

Protecting and improving the nation's health

Issue 272, November 2017

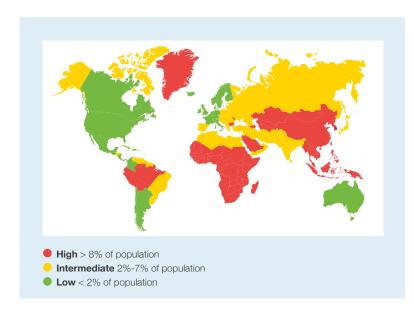
Vaccine update

European HIV-Hepatitis Testing Week Eliminating hepatitis B and C

Earlier this month in São Paulo Brazil, over 100 countries with representation from civil society, governments, clinicians and public health came together for the 2nd World Hepatitis Summit to galvanise and encourage global efforts to eliminate viral hepatitis as a major public health threat by 2030.

A staggering 325 million people globally are living with viral hepatitis, with 1.34 million deaths in 2015 alone. In England, around 180,000 people are infected with hepatitis B and 160,000 with hepatitis C.

Elimination should no longer be a pipe dream in England as over the past decades we have implemented key policies and interventions: safe injection and infection control practices, safe blood supplies, harm reduction strategies, universal antenatal screening for hepatitis B, selective immunisation for hepatitis B targeting infants born to infected mothers and other risk groups.



CONTENTS

WHO declares that UK eliminates measles – but current outbreaks remind us we still have work to do!

Don't delay immunisation for the six to eight week baby check

Live attenuated influenza vaccine (LAIV) – porcine gelatine

Delivery of the childhood flu programme to school age children

Rotavirus age restrictions

NaTHNaC is 15 years old!

Immunisation in pregnancy slide sets

Vaccine Information and Availability 2017/18 for the children's national flu vaccination programme

Giving a second dose of LAIV

Expiry dates for Fluenz Tetra®

Influenza Vaccines for the 2017 to 2018 influenza season

Update on switch to hexavalent (DTaP/IPV/Hib/HepB) vaccine for infants

Christmas and New Year Bank Holiday Deliveries 2017/18

InterVax BCG vaccine ordering reminder

Change to Rotarix® presentation reminder

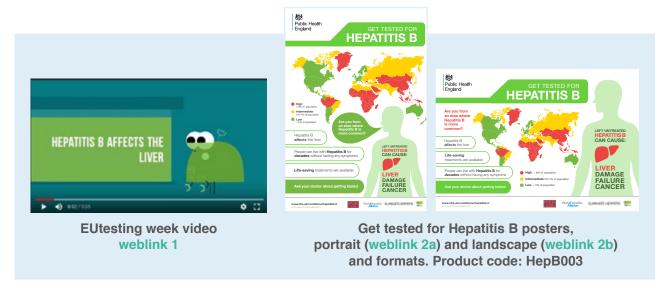
Fundamentals of Immunisation

Vaccine supply for non routine programmes

Hepatitis B and C - YouTube videos

Free copies of PHE leaflets and posters

Web links



In the past couple of years, new highly effective treatments for hepatitis C have been rolled out in the NHS – all oral treatments that can cure most people, have fewer side effects and require a shorter course. This year we also introduced hepatitis B infant immunisation into the routine childhood schedule, further strengthening our commitment towards elimination goals.

However in England, we have not yet achieved a level of awareness and engagement among professionals and affected populations that prompts those at risk to come forward for testing, act upon a diagnosis and seek life-saving treatments for hepatitis B and C.

So we welcome European HIV-Hepatitis testing week (17-24 November) as an opportunity to highlight that testing – the first step to getting treated – benefits the individual, their families and the communities in which they live.

We therefore call upon health professionals to offer testing for hepatitis B and C to those at risk and refer diagnosed patients into a treatment pathway.

In support of European HIV-Hepatitis testing week we have produced campaign resources to encourage those at risk of hepatitis B and C to come forward for testing. Please download our posters and display them in your practice.

Please share the banners and video links on your social media or display systems and help encourage as many people from relevant areas to get tested and get treated.

Hepatitis C – Have you ever...? banners

These are suitable for display systems, social media including Facebook and Twitter. Download at weblink 19

HepC testing poster

Shabana Begum features in this poster in Urdu. For download and local use. Please display this in your surgery or practice. Download at weblink 20.

Twitter hashtags

#EuroTestWeek #Gettested #Gettreated #NoHep

#NoHepB #NoHepC #TestTreatPrevent

WHO declares that UK eliminates measles – but current outbreaks remind us we still have work to do!

We are delighted that the WHO have confirmed that the UK achieved measles elimination in 2016 and that rubella elimination continues to be sustained. This is a huge achievement and a testament to all the hard work by our health professionals in the NHS over many years to ensure that children and adults are fully protected with two doses of the measles, mumps and rubella (MMR) vaccine.

Before the introduction of measles. vaccine in 1968, annual measles notifications ranged from 160,000 and 800,000, with peaks every two years. More than 90% of adults had evidence of previous infection and around 100 deaths from acute measles were recorded each year. Vaccine coverage remained low until the late 1980s and was insufficient to interrupt measles transmission. Following the introduction of the MMR vaccine in 1988 and the achievement of coverage levels in excess of 90%, measles transmission was substantially reduced and notifications of measles fell progressively to very low levels. To maintain control and to achieve measles elimination a school based Measles Rubella campaign was conducted in 1994 and a second dose MMR vaccine was introduced as a pre-school booster in 1996.



After these changes the UK interrupted endemic transmission of measles. The intense media coverage around the now refuted link between MMR and autism led to a drop in MMR coverage in the late nineties which took many years to recover. Measles cases subsequently continued to rise nationally and in 2006 endemic transmission became re-established. Since then, there have been regional and national catch-up campaigns to target age-groups where the vaccine coverage was low.

These have helped to increase herd immunity in older age groups and in 5 year olds national vaccine coverage of the first MMR dose reached the WHO 95% target for the first time this year.

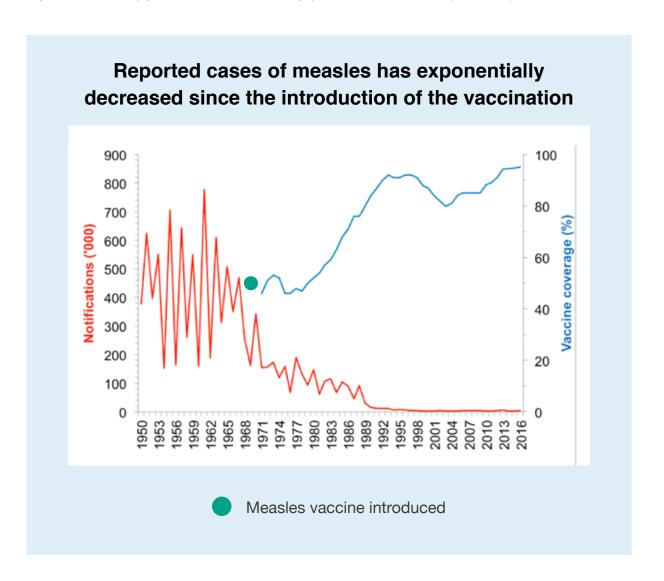
Achieving measles elimination in the UK does not mean that measles has disappeared. Measles remains endemic in many countries around the world and there are currently several large measles outbreaks across Europe. We will continue to see imported measles cases in the UK and limited onward spread can occur in communities with low coverage and in age groups with very close mixing.

For example recent importations from Romania have led to outbreaks in Leeds and Liverpool. All of these recent cases have been in children who are unvaccinated. In 2016 there were over 500 measles cases in England, many in teenagers and young people attending summer festivals.

As history teaches us, elimination can only be sustained going forward by maintaining and improving coverage of the MMR vaccine in children and by using all opportunities to catch up older children and young adults who missed out on the vaccine.

We have produced these banners (shown on previous page) which are available to anyone wishing to promote the MMR vaccination and are suitable for Twitter, Facebook and can be used on the Jayex and other brands of digital displays. See list of measles leaflets, posters and banners on page 20.

If you want a copy of them to use locally please email Cherstyn Hurley.



Don't delay immunisation for the six to eight week baby check



The 6 to 8 week check forms part of the newborn and infant physical examination screening programme (NIPE). The newborn element aims to identify and refer all children born with congenital abnormalities of the eyes, heart, hips, and testes, within 72 hours of birth.

The second examination is designed to identify abnormalities that may become detectable in older infants – that is at 6-8 weeks of age. As none of the conditions screened for would constitute a contraindication to immunisation, there is no requirement for the examination to be undertaken before the first vaccines are given. Babies will need the normal assessment of suitability for vaccines as outlined in the relevant documents e.g. vaccine PGDs.

The routine childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for the very young. In order to provide early and continued protection, providers should aim to complete the schedule at near as possible to the recommended ages. Delaying primary baby immunisations beyond 8 weeks, risks causing a queue of unimmunised babies, who in turn are unprotected against serious infections that are very dangerous for the very young, e.g. whooping cough.

If a baby presents for vaccination at eight weeks having not had the 6 to 8 week check, then this is an opportunity to do the check at the same visit. Further details of the NIPE screening programme can be found at weblink 3.

Live attenuated influenza vaccine (LAIV) – porcine gelatine

The national immunisation team has had a number of enquiries about what action to take if the parents of a child, aged 2 to 17 years and in a flu at risk group, decline consent to immunisation with live attenuated influenza vaccine (LAIV) because it contains porcine gelatine.

In these circumstances, because the child is in an at risk group, protection against influenza is still indicated and an inactivated influenza vaccine should be offered. The quadrivalent inactivated influenza vaccine (Fluarix[™] Tetra[®]) is authorised for children aged from three years and is preferred because of the additional protection offered. Children aged from six months to less than three years should be given inactivated influenza vaccine (Split Virion) BP[®]. Fluenz Tetra and inactivated injectable vaccines for children can be ordered through the ImmForm website at weblink 4.

Hexavalent vaccine should be used for all babies born on or after 1 August 2017

All babies born on or after 1 August 2017 should be offered hexavalent vaccine (DTaP/IPV/Hib/HBV) at the ages of 8, 12 and 16 weeks. Babies born before 1 August 2017 should start and finish primary immunisations with pentavalent vaccine (DTaP/IPV+Hib) where local stocks of this vaccine remain available. If there is no pentavalent vaccine (DTaP/IPV+Hib) left locally, hexavalent vaccine (DTaP/IPV/Hib/HBV) may be used to complete courses of immunisation in babies born before 1 August 2017.

What to do if the pentavalent DTaP/IPV/Hib vaccine is given in error to an infant who is eligible to receive the hexavalent DTaP/IPV/Hib/HepB vaccine

If the infant is at immediate high risk, give a dose of monovalent hepatitis B vaccine as soon as the error is realised. Otherwise, the infant should complete the primary course with hexavalent vaccine and an additional dose of hexavalent vaccine should then be given at least four weeks after completion of the primary course. If more than one dose of hexavalent vaccine is missed in the primary schedule, give Infanrix hexa® at the pre-school visit.

What to do if the hexavalent DTaP/IPV/Hib/HepB vaccine is given in error to an infant who should have received the pentavalent DTaP/IPV/Hib vaccine

The infant should complete the primary course with the pentavalent vaccine if still available (if not available, use hexavalent vaccine (DTaP/IPV/Hib/HBV)). The parents/carers should be informed that the child will not be protected against hepatitis B from the single dose they received as part of the hexavalent vaccine in error. This is not a concern unless the child is known to be at risk of hepatitis B (in which case a course of hepatitis B-containing vaccine should be given or the primary course completed with hexavalent vaccine).

Further information on the use if hexavalent vaccine is available at weblink 18.

Delivery of the childhood flu programme to school age children

In 2017/18 children in reception class and school years 1, 2,3 and 4 (ie born between 1 September 2008 and 31 August 2013) are being offered their flu vaccine by school immunisation teams. The school immunisation team are obliged to offer children missed at school a second opportunity to receive the vaccine – this would often be at a community clinic.

Unless GPs have been commissioned locally to offer this second opportunity, they are unable to vaccinate these children and will not receive a payment for immunising them. Children in at risk groups who require inactivated vaccine, however, can receive this at their general practice.

Practices can direct parents to their school immunisation team to find out what the local arrangements are for a second opportunity to receive vaccine.

Providers can consult their local NHS England commissioning team for exact details of arrangements in their area. Contact details of the teams can be found at weblink 17.



Rotavirus age restrictions

PHE have published some documents recently, including the algorithm for vaccination of individuals with incomplete immunisation status see weblink 5, which noted that the first dose of rotavirus vaccine may be given up to 16 weeks of age.

This change was prompted by consideration of the Summary of Product characteristics wording coupled with information from the January 2013 WHO Position Paper seen at weblink 6, which presents reassuring data regarding relaxing the age restrictions for the administration of rotavirus vaccine and incidence of intussusception.

However, after further consultation it has been decided that the age limitation, of up to 15 weeks of age, for the administration of the first dose of rotavirus vaccine in accordance with the national immunisation programme will currently remain in place and unchanged from the original national rotavirus immunisation programme. Rotavirus vaccine should continue to be routinely administered at 8 weeks and 12 weeks of age. If vaccination is delayed the first dose must currently be given before 15 weeks of age and the course must be completed before 24 weeks of age.

Please see Immunisations up to one year of age at weblink 7 and the current routine childhood schedule at weblink 8.

NaTHNaC is 15 years old!

On 24 November 2002 NaTHNaC (now a commissioned service of Public Health England), was set up by the Department of Health with the broad aim of Protecting the Health of British Travellers. NaTHNaC was officially opened by Her Royal Highness Princess Anne, The Princess Royal in July 2003.

During the last 15 years, NaTHNaC has worked in partnership with network founders University College London Hospital (UCLH), Liverpool School of Tropical Medicine (LSTM), London School of Hygiene and Tropical Medicine (LSHTM) and the Hospital for Tropical Diseases (HTD) to develop into an internationally respected travel medicine authority, leading the way in travel medicine.

Recent developments include an updated, open access website (nathnac.net) with improved functionality and innovative features, such as eBook format factsheets and interactive Google maps on the Country Information pages. NaTHNaC has found new ways of engaging with both health professionals and the public, by expanding into social media and now has active accounts with Twitter, Facebook and Instagram.

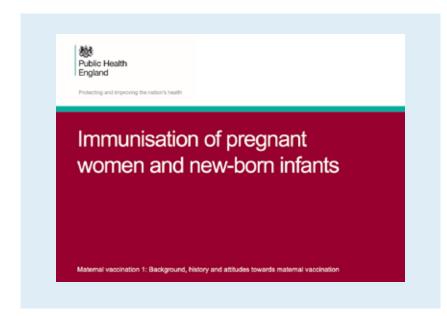
NaTHNaC continues to work closely with partners, the travel industry, travel health professionals and travellers to raise the profile of travel medicine and provide current and reliable travel health advice. Looking to the future, NaTHNaC remains committed to supporting both health professionals and travellers, whilst expanding and developing the service.

NaTHNaC's Chair Dr Rima Makarem said "NaTHNaC has come a long way since its inception just 15 years ago and continues to evolve and expand its public service. It works closely with other international bodies to share travel health intelligence and advice. It is the recognised authority in England, Wales and Northern Ireland for the registration of Yellow Fever Clinics. In response to calls for more advice, it is now developing a suite of e-learning packages to support professionals in primary care and travel clinics. The respect and status that NaTHNaC commands is in no small part due to the tireless commitment and expertise of its staff."

For more information please visit weblink 9, weblink 10, or contact Emily Aidoo.



Immunisation in pregnancy slide sets



Immunisation of pregnant women and newborn infants is a training resource consisting of five slide sets.

- This slideset has been developed to support the delivery of immunisation training to health care workers providing or advising on immunisation of pregnant women.
- Trainers may opt to use this slideset alone or in combination with any of the other slidesets listed below to deliver a comprehensive immunisation update.
- When delivering immunisation updates, trainers should consider the adience background, role, specific needs and the planned duration of the training event.

These cover:

- 1. **Maternal vaccination:** Background, history and attitudes towards maternal vaccination
- 2. **Vaccine recommendations for pregnant women:** Influenza and pertussis vaccines
- 3. Selective vaccination programmes for neonates
- 4. Vaccine for pre or post-natal vaccination
- 5. Governance considerations, challenges to achieving high vaccine coverage, horizon scanning and resources

Immunisation in pregnancy slides
– section 1 – **Background history**

Background history and attitudes

weblink 21

Immunisation in pregnancy slides – Section 2 – Influenza and Pertussis

weblink 22

Immunisation in pregnancy slides – section 3 – **Selective programme for neonates**

weblink 23

Immunisation in pregnancy slides – section 4 – **Pre and post-natal viral rash illness inadvertent vaccination**

weblink 24

Immunisation in pregnancy slides – section 5 – **Governance, challenges and horizon scanning**

weblink 25

and resources

The links to the slide sets have been published on the main Immunisation page under the training resources section at weblink 27

Vaccine supply

Vaccine Information and Availability 2017/18 for the children's national flu vaccination programme

The following vaccines are available to providers of the children's national flu programme via the ImmForm website:

Vaccine	Manufacturer
Fluenz Tetra® (LAIV)	AstraZeneca UK Ltd
Inactivated influenza vaccine (split virion) BP	Sanofi Pasteur
Fluarix Tetra	GSK

Order controls for Fluenz Tetra®

General Practices in England are now able to order 2 packs (20 doses) of Fluenz Tetra® per week. Requests for larger volumes should be made via the ImmForm helpdesk. Order controls are also in place for all other providers, full details are available in the August edition of Vaccine update at weblink 11.

Giving a second dose of LAIV

The patient information leaflet provided with LAIV states that children should be given two doses of this vaccine if they have not had flu vaccine before. However, the Joint Committee on Vaccination and Immunisation (JCVI) considers that a second dose of the vaccine provides only modest additional protection. On this basis, JCVI has advised that healthy children should be offered a single dose of LAIV. However, children in clinical risk groups aged 2 to less than 9 years who have not received flu vaccine before should be offered two doses of LAIV or quadrivalent inactivated vaccine as appropriate (given at least four weeks apart).

Expiry dates for Fluenz Tetra®

The first batch of Fluenz Tetra® supplied for the 2017-18 children's flu vaccination programme will expire on 26 December 2017. Expiry dates for this and subsequent batches that are being supplied this season are set out in the table on the following page.

It is important to ensure that you are not holding more stock than you realistically expect to use before its expiry date, and you should be ordering little and often to ensure that the stock that you receive has the longest possible shelf life. Please ensure that the expiry date is always checked before use and that any expired stock is disposed of in line with local policies. Please record any stock that is disposed of due to expiry before use through the ImmForm website.

Batch	Expiry date	
JH2616	26 December 2017	
JH2617	27 December 2017	
JH2618	28 December 2017	
JH2619	02 December 2018	
JH3127	04 January2018	
JJ2069	04 January 2018	
JJ2071	09 January 2018	
JJ2609	10 January 2018	
JJ2612	15 January 2018	
JJ2837	15 January 2018	
JJ2838	17 January 2018	
JK2130	22 January 2018	
JK2131	23 January 2018	
JK2516	29 January 2018	
JK2516B	13 February 2018	
JK2516C	15 March 2018	

The general principles for LAIV ordering

- Remember that LAIV is supplied in a 10 dose pack.
- Remember that you can order weekly and receive weekly deliveries.
- Be realistic about the amount of vaccine that you need, and when you need it.
- Spread your orders over the course of the flu vaccination season later ordered stock will have a later expiry date and will last longer.
- Hold no more than 2 weeks' worth of stock in your fridge. Local stockpiling can cause delays or restrictions on stock being released to the NHS, and increases the risk of significant loss of stock if there is a cold chain failure in your supply chain or premises.

Influenza Vaccines for the 2017 to 2018 influenza season

Aside from this central procurement of vaccine for children less than 18 years of age, 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 2017/18. The vaccines available for the 2017/18 season are:

Supplier	Name of product	Vaccine Type	Age indications	Ovalbumin content micrograms/ml (micrograms/dose)	Contact details
AstraZeneca UK Ltd	Fluenz Tetra 🔻	Live attenuated, nasal (quadrivalent)	From 24 months to less than 18 years of age	≤0.12 (≤0.024/0.2ml dose)	0845 139 0000
GSK	Fluarix™ Tetra ▼	Split virion inactivated virus (quadrivalent)	From 3 years	≤0.1 (≤0.05/0.5ml dose)	0800 221 441
MASTA	Imuvac®	Surface antigen, inactivated virus	From 6 months	0.2 (0.1/0.5ml dose)	0113 238 7552
	Inactivated Influenza Vaccine (Split Virion) BP	Split virion, inactivated virus	From 6 months	≤0.1 (≤0.05/0.5ml dose)	
	Quadrivalent Influenza Vaccine (Split Virion, inactivated) ▼	Split virion, inactivated virus	From 3 years	≤0.1 (≤0.05/0.5ml dose)	
	Influvac® sub-unit	Surface antigen, inactivated virus	From 6 months	0.2 (0.1/0.5ml dose)	0800 358 7468
Mylan (BGP Products)	Imuvac®	Surface antigen, inactivated virus	From 6 months	0.2 (0.1/0.5ml dose)	
	Influenza vaccine, suspension for injection (influenza vaccine, surface antigen, inactivated)	Surface antigen, inactivated virus	From 6 months	0.2 (0.1/0.5ml dose)	
Pfizer Vaccines	Influenza vaccine (Split Virion, inactivated), pre-filled syringe	Split virion, inactivated virus	From 5 years	≤2 (≤1/0.5ml dose)	0800 089 4033
	Enzira®	Split virion Inactivated virus	From 5 years	≤2 (≤1/0.5ml dose)	
Sanofi Pasteur Vaccines	Quadrivalent Influenza Vaccine (Split Virion, inactivated) ▼	Split virion, inactivated virus	From 3 years	≤0.1 (≤0.05/0.5ml dose)	0800 854 430
	Inactivated Influenza Vaccine (Split Virion) BP	Split virion, inactivated virus	From 6 months	≤0.1 (≤0.05/0.5ml dose)	
Seqirus Vaccines Ltd	Agrippal [®]	Surface antigen, inactivated virus	From 6 months	≤0.4 (≤0.2/0.5ml dose)	08457 451 500

Note, the ovalbumin content is provided in units of micrograms/ml and micrograms/dose.

Update on switch to hexavalent (DTaP/IPV/Hib/HepB) vaccine for infants

ImmForm ordering is now closed for both previously supplied pentavalent (DTaP/IPV/Hib) vaccines, Pediacel® and Infanrix® – IPV+Hib.

Infanrix hexa® (DTaP/IPV/Hib/HepB) is available to order instead and should be provided to eligible infants born on or after 1 August 2017 for routine childhood immunisations at 8, 12 and 16 weeks of age. Infanrix hexa® (DTaP/IPV/Hib/HepB) should also be provided to infants born before 1 August 2017 who have commenced the primary vaccine course with pentavalent vaccine (DTaP/IPV/Hib) and the second or third doses in the schedule cannot be completed with pentavalent vaccine.

Babies born on or after 1 August 2017 to hepatitis B infected mothers will still require a dose of monovalent vaccine immediately after birth and at 4 weeks of age and should then follow the routine schedule with Infanrix hexa® (DTaP/IPV/Hib/HepB) vaccine at 8, 12 and 16 weeks of age. They will require a further dose of monovalent hepatitis B vaccine (not centrally supplied) at one year of age and should be tested to exclude infection at the same time.

In order to avoid wastage, as a temporary measure, any last remaining local stocks of pentavalent vaccine can also be used for pre-school boosting at the age of 3 years and 4 months.

For more details, please see the following patient group direction at weblink 13. For further information on the switch to Infanrix hexa[®], please see the following link to an earlier edition of Vaccine Update at weblink 14.

Christmas and New Year Bank Holiday Deliveries 2017/18

Due to the Christmas and New Year Bank Holidays, there will not be any deliveries or order processing by Movianto UK on Monday 25 and Tuesday 26 December 2017 and Monday 1 January 2018. Please see the table below for revised order and delivery dates.

Customers with a standard delivery day of Monday should be aware that after 18 December, your next available delivery day will be the 8 January 2018.

Customers with a standard delivery day of Tuesday should be aware that after 19 December, your next available delivery day will be the 2 January 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 (see overleaf for schedule).

Delivery date	Order cut-off date	Order cut-off time
Monday 18 December	Thursday 14 December	11:55 AM
Tuesday 19 December	Friday 15 December	11:55 AM
Wednesday 20 December	Monday 18 December	11:55 AM
Thursday 21 December	Tuesday 19 December	11:55 AM
Friday 22 December	Wednesday 20 December	11:55 AM
Monday 25 December	CLOSED - NO DELIVERIES	
Tuesday 26 December	CLOSED - NO DELIVERIES	
Thursday 28 December	Thursday 21 December	11:55 AM
Friday 29 December	Wednesday 27 December	11:55 AM
Monday 1 January	CLOSED - NO DELIVERIES	
Tuesday 2 January	Thursday 28 December	11:55 AM
Wednesday 3 January	Friday 29 December	11:55 AM
Thursday 4 January	Tuesday 2 January	11:55 AM
Friday 5 January	Wednesday 3 January	11:55 AM

InterVax BCG vaccine ordering reminder

Intervax BCG vaccine remains available to order for all ImmForm accounts and can therefore currently be provided to all eligible groups including Occupational Health. Some account holders will notice that there is a cap on the number of packs they can order through ImmForm over a specific time period. Please note that future supply remains uncertain and further restrictions could be implemented at short notice.

Please see the following link for further advice and the full list of eligible groups, published July 2017, see weblink 15.

Change to Rotarix® presentation reminder

Rotarix® oral suspension tube presentation was introduced to the UK market earlier this year, replacing the suspension in pre-filled oral applicator presentation. Please be aware that orders placed on ImmForm will soon begin to be filled with vaccine in the tube presentation (once stocks of the oral applicator presentation are used up).

Images for the new pack are shown below and updated guidance on administration of the vaccine will be available shortly on the PHE webpages at weblink 16.



Fundamentals of Immunisation

UCL Great Ormond Street Institute of Child Health 30 Guilford Street London WC1N 1EH

Course fee: £150

12th and 13th March 2018

Public Health England and UCL Great Ormond Street Institute of Child Health are running a Fundamentals of Immunisation course in March next year. This annually held, two day intense theoretical course is designed for those new to a role in immunisation and is most suited to those who give or advise on a range of different vaccines. The course comprises a series of lectures from national immunisation experts and will provide delegates with up-to-the-minute information on the range of topics included in PHE's 'Core Curriculum for Immunisation Training'. A basic level of prior immunisation knowledge and familiarity with the Green Book (Immunisation against infectious disease) will be assumed.

Programme and booking information available at weblink 12.

Vaccine supply for non routine programmes

Hepatitis A

Adult

- **GSK**: Havrix PFS singles and Havrix PFS packs of 10 are currently unavailable and are unlikely to be available until 2018
- Sanofi Pasteur: Limited supplies of Avaxim are available. It is likely that there will be order restrictions in place
- **MSD**: There will be restricted supplies of VAQTA for the remainder of 2017

Paediatric

- **GSK**: Havrix Paediatric singles and packs of 10 will experience supply constraints for the remainder of 2017
- MSD: VAQTA Paediatric is unavailable until mid-November

Hepatitis B

All hepatitis B containing monovalent vaccines are currently under supply management processes. This approach has been developed with support from PHE and DH.

Adult

- **GSK**: Limited supplies of Engerix B PFS singles are available
- **GSK**: Engerix B PFS packs of 10 are currently unavailable until late 2017
- **GSK**: Very limited supplies of Engerix B vials are available
- **GSK**: Limited supplies of Fendrix are available
- MSD: Limited supplies of HBVAXPRO 10µg are available
- **MSD**: Limited supplies of HBVAXPRO 40µg are available

Paediatric

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

Combined hepatitis A and hepatitis B vaccine

- GSK: Supplies of the adult presentation (Twinrix) and paediatric
 presentation (Twinrix Paediatric) are currently under supply management
 process as agreed with PHE and DH
- GSK: Ambirix is currently unavailable until late November 2017

Combined Hepatitis A and Typhoid

- **GSK**: Hepatyrix is unavailable until at least 2019
- **Sanofi Pasteur**: Limited supplies of Viatim are available. It is likely that there will be order restrictions in place

Typhoid

- GSK: Typherix is unavailable until at least 2019
- **Sanofi Pasteur**: Limited supplies of Typhim are available. It is likely there will be order restrictions in place
- PaxVax: Vivotif is available

Rabies

- **GSK**: limited supplies of Rabipur are available
- Sanofi Pasteur: Licensed Rabies BP is unavailable for daily sales.
 Please contact Sanofi Pasteur for information regarding availability of a Rabies vaccine

PPV

• **MSD**: Very limited stock of Pneumococcal Polysaccharide Vaccine is available. Further replenishment is due in January 2018

During periods of constrained supply of Pneumococcal Polysaccharide Vaccine (PPV23), some patients may choose to have Pneumococcal Conjugate Vaccine (PCV13) or Synflorix (PCV10) privately. Herd immunity from the infant and toddler programme has reduced levels of infections in the elderly for the 13 (or 10) pneumococcal serotypes to very low levels. As only PPV23 can provide any protection against the serotypes that now predominate in that age group, patients eligible for PPV23 should still be offered this vaccine

The offer of PPV23 is subject to vaccine supply, and should be made in accordance with the guidance recently circulated to general practices on priority groups for PPV23 during periods of constrained supply

Varicella Zoster vaccine

- GSK: Varilrix is currently available
- MSD: VARIVAX is currently available

Diphtheria, tetanus and poliomyelitis (inactivated) vaccine

 Sanofi Pasteur: Limited supplies of Revaxis are available. There are likely to be order restrictions in place for travellers. Please contact Sanofi Pasteur for information regarding availability

Hepatitis B and C - YouTube videos

Hepatitis B video

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis B as a major public health threat. This video aims to encourage anyone who comes from a country where Hepatitis B (HBV) is more common to ask their doctor about a HepB test. This video is in English. https://youtu.be/-b2R647uO_0

Hepatitis B video (in Chinese).

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis B as a major public health threat. This video aims to encourage anyone who comes from a country where Hepatitis B (HBV) is more common to ask their doctor about a HepB test. This video is in Chinese. https://youtu.be/zXXvr2CMvtg

Hepatitis B video (in Bengali).

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis B as a major public health threat. This video aims to encourage anyone who comes from a country where Hepatitis B (HBV) is more common to ask their doctor about a HepB test. This video is in Bengali. https://youtu.be/BYpPF3JW46U

Hepatitis C video.

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who may be at risk of Hepatitis C (HCV) to ask their doctor about a HepC test. This video is in English.

https://youtu.be/198I6-DS94A

Hepatitis C video for unscreened blood risk

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who received a blood transfusion before September 1991 or a blood product before 1986, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in English.

https://youtu.be/HwK85w7-AAI

Hepatitis C video for needle sharing risk

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who has shared a needle or other equipment for injecting drug, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in English. https://youtu.be/7vGn9Vgo1eU

Hepatitis C video for medical/dental treatment abroad

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who had medical or dental treatment abroad in unsterile conditions, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in English.

https://youtu.be/-zqTcvYIRM4

Hepatitis C video for unsterile tattoo or piercing

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who had a tattoo or piercing using equipment that may not have been sterilised, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in English.

https://youtu.be/knQJ7bfkQ48

Hepatitis C video (in Urdu)

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who may be at risk of Hepatitis C (HCV) to ask their doctor about a HepC test. This video is in Urdu. https://youtu.be/Ewx3ysyzl3E

Hepatitis C video for unscreened blood risk (in Urdu)

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who received a blood transfusion before September 1991 or a blood product before 1986, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in Urdu.

https://youtu.be/KQPxdRISdzg

Hepatitis C video for medical/dental treatment abroad (in Urdu)

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who had medical or dental treatment abroad in unsterile conditions, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in Urdu. https://youtu.be/V5GH763nyE8

Hepatitis C video for unsterile tattoo or piercing (in Urdu)

In support of European HIV-Hepatitis week and our ongoing campaign to eliminate Hepatitis C as a major public health threat. This video aims to encourage anyone who had a tattoo or piercing using equipment that may not have been sterilised, and may be at risk of Hepatitis C (HCV), to ask their doctor about a HepC test. This video is in Urdu. https://youtu.be/5E2iz-TbNis

Free copies of PHE leaflets and posters

Free copies of PHE leaflets and posters can be ordered by following the link to the Health and Social care **Orderline:** www.orderline.dh.gov.uk/ecom_dh/public/contact.jsf Alternatively, you can call **0300 123 1003**.

- **1. Think measles leaflet –** product code: 3205760 www.gov.uk/government/publications/think-measles-patient-leaflet-for-young-people
- **2.** Think measles poster product code: 3205852 www.gov.uk/government/publications/think-measles-poster-about-measles-in-young-people
- **3. Call ahead measles poster –** product code: 3207737 www.gov.uk/government/publications/think-measles-poster-for-young-people
- **4. Pregnancy leaflet –** product code: 2903655 www.gov.uk/government/publications/pregnancy-how-to-help-protect-you-and-your-baby
- 5. Have you had your MMR flyer (for mums who have just given birth product code:3325595 www.gov.uk/government/publications/mmr-vaccination-have-you-had-your-mmr
- **6. MMR leaflet –** product code: 3219250 www.gov.uk/government/publications/mmr-for-all-general-leaflet
- **7. Measles EIW poster –** product code: 2900430 www.gov.uk/government/publications/measles-dont-let-your-child-catch-it-poster

Web links

web link 1	https://www.youtube.com/watch?v=-b2R647uO_0&feature=youtu.be
web link 2a	https://publichealthengland-immunisati.box.com/s/mfnoj6mc68e594ibrqu6unqofnvi3dr6
web link 2b	https://publichealthengland-immunisati.box.com/s/y5sfuh6adpmzxqzhh3zaz7f7jszb3zx0
web link 3	https://www.gov.uk/government/publications/newborn-and-infant-physical-examination-programme-handbook
web link 4	http://www.immform.dh.gov.uk
web link 5	https://www.gov.uk/government/publications/vaccination-of-individuals-with-uncertain-or-incomplete-immunisation-status
web link 6	http://www.who.int/immunization/documents/positionpapers/en/
web link 7	https://www.gov.uk/government/publications/a-guide-to-immunisations-for-babies-up-to-13-months-of-age
web link 8	https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule
web link 9	http://www.travelhealthpro.org.uk
web link 10	http://www.nathnacyfzone.org.uk
web link 11	https://www.gov.uk/government/publications/vaccine-update-issue-269-august-2017
web link 12	http://onlinestore.ucl.ac.uk/conferences-and-events/faculty-of-population-health-sciences-c09/ucl-great-ormond-street-institute-of-child-health-d13/d13-fundamentals-of-immunisation-2018
web link 13	https://www.gov.uk/government/publications/dtapipvhib-booster-patient-group-direction-pgd-template
web link 14	https://www.gov.uk/government/publications/vaccine-update-issue-270-september-2017
web link 15	https://www.gov.uk/government/publications/vaccine-update-issue-265-july-2017-bcg-special-edition
web link 16	https://www.gov.uk/government/collections/rotavirus-guidance-data-and-analysis
web link 17	https://www.england.nhs.uk/about/regional-area-teams/
web link 18	https://www.gov.uk/government/collections/immunisation#hexavalent-combination-vaccine-(dtap/ipv/hib/hepb)
web link 19	https://publichealthengland-immunisati.box.com/s/v68nky6hvn8mxzul39jvizuvyfhtiobh
web link 20	https://publichealthengland-immunisati.box.com/s/h1yi0a1oxz6strujnha1wnv6ahmt9yz1
web link 21	https://publichealthengland-immunisati.box.com/s/p0b1wkrfliu6ss5941im5eecoyvhgfkw
web link 22	https://publichealthengland-immunisati.box.com/s/dfj14tasy89d3tfj2g1e2h6ipc62uev6
web link 23	https://publichealthengland-immunisati.box.com/s/3mnbnl2ei8cklgfhsejymw2co690suls
web link 24	https://publichealthengland-immunisati.box.com/s/4f21r0wcagf2qkw3sv0uldzzi00vhrnk
web link 25	https://publichealthengland-immunisati.box.com/s/5yhzzyhv8snaddigoku38q602q3yy518
web link 26	https://www.gov.uk/government/publications/flu-vaccination-leaflets-and-posters
web link 27	https://www.gov.uk/government/collections/immunisation#immunisation-training-resources-for-healthcare-professionals