding. It is anticipated that PHE will be in a position to re-open ordering for the UK-licensed AJ Vaccines product in late July or August 2018. In the meantime, PHE will continue to make available Intervax BCG vaccine for ordering through the ImmForm website.

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**All organisations holding centrally supplied BCG vaccine are asked to use their current stocks of InterVax BCG vaccine before ordering AJ Vaccines BCG Vaccine to minimise vaccine wastage.**

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This is particularly important as supplies for this vaccine remain globally constrained. BCG vaccine supplied by AJ Vaccines is presented as a powder for reconstitution in a glass vial with synthetic stopper.

Each pack of vaccine ordered contains 10 vials, and will be accompanied by a pack of 10 vials of diluent. In addition, a pad of 100 patient information leaflets will be included in your order. One vial of reconstituted vaccine contains 1 ml, corresponding to 10 doses (of 0.1 ml) for adults and children aged 12 months and over or 20 doses (of 0.05 ml) for infants under 12 months of age. PHE anticipates having sufficient BCG vaccine for all eligible groups. To help with managing this, ordering will be opened to all ImmForm account holders at an initial 2 packs per order per week (each pack contains up to 200 infant doses). This order restriction will be kept under review.

To note, that at times the shelf life of this product may be relatively short, therefore it is advised not to create locally held stockpiles. In the event that further packs are required, please contact [helpdesk@immform.org.uk](mailto:helpdesk@immform.org.uk).

## Flu vaccine ordering for 2018 to 2019

### Information for General Practice

For the past 2 seasons ImmForm order controls have been in place for general practice to reduce the amount of Live Attenuated Influenza Vaccine (LAIV), or Fluenz Tetra®, ordered across England but not administered to children. This approach has been successful in reducing the amount of vaccine which goes unused and therefore similar controls will be in place again this year.

The controls are tailored to each practice and work by allocating an amount of vaccine based on the number of registered eligible patients. The planned timings and changes to the allocations are set out below in order to assist with local planning. Please note that these controls are subject to change as necessary (i.e. to increase allocations earlier than planned), to respond to the needs of the programme.

The following controls will be applied to those accounts ordering for the GP part of the programme:

- in the first 4 weeks all customers will be able to order for up to 40% of the eligible cohort (all 2 and 3 year olds, plus at risk from 4 – <18 years). Requests for extra vaccine will be considered on a case by case basis
- in the next 4 weeks, all practices will be able to order up to last year's INDIVIDUAL uptake (or remain at 40% if individual uptake was lower). Requests for extra vaccine will be considered on a case by case basis
- after these first 8 weeks all practices will be able to order a set number of packs per week (one order per week) depending on stock levels. Requests for additional vaccine will continue to be considered on a case by case basis

Any changes to this schedule in-season will be communicated via the news item on the ImmForm front page. Requests for additional vaccine should be sent to the [helpdesk@immform.org.uk](mailto:helpdesk@immform.org.uk) 0844 376 0040 and should be sent in good time before your order cut-off. Out of schedule deliveries will be by exception only.

### Multi Branch Practices and LAIV allocations

GP practices or groups that operate over multiple sites but are part of the same organisation will have a joint allocation (as in previous years), even where each site has a unique ImmForm account. What this means, is that it is possible for one site to order all of the available vaccine for the group unless there is local agreement on how the available amount should be shared. PHE recommends that this agreement is in place before ordering opens to reduce the risk of supply interruption.

Practices should be able to work out how much vaccine they will be allocated during the first 8 weeks, and how it should be split between all sites, using the information above. If additional vaccine is required then this should be requested in the normal way via the ImmForm helpdesk.



## Information for Schools Providers

A default cap of 300 packs (3000 doses) per week will be in place for school providers (as in previous years).

This is due to the variability in programme management across the country, which limits the options for national stock management.

We understand that there may be instances where school providers need to order more than 300 packs (3000 doses) in a week. Where this is the case, providers will need to contact the ImmForm helpdesk to arrange a large order. These will be dealt with on a case by case basis and will be by exception.

Additionally, if a provider covering a large area feels that they need a higher weekly cap than 300 packs (3000 doses) to deliver the programme, they should discuss their vaccine requirements with their Commissioner in the first instance and then with their support, request an increase via the ImmForm helpdesk.

Orders will be monitored regularly and Commissioners will be alerted to any requests for additional vaccine or unusual ordering activity.

## Flu vaccine information and availability for 2018 to 2019

As in previous years, PHE has centrally procured flu vaccine for children included in this year's flu programme, including those aged from six months to less than 18 years old in clinical risk groups. It remains the responsibility of GPs and other providers to order sufficient flu vaccine directly from manufacturers for older eligible patients of the flu programme in 2018-19.

The following vaccines will be available to providers of the children's flu programme in England via the ImmForm website. Further details on the timing of availability of vaccines will be published as information becomes available.

Please refer to guidance from your respective health departments for arrangements in Scotland, Wales and Northern Ireland.

Vaccine	Manufacturer	Anticipated ImmForm order opening
Fluenz Tetra® (LAIV)	AstraZeneca UK Ltd	Early October
Quadrivalent Influenza Vaccine (split virion, inactivated)	Sanofi Pasteur	September

**Eligibility and the type of vaccine to offer children from six months to less than 18 years is as follows:**

Age on 31 August 2018	Is child eligible for LAIV?	Setting
<b>Under 2 years of age</b>	<p><b>Universal programme:</b> No. Only at risk children offered vaccination.</p> <p><b>At risk children:</b> LAIV is not licenced for children under 2 years of age. At risk children over six months of age to be offered suitable quadrivalent inactivated flu vaccine (QIV).</p>	
<p><b>Aged 2 – 3 years old</b> (Born between 1 September 2014 and 31 August 2016)</p>	<p><b>Universal programme:</b> All 2 and 3 year olds offered LAIV.</p> <p>Children who turn two after 31 August 2018 are not eligible.</p> <p>Children who were three on 31 August 2018 and turn four afterwards, are still eligible.</p> <p><b>At risk children:</b> Offer LAIV. If child is contraindicated (or it is otherwise unsuitable), then offer suitable quadrivalent inactivated flu vaccine (QIV).</p>	General practice
<p><b>Aged 4 – 9 years old</b> (Born between 1 September 2008 and 31 August 2014)</p>	<p><b>Universal programme:</b> All primary school years from reception class to year 5* offered LAIV.</p> <p><b>At risk children:</b> Offer LAIV. If child is contraindicated (or it is otherwise unsuitable), then offer suitable quadrivalent inactivated flu vaccine (QIV).</p> <p>At risk children may be offered vaccination in general practice if the school session is late in the season, parents prefer it, or they missed the school session. Also, some schools may not offer inactivated vaccines to at risk children in whom LAIV is contraindicated.</p>	School
<b>Aged 10 years old to less than 18 years</b>	<p><b>Universal programme:</b> No. Only at risk children offered vaccination.</p> <p><b>At risk children:</b> Offered LAIV. If contraindicated (or it is otherwise unsuitable), then offer suitable quadrivalent inactivated flu vaccine (QIV).</p>	General practice

\*Reception class (4 to 5 year olds); Year 1 (5 to 6 year olds); Year 2 (6 to 7 year olds); Year 3 (7 to 8 year olds); Year 4 (8 to 9 year olds); Year 5 (9 to 10 year olds).

**The full list of influenza vaccines that will be available  
for the 2018/19 season is:**

Supplier	Product details	Vaccine type	Age indications	Contact details
<b>AstraZeneca UK Ltd</b>	Fluenz Tetra ▼	Live attenuated, nasal (quadrivalent)	From 24 months to less than 18 years of age	0845 139 0000
<b>GSK</b>	Fluarix Tetra ▼	Split virion inactivated virus (quadrivalent)	From 6 months	0800 221 441
<b>MASTA</b>	Quadrivalent Influenza Vaccine (split virion, inactivated) ▼	Split virion, inactivated virus	From 6 months	0113 238 7552
<b>Mylan (BGP Products)</b>	Influvac® sub-unit Imuvac® Influenza vaccine MYL	Surface antigen, inactivated virus	From 6 months	0800 358 7468
	Quadrivalent Influenza vaccine Tetra MYL Quadrivalent Influvac sub-unit Tetra	Influenza virus surface antigen (inactivated)	From 18 years	
<b>Pfizer Vaccines</b>	Influenza vaccine (Split Virion, inactivated), pre-filled syringe	Split virion, inactivated virus	From 5 years	0800 089 4033
<b>Sanofi Pasteur vaccines</b>	Quadrivalent Influenza Vaccine (split virion, inactivated) ▼	Split virion, inactivated virus	From 6 months	0800 854 430
<b>Seqirus UK Ltd</b>	Fluad®	Surface antigen, inactivated, Adjuvanted with MF59C.1	65 years of age and over	08457 451 500

More detailed information on the characteristics of the available vaccines, including ovalbumin (egg) content will be published on the PHE Immunisation web pages.

None of the influenza vaccines for the 2018/19 season contain thiomersal as an added preservative.

## Training resources for healthcare practitioners

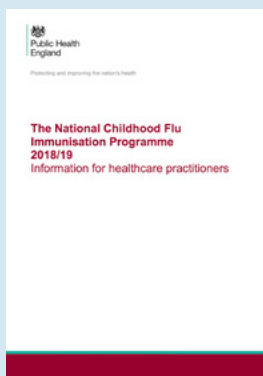
Two slide sets for healthcare practitioners providing information on the annual flu vaccination programme, the vaccines and how to administer them have been updated and are available at the following links:



**The national flu immunisation programme 2018/19 training slides:** [weblink 12](#)



**The national childhood flu immunisation programme 2018/19 training slides:** [weblink 13](#)



Two training documents for health care practitioner providing information on the annual flu vaccination programme, the vaccines and how to administer them have been updated for the 2018/19 flu season and will be available shortly at [weblink 14](#).

**The childhood flu programme: information for healthcare practitioners:** [weblink 15](#)

## Flu immunisation e-learning programme!



An interactive flu immunisation e-learning programme, written by PHE, and produced by Health Education England's e-Learning for Healthcare, is available at [weblink 16](#) or anyone involved in delivering the flu immunisation programme.

## Purified Protein Derivative PPD 10TU ImmForm ordering now closed

ImmForm ordering has closed for Purified Protein Derivative (PPD) 10TU/0.1ml for Mantoux testing. Please note that the last of the stock delivered to ImmForm customers had an expiry date of **30 June 2018**, and as such should no longer be used.

In the UK, the standard concentration of Purified Protein Derivative (PPD) 2TU/0.1ml is used for routine Mantoux testing to identify latent TB infection among contacts of active TB cases, migrants and in individuals prior to immunosuppressive therapy.

The higher concentration of 10 TU/0.1 ml is only used in rare circumstances, for example where the first Mantoux test (PPD 2TU) is negative (less than 5mm in diameter) and a retest is considered appropriate for clinical purposes e.g. in immunocompromised patients/contacts (Green Book page 404).

For immunocompromised individuals where the Mantoux test response is considered less than reliable, PHE recommends using Interferon Gamma Release Assay (IGRA) testing together with a Mantoux test using PPD 2TU at [weblink 6](#).

## Reminder about MMR vaccine ordering restriction

There are currently two different vaccines available to order for the MMR programme, M-M-RvaxPro<sup>®</sup> and Priorix<sup>®</sup>. Orders for Priorix<sup>®</sup> continue to be capped at 6 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, M-M-RvaxPro<sup>®</sup>, remains available to order without restriction. If you specifically require additional Priorix<sup>®</sup> 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](mailto:helpdesk@immform.org.uk) or 0844 376 0040.

## Attention all customers – August Bank Holiday deliveries warning notice

Due to the August Bank Holiday, there will be **no deliveries or order processing** by Movianto UK on Monday 27 August 2018. Please see the table below for revised order and delivery dates.

For customers with standard delivery dates of Monday please be aware that after the **20 August 2018**, your next available delivery day will be the **3 September 2018**.

You are reminded to be prepared for the break in deliveries and to order accordingly. Please make sure you have sufficient room in your fridge for any additional vaccine you wish to stock over this holiday period, bearing in mind the recommendation that only two to four weeks of vaccine stock be held at any one time.

August Bank Holiday orders and deliveries – Monday 27 August 2018		
Delivery date	Order cut-off date	Order cut-off time
Monday 20 August 2018	Thursday 16 August 2018	11:55 AM
Tuesday 21 August 2018	Friday 17 August 2018	11:55 AM
Wednesday 22 August 2018	Monday 20 August 2018	11:55 AM
Thursday 23 August 2018	Tuesday 21 August 2018	11:55 AM
Friday 24 August 2018	Wednesday 22 August 2018	11:55 AM
<b>Monday 27 August 2018</b>	<b>Closed – No deliveries</b>	
Tuesday 28 August 2018	Thursday 23 August 2018	11:55 AM
Wednesday 29 August 2018	Friday 24 August 2018	11:55 AM
Thursday 30 August 2018	Tuesday 28 August 2018	11:55 AM
Friday 31 August 2018	Wednesday 29 August 2018	11:55 AM

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

## Vaccine supply (non-centrally supplied)

### Hepatitis B vaccine supplies

GSK are confident that planned supplies of adult and paediatric vaccine (Engerix B®) and renal vaccine (Fendrix®) are now sufficient to supply the UK market. Combined HepA/HepB vaccines (Twinrix® and Ambirix®) are also available.

MSD UK expects current supplies of adult vaccine (HBvaxPRO™ 10mcgs) to last until October 2018 and supplies will not resume until 2020. Supplies of HBvaxPRO™ 5mcgs and limited supplies of HBvaxPRO™ 40mcgs remain available via AAH, the MSD nominated wholesaler, and are recommended for use in individuals prioritised by Public Health England (PHE).

PHE and the Department of Health and Social Care (DHSC) have therefore agreed to accelerate the phased re-introduction of vaccine outlined in the recovery plan, so that vaccine is now available for all priority groups 1-4. This means that:

- a) vaccine can be ordered for all health and social care clinical and non-clinical staff and healthcare students who are at risk of exposure to blood and bodily fluids, including for groups where vaccine ordering was due to open in late summer/ early autumn.
- b) vaccine is also now available for travel. Please visit the NaTHNaC website at [weblink 10](#) for indications for hepatitis B vaccination prior to travel.

To prevent excessive stockpiling and to ensure backlog or catch up vaccination can continue, some ordering restrictions will remain in place. If a vaccine order cannot be fulfilled by one manufacturer, please check with another.

As forecasts are dependent on expected deliveries and sales, we will continue to monitor the situation and update as required.

### Vaccine supply for the non routine programme

#### HEPATITIS A VACCINE

##### Adult

- **GSK:** Supplies of Havrix PFS singles, PFS packs of 10 are available. Please note, there may not be sufficient stock in each presentation to accommodate demand, therefore you may not be able to access supply of some presentations
- **Sanofi Pasteur:** Avaxim is currently available for orders without any restrictions
- **MSD:** Limited stocks of VAQTA Adult are currently available

##### Paediatric

- **GSK:** There will be intermittent supply of Havrix Paediatric singles and packs of 10
- **MSD:** VAQTA Paediatric is currently available

## HEPATITIS B VACCINE

Hepatitis B monovalent vaccines are currently under supply management. While priority groups 1-3 (in the PHE temporary recommendations) will continue to have access to Hepatitis B monovalent vaccines, availability for priority group 4 patients has commenced in a phased approach.

### Adult

- **GSK:** Supplies of Engerix B PFS singles and packs of 10 are available. Please note there may not be sufficient stock in each presentation to accommodate demand, therefore you may not be able to access supply of some presentations
- **GSK:** Supplies of Engerix B vials singles and packs of 10 are available. Please note there may not be sufficient stock in each presentation to accommodate demand, therefore you may not be able to access supply of some presentations
- **GSK:** Fendrix is available
- **MSD:** Limited supplies of HBVAXPRO 10µg are available. Supplies are expected to be restricted until further notice
- **MSD:** Limited supplies of HBVAXPRO 40µg are available. Supplies are expected to be restricted until further notice

### Paediatric

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

## COMBINED HEPATITIS A & B VACCINE

- **GSK:** Twinrix Adult and Paediatric presentations are available
- **GSK:** Ambirix is available

## COMBINED HEPATITIS A & TYPHOID VACCINE

- **Sanofi Pasteur:** Limited supplies of Viatim are available. It is likely that there will be order restrictions in place

## TYPHOID VACCINE

- **Sanofi Pasteur:** Typhim is available to order without restrictions
- **PaxVax:** Vivotif is available

## RABIES VACCINE

- **GSK:** Rabipur is available
- **Sanofi Pasteur:** Rabies BP is out of stock. For more information, please call Sanofi Pasteur Customer services

## PPV (Pneumococcal Polysaccharide Vaccine)

- **MSD:** Limited supply is currently available with next replenishment due late July



**VARICELLA ZOSTER VACCINE**

- **GSK:** Varilrix is currently available
- **MSD:** VARIVAX is currently available
- **MSD:** ZOSTAVAX stocks are currently available for the private market

**DIPHTHERIA, TETANUS AND POLIOMYELITIS (inactivated) VACCINE**

- **Sanofi Pasteur:** Revaxis is available to order without restrictions

**MMR**

- **MSD:** MMR stocks are currently available for the private market

**HUMAN PAPILLOMAVIRUS VACCINE**

- **MSD:** Stocks of GARDASIL are available for private market sales
- **MSD:** Limited supplies of Gardasil 9 are available for private market sales. Supplies are expected to be replenished in late July/early August and in September

**MENINGITIS ACWY VACCINE**

- **GSK:** Menveo is currently unavailable until late 2018
- **Pfizer:** Nimenrix is currently available for private sales

**YELLOW FEVER**

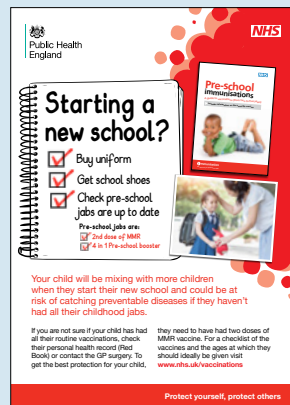
- **Sanofi Pasteur:** Stamaril is available to order without restrictions

## New resources

### Back to school? After the summer!

These resources will be available soon at [weblink 10](#) and is suitable for healthcare professionals, head teachers and all school staff.

#### Pre-primary school poster and postcard



#### Pre-secondary school poster and postcard



### Teaching and learning resources

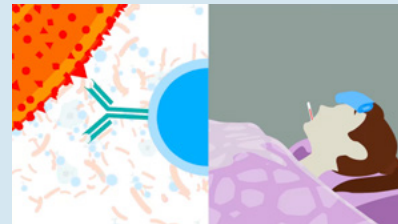
#### Vaccines work quiz

Here is a link to a WHO resource which is suitable for healthcare professionals to use and share. See [weblink 8](#).

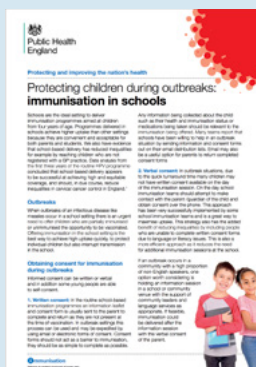


#### Oxford vaccine Group

Have produced a new how vaccines work immunisation video, watch at [weblink 9](#).



### Protecting children during an outbreak: immunisation in schools



It is available to download at [weblink 7](#). This guidance covers:

- the rationale behind offering vaccination in schools during an outbreak
- a range of useful consent advice
- the evidence of the effectiveness of programmes delivered in schools

## Weblinks

- Weblink 1 <https://peopleshistorynhs.org/encyclopaedia/childhood-vaccination-and-the-nhs/>
- Weblink 2 <https://www.cdc.gov/rubella/about/photos.html>
- Weblink 3 <http://www.cqc.org.uk/guidance-providers/gps/nigels-surgery-37-immunisation-healthcare-staff>
- Weblink 4 <https://www.gov.uk/government/publications/immunoglobulin-when-to-use>
- Weblink 5 <https://www.gov.uk/drug-safety-update/off-label-or-unlicensed-use-of-medicines-prescribers-responsibilities#prescribing-in-a-patients-best-interests>
- Weblink 6 <https://www.gov.uk/government/publications/tuberculosis-tb-interferon-gamma-release-assay-tests>
- Weblink 7 <https://www.gov.uk/government/publications/protecting-children-during-outbreaks-immunisation-in-schools>
- Weblink 8 <http://apps.who.int/worldimmunizationweek/>
- Weblink 9 <https://www.youtube.com/watch?v=-muloWofsCE>
- Weblink 10 <https://www.gov.uk/government/collections/immunisation>
- Weblink 11 <https://www.gov.uk/government/publications/tetanus-immunoglobulin-recommendations-on-treatment-and-prophylaxis>
- Weblink 12 <https://app.box.com/s/weguixyyncpunxzkjijpzgbwzfzjdgrhm>
- Weblink 13 <https://app.box.com/s/1vjz9aneb1pwtic4k7zckgpqfq0zz8ro>
- Weblink 14 <https://www.gov.uk/government/collections/annual-flu-programme#2018-to-2019-flu-season>
- Weblink 15 <https://www.gov.uk/government/publications/childhood-flu-programme-qa-for-healthcare-professionals>
- Weblink 16 <https://www.e-lfh.org.uk/programmes/flu-immunisation/>