



Christmas is coming!

2018 has been a year for remembrance

2018 has been a year for remembrance. Thoughts of the Great War and the 1918/19 pandemic have had a presence in many minds. The 1918/19 pandemic is estimated to have caused more than 50 million deaths – far exceeding the 20 million estimate of those killed in the war (see next page).

Advances in science have not provided us with the means to prevent pandemics but they have without doubt enabled us to hasten the end of many infectious diseases that once killed and harmed thousands of our children. As Christmas approaches it is worth remembering

the value of vaccination and the opportunity it brings us to prevent suffering and save lives. In the same way we should remember and celebrate the value of the hard work that those involved in immunisation bring to protect our population. In the midst of the flu season and all the extra work it is sometimes hard to remember the benefit this can provide – even making a slight dent in the excess winter deaths that flu causes will be a huge achievement. The NHS is offering important protection to even more people every year through the hard work of teams working in primary care and schools.

We confirmed this year that confidence in the national childhood programme remains very high with 94% of parents in our 2018 survey saying that they were either 'very confident' or 'confident' in the vaccination programme. The 2017 survey of teenagers and their parents also shows high levels confidence in the programme.



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In both surveys we see that trust in health care workers is also very high. A 2018 Ipsos-MORI poll showed that nurses and doctors are the most trusted professions in Britain. This year 96% of respondents say they trust nurses to tell the truth, with doctors following closely at 92% ([weblink1](#)). All of this is a tribute to those advising on and delivering immunisation throughout the NHS – preventing potentially fatal diseases – not just for Christmas but for the rest of people's lives.

100 years of flu

So much has changed since the flu pandemic of 1918 and we now have a range of flu vaccines that we can offer to eligible individuals – helping to protect people during the flu season. However these seasonal vaccines do not help us with the prevention of a pandemic – of which the 1918 pandemic was a terrible example.

Why was the 1918 flu pandemic so bad?



The Royal College of Nursing library 1918

One explanation for the pandemic's severity was the viral strain itself. Some studies show the 1918 virus could spread rapidly to other tissues beyond the respiratory tract, resulting in more widespread damage.

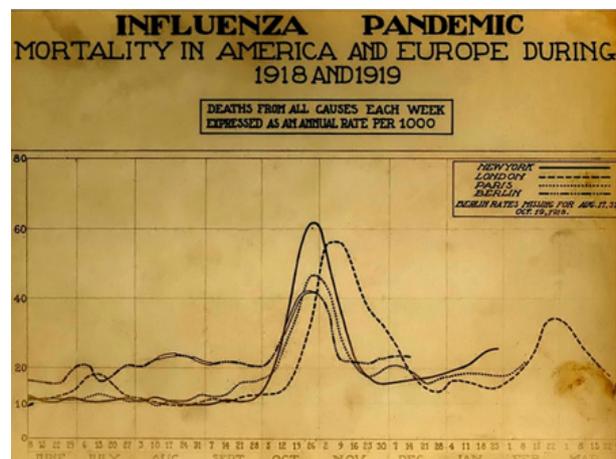
Many people managed to survive a severe infection and others displayed only mild symptoms but unlike other pandemics, this strain of flu managed to kill many otherwise

healthy adults. The rapid onset of symptoms amongst all age groups meant that alongside the population, the healthcare professionals were equally affected with reports of nurses, doctors and auxiliary staff being heavily affected. In 1918, people suffering from malnutrition and underlying diseases, such as tuberculosis, were more likely to die from the infection. Today increasing antibiotic resistance and the challenge of obesity, may increase the risk of dying from influenza.

Population demographics also play a role. One of the most severely affected groups in 1918 was an usually resilient group – young adults. It is thought that older people may have been protected due to previous exposure to other influenza viruses, giving them greater cross-protective immunity.

Why was it called 'Spanish flu'?

There was a high degree of censorship during the war and stories relating to the pandemic as there was a concern about worsening morale. Neutral Spain reported more in the media, creating the impression that Spain was badly affected, hence the term Spanish flu.



In fact, the geographic origin of the pandemic was not clear. There have been three more influenza pandemics since 1918: the 1957 'Asian' flu, the 1968 'Hong Kong' flu and the 2009 'swine' flu. The severity of any future outbreak will result from a complex interplay between virus, host and societal factors, and while it is impossible to know when or how the next flu pandemic will emerge, one thing is certain – it won't be exactly like the 1918 or any of the more recent flu pandemics.

Changes in the national flu programme

1960s	annual flu immunisation recommended to directly protect those in clinical risk groups who are at a higher risk of influenza associated morbidity and mortality
2000	flu vaccine policy extended to include all people aged 65 years or over
2010	pregnancy added as a clinical risk category for routine flu immunisation
2013	phased introduction of an annual childhood flu vaccination programme for all children aged 2 – 16 years began with vaccine offered to all children aged 2 and 3 years and seven geographical pilots in primary school aged children
2014	phased introduction of childhood flu vaccination programme continued with vaccine offered to all children aged 2, 3 and 4 years and geographical pilots in primary and secondary school aged children
2015	offer to all 2, 3 and 4 year old children and children of school years 1 and 2 age
2016	offer to all 2, 3 and 4 year old children and children of school years 1, 2 and 3 age
2017	offer to all 2 and 3 year old children and children of reception and school years 1, 2, 3 and 4 age
2018	offer to all 2 and 3 year old children and children of reception and school years 1, 2, 3, 4 and 5 age (all children who are aged two to nine years old on 31 August 2018)

The United Kingdom (UK) has a long-standing flu vaccination programme targeting all those 65 years and over, those under 65 years in a clinical risk group, and pregnant women. Influenza is a very common infection in the young with healthy children under 5 years of age having the highest influenza hospital admission rates compared to other age-groups¹. The vaccine programme was extended to include children, following the recommendations of the Joint Committee on Vaccination and Immunisation (JCVI) in 2012. From the 2013/14 season, a childhood flu programme using a newly licensed live attenuated influenza vaccine (LAIV) was introduced in England with a new cohort being introduced each season to eventually cover all children 2 – 11 years of age, when there will be a pause².

¹ Cromer D, van Hoek AJ, Jit M, Edmunds WJ, Fleming D, Miller E. The burden of influenza in England by age and clinical risk group: A statistical analysis to inform vaccine policy. *Journal of Infection*. 2014;68:363-71.

² JCVI. Joint Committee on Vaccination and Immunisation Meeting Minutes 5 October 2011. http://webarchive.nationalarchives.gov.uk/20120907090205/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@ab/documents/digitalasset/dh_133598.pdf; 2011

³ Pebody RG, Green HK, Andrews N, Zhao H, Boddington N, Bawa Z, et al. Uptake and impact of a new live attenuated influenza vaccine programme in England: early results of a pilot in primary school-age children, 2013/14 influenza season. *Euro surveillance: bulletin Européen sur les maladies transmissibles = European communicable disease bulletin*. 2014;19.

In 2013 Public Health England (PHE) commissioned a pilot vaccination programme to cover children of primary school-age (4 – 11 years) in 7 geographically distinct areas. Pilot regions offered LAIV to healthy and at risk children in whom the vaccine was not contraindicated. The pilots achieved a final overall uptake of 52.5%, ranging from 35.8% to 71.5% between individual pilot areas³. Early results from these pilots indicate a positive impact not just on those vaccinated children but also on the wider population.

There is still time to have your flu vaccine!

There are new resources to promote the flu jab available at the Campaign resource centre ([weblink 2](#)):

I've had my flu jab.

If you're 65 or over, flu can be serious.
Don't put it off.
Speak to your GP or pharmacist today.

HELP US HELP YOU
STAY WELL THIS WINTER

NHS

Sir Trevor McDonald OBE,
Newsreader and Journalist

Credit: NHS North West London Collaboration of Clinical Commissioning Groups

Pregnant?

Speak to your midwife, GP or pharmacy today to get your free flu jab, and help protect your baby and you.

HELP US HELP YOU
STAY WELL THIS WINTER

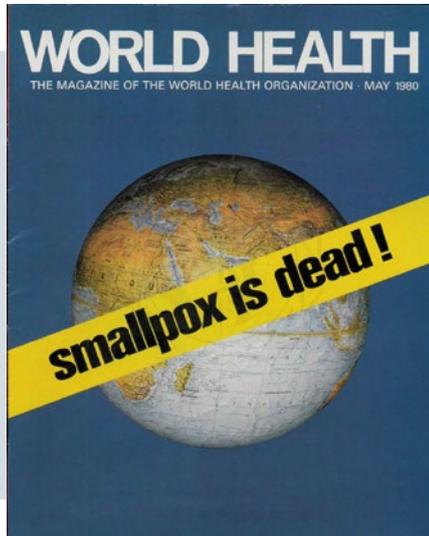
NHS

[nhs.uk/flu-vaccine](https://www.nhs.uk/flu-vaccine)

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Smallpox is dead

On 9th December 1970, 39 years ago WHO announced that small pox had now been eradicated. The worldwide vaccination campaign had begun in 1958. This has alleviated the terrible burden of this disease, and shows us that elimination is possible.



To achieve elimination the worldwide campaign is dependant on a commitment to vaccination by governments, vaccine providers, healthcare professionals and the public. Complacency, misinformation and missed opportunities form barriers to elimination.

This year we have had many outbreaks of measles and we wish to thank all of the HCPS completing the vitally important work to inform, identify vulnerable communities and improve uptake of the MMR vaccine. We have responded by providing new materials, training, translated leaflets and digital resources. As ever, we rely on you to download, order and give them to patients.

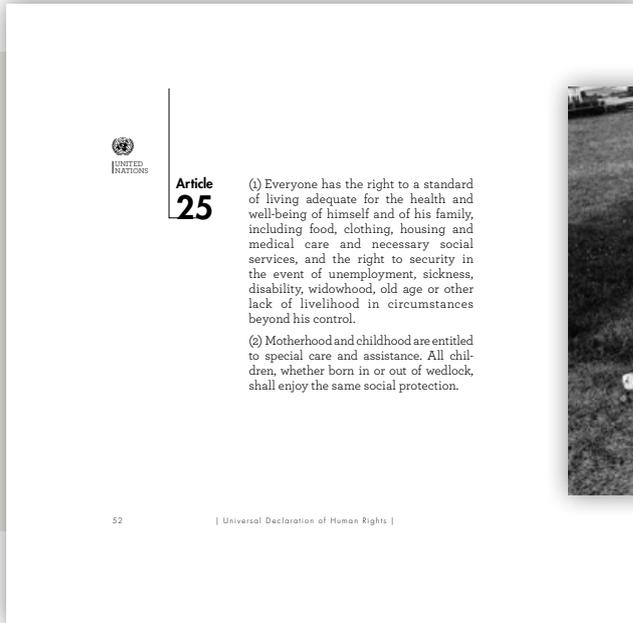
Vaccination is a right!

Anniversary of the UN declaration of human rights

The Universal Declaration of Human Rights, which was adopted by the UN General Assembly on 10 December 1948, was the result of the experience of the Second World War. With the end of that war, and the creation of the United Nations, the international community vowed never again to allow atrocities like those of that conflict happen again.

World leaders decided to complement the UN Charter with a road map to guarantee the rights of every individual everywhere. The document they considered, and which would later become the Universal Declaration of Human Rights, was taken up at the first session of the General Assembly in 1946.

This year is an opportunity to stand up for their rights. It is the 70th anniversary of the Universal Declaration for Human Rights, and the 70th anniversary of WHO. Both the Declaration and WHO's Constitution, the organization's founding document, assert that health is a fundamental right for all people. Every health professional, wherever they are in the world, has a role to play in standing up for the fundamental, universal right to health.



This year is the 70th anniversary of the NHS, the UN human rights and the 70th anniversary of WHO.



This week on the 12 December was International Universal Health Coverage Day

It aims to raise awareness of the need for strong and resilient health systems and universal health coverage (see [weblink 3](#)).

Visit the WHO site to read about the ABC's of health rights – see [weblink 4](#)

Green book chapters?

We have recently reformatted and published the Greenbook chapters 1 and 10.

- Greenbook [chapter 1](#)
- Greenbook [chapter 10](#)
- Green book chapter: Tetanus has recently been revised – see [weblink 5](#).

This edition of the green book chapter contains updated advice on management of exposure prone wounds and supplies of immunoglobulin.

Herpes zoster (shingles) immunisation programme 2017 to 2018: evaluation report published

This report presents the evaluation of vaccine coverage of the herpes zoster (shingles) vaccination programme in England, from 1 September 2017 to 31 August 2018.

Eligibility criteria for the shingles vaccination were revised in April 2017 so that adults become eligible for the routine programme on their 70th birthday and for the catch up programme on their 78th birthday, and remain eligible until their 80th birthday. Data underlying this report were collected according to the previous eligibility criteria. Therefore eligible individuals are split across the 69 and 70 year old cohorts (for the routine programme) and the 77 and 78 year old cohorts (for the catch-up).

Shingles vaccine coverage in the routine cohort (aged 70 years on 1 September 2017) was 44.4% in 2017/18 a 3.9% decrease since 2016/17. However, by August 2018, uptake was 18.7% among 69 year olds, compared with 4.9% in 2016/17. Similarly, a decrease in coverage was observed in the catch-up cohort (aged 78 years) to 46.2% in 2017/18, a 3.2% decrease from 2016/17, but uptake was 20.3% among the 77 year olds, compared with 5.5% in 2016/17.

It is therefore likely that part of the decrease in coverage in the routine and catch up cohorts evaluated in 2017/18 is a data artefact related to the change in eligibility criteria as a proportion of those eligible under the new criteria for routine and catch-up vaccinations are in the 69 and 77 year old cohorts respectively. After taking this into account, this suggests that coverage has increased compared to that achieved in 2016/17, possibly reversing the downward trend seen in previous years.

The new eligibility criteria mean GPs can offer the vaccination throughout the year, and to support this programme a **“Shingles – all year round!”** campaign was introduced offering a range of resources. GPs should also continue to offer vaccinations to any individuals who missed out when they first became eligible to improve protection in these age groups, as they remain eligible until they reach their 80th birthday. Longer term follow-up data suggests that this has been happening and some of those eligible for shingles vaccination who did not receive it in the year they became eligible got it in subsequent years.

For example, coverage for 71 year olds in 2017/18 was 59.1% by the end of August 2018, 10.8% higher than coverage for this cohort at the end of August 2017.

The full report and associated data tables can be found here – see [weblink 6](#).

Pertussis vaccination programme for pregnant women update: vaccine coverage in England, April to June 2018 report published

This report presents pertussis vaccine coverage in pregnant women in England for the period April to June 2018.

Pertussis vaccine coverage in pregnant women averaged 68.2% across the quarter, 3.9% lower than coverage for the same quarter in 2017. Average annual coverage for the financial year 2017/18 was 71.9%. During the time period covered by this report, pertussis vaccine has increasingly been offered to pregnant women through maternities. However vaccination administered in maternities are not systematically recorded in primary care records. The drop in coverage could therefore represent a genuine decrease, or an increase in vaccination in maternities poorly recorded in some primary care records.

Screening and Immunisation Teams should continue to update service providers on the current epidemiology of the disease, the recent changes to and effectiveness of the vaccination programme, and the need to maintain and improve coverage achieved thus far. If coverage, and ultimately the impact of the programme itself, is to be accurately monitored, it is essential that GPs and practice nurses continue to ensure that vaccination and date of delivery are recorded in the patient's GP record. In areas that have commissioned maternity units to offer pertussis vaccines in pregnancy, it is important that providers ensure doses of vaccines given to individual women are also communicated to the woman's GP. Ongoing research suggests that vaccines administered in maternity units are under-recorded in GP notes resulting in underestimated vaccine coverage. Maternity units not offering pertussis vaccines to pregnant women should continue to discuss its importance, making use of available resources and sign-post the woman to her GP to receive the vaccine. The full report and associated data tables can be found here – see [weblink 7](#).

Human papillomavirus (HPV) vaccination coverage in adolescent females in England: 2017/18 report published

This report represents the third year HPV vaccine coverage for the two-dose schedule has been calculated in school Year 9 females (aged 13 – 14 years) in England.

- 83.8% of Year 9 females completed the two-dose HPV vaccination course in 2017/18, compared to 83.1% in 2016/17.
- in the 81/152 (53.3%) local authorities that offered two doses of HPV vaccine to Year 8 females in all schools within the 2017/18 school year, completed course coverage was 79.5%.
- HPV immunisation coverage for the first (priming) dose in Year 8 in 2017/18 was 86.9%, compared with 87.2% in 2016/17, 87.0% in 2015/16 and 89.4% in 2014/15.
- during the 2017/18 academic year, the continued commitment to deliver on the childhood flu vaccine programme, now extended to five school years from reception to Year 4, may have continued to impact on the capacity of school immunisation providers to deliver the HPV vaccination programme in some areas.

The full report and associated data tables can be found here – see [weblink 8](#).

Training and education

Fundamentals of Immunisation

UCL Great Ormond Street Institute of Child Health

30 Guilford Street, London WC1N 1EH | 11 and 12 March 2019

Course fee: £150

Places still available – book today to avoid disappointment ([weblink 9](#)).



Public Health England and UCL Great Ormond Street Institute of Child Health are running a 'Fundamentals of Immunisation' course in March 2019. 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 'National Minimum Standards and 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.

Spread e-Bug, not infection

e-Bug (www.e-bug.eu) is a Public Health England operated evidence-based educational resource for schools and communities that makes learning about micro-organisms, and the spread, prevention and treatment of infection fun and accessible for young people and hard-to-reach groups. Freely available in 23 languages, e-Bug features diverse educational materials, activities and interactive websites hosting revision guides, quizzes and games.

There are educational resources and activities around vaccination for ages 7-18 years. Peer education materials can be used by schools and community groups to facilitate learning and improvements in behaviour, self-esteem and presentation skills. 'Train the trainer' workshops give educators the knowledge, confidence and skills they need to teach about infection prevention topics and antimicrobial resistance. The workshops are currently being rolled out through local authorities and e-Bug is hosting a conference on infection prevention and AMR education in the new year ([weblink 14](#)). Please contact e-bug@phe.gov.uk to find out more.

Vaccine supply (centrally supplied)

The Falsified Medicines Directive (FMD) as it applies to centrally supplied vaccines for the national immunisation programme

As you may be aware, from 9 February 2019 there will be legal obligations on the UK medicines supply chain to scan and verify the authenticity of prescription only medicines. This comes alongside new requirements for all pharmaceutical products to carry safety features including a unique identifier (contained in a 2D barcode) and an anti-tampering device (a seal).

This means that vaccines and other products distributed by Public Health England (PHE) via Movianto UK Ltd will start to be supplied in packaging containing these safety features, as set out in the Delegated Regulation¹. Products which are not exempt, and where their safety features have become active², will in future need to be 'verified and decommissioned' before being supplied to a patient. This means that before the vaccine is given to a patient, the integrity of the seal should be checked and the barcode on the product should be scanned to verify and register the use of the product on a central database. These changes will affect organisations across the UK who access centrally supplied products from PHE.

Although the Regulation comes into force on 9 February 2019, due to the large volume of stock that is held by PHE, many of the vaccines issued after 9 February will not be packaged as described above. These vaccines in old packaging will remain exempt even after the Regulation comes into force. PHE will begin distributing packs carrying the safety features at different times throughout 2019, and potentially into 2020.

Organisations that are not considered to be healthcare institutions or pharmacies but who still supply medicines to the public, are exempt from decommissioning vaccine under Article 23 of the Regulation. Article 23 allows wholesalers to decommission on behalf of these organisations. The MHRA will be publishing guidance on Article 23 in the near future. We would encourage all our colleagues to study this guidance to determine if the exemption provided by Article 23 applies to your organisation with respect to vaccines ordered via ImmForm. If you believe that Article 23 applies to your organisation, we would be grateful, if you have not already done so, if you would confirm this to helpdesk@immform.org.uk quoting your account number so that PHE can ensure your ImmForm account is set up correctly.

The Government has recently consulted on implementing these safety features under the FMD and a response is expected to be published here (see [weblink 10](#)) soon. Once the consultation response is published, PHE will issue guidance concerning centrally supplied vaccines. This will be published on the gov.uk website and signposted in a future edition of Vaccine Update and NIN teleconferences.

Further information and guidance related to FMD and the safety features is available on Gov.uk at [weblink 11](#).

Any questions about the MHRA consultation process, or regarding FMD and the safety features more broadly can be directed to fmd.safetyfeatures@mhra.gov.uk

¹ Commission Delegated Regulation (EU) 2016/161

² Batch specific product data is uploaded onto a central database

Expiry dates for Fluenz Tetra issued for the 2018/19 children's programme

The first batch of Fluenz Tetra® which was distributed this season, will expire on 1 January 2019. Batch numbers and associated expiry dates for this and all other batches that have been issued so far this season are set out in the table below. Please ensure that the expiry date is always checked before use and that expired stock is disposed of in line with local policies. Any disposed stock should be recorded through the ImmForm stock incident page – see [weblink 12](#).

Batch Number	Expiry Date
KJ2354	1 January 2019
KJ2356	2 January 2019
KJ2357	3 January 2019
KJ2355	4 January 2019
KJ2491	7 January 2019
KJ2502	10 January 2019
KJ2501	11 January 2019
KJ3272	21 January 2019
KJ3196	30 January 2019
KK2345	4 February 2019
KK2794	28 February 2019
KL2239	4 March 2019
KL2241	11 March 2019
KL2241B	1 April 2019

Fluenz Tetra ordering in England

Information for General Practice

General Practices are now able to order 20 doses (2 packs) per week (one order per week). Changes to these order controls may be made at any time to respond to the programme needs. Any changes will be communicated via the news item on the ImmForm front page.

Requests for additional vaccine should continue to be sent to the ImmForm helpdesk at helpdesk@immform.org.uk / 0844 376 0040 and should be sent in good time before your order cut-off.

Information for Schools Providers

A default cap of **3,000 doses (300 packs) per week**, per account remains in place for school providers. If you are a school provider and need to place an order for more than 300 packs, please contact the ImmForm helpdesk before your order cut-off.

Inactivated flu vaccine ordering for the 2018 – 19 children’s programme in England

Quadrivalent Influenza Vaccine (split virion, inactivated) is available to order for all children from six months to less than 18 years old who are contraindicated for Fluenz Tetra (or it is otherwise unsuitable) and are in a clinical risk group. This vaccine has an order cap of **30 doses (30 packs) per week** and is available to order in England only.

Additional information

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

Please refer to the September edition of Vaccine Update (see [weblink 13](#)) for further information, including:

- Eligibility criteria for the children’s flu programme in England;
- The full list of influenza vaccines that are being marketed in the UK for the 2018/19 season and their ovalbumin content.

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

To avoid over ordering errors, a high level order cap of 4 packs per order per week is in place. This equates to 400 adult or 800 infant doses, and hence order volumes should routinely be much less than this in order to avoid wastage if there is a fridge failure. At times the shelf life of this product may be relatively short, therefore it is advised not to create locally held stockpiles.

BCG vaccine supplied by AJ Vaccines is presented as a powder for reconstitution in a glass vial with synthetic stopper. Each pack ordered contains 10 vials, and will be accompanied by a pack of 10 vials of diluent. One vial of reconstituted vaccine contains 1 ml, corresponding to 10 doses (of 0.1 ml) for adults and children aged 12 months or over, or 20 doses (of 0.05 ml) for infants under 12 months of age.

The AJ Vaccines BCG vaccine has replaced the InterVax BCG vaccine for the national BCG programme. Please safely dispose of any remaining Intervax BCG product according to local protocols and in line with the guidance specified in **Chapter 32 of the Green Book on Tuberculosis**.

Reminder about MMR vaccine ordering restriction

There are currently two different vaccines available to order for the MMR programme, M-M-RvaxPro® and Priorix®. Orders for Priorix® 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®, 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.

All customers – Christmas and New Year deliveries warning notice

Due to the Christmas and New Year Bank Holidays, there will not be any deliveries or order processing by Movianto UK on Tuesday 25 and Wednesday 26 December 2018 and Tuesday 1 January 2019. 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. Out of Schedule deliveries cannot be arranged for failure to place orders in good time.

Please see the table below for revised order cut-off and delivery dates:

- customers with a standard delivery day of Tuesday should be aware that after 18 December, your next available delivery day will be Tuesday 8 January 2019
- customers with a standard delivery day of Wednesday should be aware that after 19 December, your next available delivery day will be Wednesday 2 January 2019

Christmas period orders and deliveries		
Delivery date	Order cut-off date	Order cut-off time
Monday 24 December 2018	Thursday 20 December 2018	11:55 AM
Tuesday 25 December 2018	Closed – No deliveries	
Wednesday 26 December 2018	Closed – No deliveries	
Thursday 27 December 2018	Friday 21 December 2018	11:55 AM
Friday 28 December 2018	Monday 24 December 2018	11:55 AM
Monday 31 December 2018	Thursday 27 December 2018	11:55 AM
Tuesday 1 January 2019	Closed – No deliveries	
Wednesday 2 January 2019	Friday 28 December 2018	11:55 AM
Thursday 3 January 2019	Monday 31 December 2018	11:55 AM
Friday 4 January 2019	Wednesday 2 January 2019	11:55 AM

Non-centrally supplied

– for the non routine programmes

HEPATITIS A VACCINE

Adult

- **GSK:** Havrix Adult PFS singles and packs of 10 are available
- **Sanofi Pasteur:** Avaxim is currently available for orders without restrictions
- **MSD:** Some limited stocks of VAQTA Adult are available at the wholesaler AAH, but MSD is now out of stock. Replenishment is expected in 2019

Paediatric

- **GSK:** Havrix Paediatric PFS singles and packs of 10 are available
- **MSD:** VAQTA Paediatric available

HEPATITIS B VACCINE

Adult

- **GSK:** Supplies of Engerix B PFS singles and packs of 10 are available
- **GSK:** Supplies of Engerix B vials singles and packs of 10 are available
- **GSK:** Fendrix is available
- **MSD:** HBVAXPRO 10mcg is currently unavailable until further notice
- **MSD:** Limited supplies of HBVAXPRO 40µg are available

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:** Viatim is available to order without any restrictions

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 currently out of stock. An alternative vaccine is available, please contact Sanofi Pasteur directly for more information

PPV (PNEUMOCOCCAL POLYSACCHARIDE VACCINE)

- **MSD:** has a limited supply available in both vial presentation and Pneumovax® 23 pre-filled syringe presentation. Further replenishment due in mid-December 2018
- As mentioned in last month's bulletin, MSD has introduced a limited quantity of a prefilled syringe presentation (PFS) of PPV under the brand name PNEUMOVAX® 23 to supplement the current supply of vials from December 2018
- A combination of growing global demand for pneumococcal polysaccharide vaccines, alongside manufacturing constraints, have led to regular interruptions in supply of PPV to the UK since 2017. The introduction of a PFS presentation of PPV is intended to support the continuity of supply and to help address public health need
- Pneumovax® 23 in the PFS presentation can be ordered in the same way as the PPV in vials; through MSD's distribution partner AAH online at www.aaeco.uk or by phone on 0344 561 8899. Customers need an AAH account to place an order
- For more information about the vaccine, please refer to the Summary of Product Characteristics (SmPC)

PNEUMOCOCCAL POLYSACCHARIDE CONJUGATE VACCINE

- **Pfizer:** Prevenar 13 is in stock and available for the private market

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:** Limited stocks of MMRvaxPro are currently available for the private market

MENINGITIS ACWY VACCINE

- **GSK:** Menveo is currently unavailable until 2019
- **Pfizer:** Nimenrix is currently available for private sales.

YELLOW FEVER

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

HUMAN PAPILLOMAVIRUS VACCINE

- **MSD:** Gardasil is currently available for private market sales a
- **MSD:** Gardasil 9 is currently available.

Weblinks

- Weblink 1 <https://www.ipsos.com/ipsos-mori/en-uk/advertising-execs-rank-below-politicians-britains-least-trusted-profession>
- Weblink 2 <https://campaignresources.phe.gov.uk/resources/campaigns/34-stay-well-this-winter-/resources>
- Weblink 3 <http://www.un.org/en/events/universal-health-coverage/>
- Weblink 4 <https://www.who.int/news-room/feature-stories/detail/standing-up-for-the-right-to-health>
- Weblink 5 <https://www.gov.uk/government/publications/tetanus-the-green-book-chapter-30>
- Weblink 6 <https://www.gov.uk/government/publications/herpes-zoster-shingles-immunisation-programme-2017-to-2018-evaluation-report>
- Weblink 7 <https://www.gov.uk/government/publications/pertussis-immunisation-in-pregnancy-vaccine-coverage-estimates-in-england-october-2013-to-march-2014>
- Weblink 8 <https://www.gov.uk/government/statistics/hpv-vaccine-coverage-annual-report-for-2017-to-2018>
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