



# Vaccine update



## The Value of Vaccines

### #Vaccineswork and save lives. Let's focus on the value of vaccines

In the UK we have a world-leading vaccination programme, led by an exceptional workforce. Year after year our vaccine heroes continue to take us closer towards our goal of making sure all eligible individuals are offered protection by vaccines throughout their life.

This past year we have added another school year to the National childhood flu programme, and we are looking forward to implementing the HPV for boys alongside our very successful well received programme for girls. It's almost five years since we implemented the Meningitis B programme and this has resulted in a significant decrease in Men B cases in babies.

We have seen some incredible public health achievements across the globe due to vaccination, but we are still seeing outbreaks, sometimes serious, of diseases that can be prevented by vaccines. Recent media reporting has focused on the challenges other countries are facing in controlling measles and some of the extreme measures they have taken. This has understandably raised questions about our situation and has put a spotlight on the potential role of mis-information and social media. Secretary of State Matt Hancock is leading on calling for social media platforms to remove inaccurate content and in this he has the full support of PHE.

### CONTENTS

European Immunization week – 24–30 April 2019

Theme: #VaccinesWork

Going to a festival, concert or group holiday and up to 25 years of age? Starting university?

MenACWY in school years 9 or 10 – leaflet for schools

Update on vaccine coverage data

Green book chapter 11: The UK immunisation schedule has been published

BCG vaccine (AJ Vaccines) for the national BCG programme

Update on MMR vaccine ordering restriction

Reminder about ordering centrally supplied vaccines

Attention to all customers – Easter and May bank holiday deliveries warning notice

Reporting expired or unused vaccines

The EU Falsified Medicines Directive (FMD) and Delegated Regulation as applicable to centrally supplied vaccines for the National Immunisation Programme

Vaccine supply for the non routine programme

In England, our vaccination rates exceed or approach the key global targets, but we are seeing a small but definite, steady decline in vaccine uptake and there is no room for any complacency. PHE's attitudinal surveys confirms that parental confidence in vaccines is very high and healthcare professionals remain the most trusted source of information about vaccines – which we all have a role in maintaining.

This European Immunisation Week we are therefore focusing on the value of vaccines, leaving the public in no doubt that vaccines are safe and save lives.

Please support and help spread positive messaging and accurate facts about the effectiveness of vaccines. Materials can be access at [weblink 1](#).

## European Immunization week – 24–30 April 2019

Every year, the WHO European Region marks European Immunization Week (EIW) to promote immunization as vital to preventing diseases and protecting life. This year, between 24–30 April 2019, the campaign aims to raise awareness of the benefits of vaccination and to celebrate the “vaccine heroes” who contribute in so many ways to protecting lives through vaccination.

Vaccine heroes include health workers who administer vaccines, parents who choose vaccination for their children, and everyone who seeks evidence-based information and passes it on to empower others. This concept is further embedded in the larger framework of World Immunization Week, which will focus on the theme “Protected Together, #Vaccines Work”. Visit [weblink 1](#) to find out more about global Vaccine heroes and their work.

EIW's key messages and facts about vaccines will be disseminated in countries across the Region through information campaigns, interviews, blogs, panel discussions, press releases, television programmes, scientific conferences and other activities, many of which will be attended by immunization experts from WHO and partner organizations. Highlights will be published after the event in the form of an EIW annual report.



## Background

EIW was first rolled out in 2005 to celebrate the success of immunization and to promote the core message that vaccines save lives. Since its inaugural event, the initiative has grown into one of the most visible public health campaigns in the Region. EIW is utilized by ministries, public health institutes, health-care workers and other individuals in their efforts to sustain or increase immunization coverage.

## Vaccination fundamental to achieving the Sustainable Development Goals

EIW draws attention not only to the progress that has already been made in reducing the threat of vaccine-preventable diseases, but also to the many people in the Region who are still missing out on the protective benefits of vaccination. More effort is needed to ensure that immunization coverage gaps are closed and no one is left behind.

The European Vaccine Action Plan (EVAP) envisions a “European Region free of vaccine-preventable diseases, where countries provide equitable access to high-quality, safe, affordable vaccines and immunization services throughout the life course”. Making this vision a reality is vital to achieving the 2030 Agenda for Sustainable Development, and in particular Goal 3 “to ensure healthy lives and promote well-being for all at all ages”.

[See the European Vaccine Action Plan 2015-2020 here](#)  
[or read more about the Sustainable Development Goals here](#)



Easter holidays are a good time to encourage parents to check if their children are up to date with their routine immunisations. There have been outbreaks of measles in many countries and it is important to make sure that everyone has had their two doses of MMR before they travel.

You can also check [weblink 2](#) to see if you and your family need any other vaccines before **you** travel.

## Theme: #VaccinesWork

World Immunization Week – celebrated in the last week of April – aims to promote the use of vaccines to protect people of all ages against disease. Immunization saves millions of lives every year and is widely recognized as one of the world's most successful and cost-effective health interventions. Yet, there are still nearly 20 million unvaccinated and under-vaccinated children in the world today.

The theme this year is Protected Together: Vaccines Work!, and the campaign will celebrate Vaccine Heroes from around the world – from parents and community members to health workers and innovators – who help ensure we are all protected through the power of vaccines.

### Vast progress but fragile gains

In 2017, the number of children immunized – 116.2 million – was the highest ever reported. Since 2010, 113 countries have introduced new vaccines, and more than 20 million additional children have been vaccinated.

But despite gains, all of the targets for disease elimination – including measles, rubella, and maternal and neonatal tetanus – are behind schedule, and over the last two years the world has seen multiple outbreaks of measles, diphtheria and various other vaccine-preventable diseases. Most of the children missing out are those living in the poorest, marginalized and conflict-affected communities.

In order for everyone, everywhere to survive and thrive, countries must intensify efforts to ensure all people receive the lifesaving benefits of vaccines. Additionally, those countries that have achieved or made progress towards the goals must work to sustain the progress they have made.

### 2019 campaign objectives

The main goal of the campaign is to raise awareness about the critical importance of full immunization throughout life

As part of the 2019 campaign, WHO and partners aim to:

- demonstrate the value of vaccines for the health of children, communities and the world
- highlight the need to build on immunization progress while addressing gaps, including through increased investment
- show how routine immunization is the foundation for strong, resilient health systems and universal health coverage

### Why immunization matters

Expanding access to immunization is vital for achieving the Sustainable Development Goals, poverty reduction and universal health coverage. Routine immunization provides a point of contact for health care at the beginning of life and offers every child the chance at a healthy life from the earliest beginnings and into old age.

Immunization is also a fundamental strategy in achieving other health priorities, from controlling viral hepatitis, to curbing antimicrobial resistance, and providing a platform for adolescent health and improving antenatal and newborn care.

## Key messages

- We need the help of all vaccine heroes everywhere to reach the 1 in 10 kids who still do not have access to vaccines.
- At all ages, vaccines save lives. They protect our children and they protect us all as adults.
- Vaccines mean lives lived – they mean a brighter future for our children and theirs to come.
- We can ensure vaccines reach the people that need them most. You can be a vaccine hero.
  - Ensure **you & your family** are vaccinated on time, every time
  - Travelling? Know before you go – ensure **your family's** vaccines are up to date.
  - Be a vaccine champion – Talk to **people** about the benefits of vaccines. Vaccines save lives, help children learn & grow, & prevent serious illness & disability.
  - Know the facts. Any licensed vaccine has been rigorously tested before use to make sure it is safe and effective for **you and your family**.
  - Health workers: Every check up is an opportunity to check in on vaccination, for children, **teenagers, young adults and the elderly**.

## Going to a festival, concert or group holiday and up to 25 years of age? Starting university?

**Young people aged 18-25 are particularly at risk from meningococcal disease as they often come into contact with many new people in confined environments such as pubs and clubs, festivals and university halls.**

**These three banners are available to use on digital displays, social media and websites to remind young adults that they need their MMR too (see [weblink 10](#)).**



**Students starting university for the first time are particularly at risk if unvaccinated.** They need their two doses of MMR to protect them against measles, mumps and rubella. We have seen outbreaks of measles and mumps in halls of residence. They also need their MenACWY vaccine and a good understanding of the signs and symptoms of meningitis and septicaemia.

If you were born on or after 1 September 1996 and eligible but missed your teenage MenACWY vaccine you can still have the vaccine up to your 25<sup>th</sup> birthday. If you are older and starting university for the first time, you can still have the vaccine up to your 25<sup>th</sup> birthday. If you are still at school you should talk to your school provider otherwise you will need to make an appointment with your GP practice.

### Have you met the meningitis symptoms

This video developed by the Meningitis Now charity, aimed at young people to promote the signs and symptoms of meningitis and septicemia. You can view it at [weblink 3](#). #Maybemeningitis



### MenACWY in school years 9 or 10 – leaflet for schools

This leaflet has been revised to include more information on the signs and symptoms of meningitis and septicemia, see [weblink 8](#).



### Update on vaccine coverage data

In England, PHE publishes vaccine coverage data for the routine childhood immunisation programme quarterly and annually at Local Authority (LA) level through the PHE COVER programme. COVER collects information from Child Health Record Departments on the proportion of children aged 12 months, 24 months and 5 years who have completed courses of each routine childhood immunisation. This information is promptly fed back to the local level via the COVER report and associated tables, creating the opportunity to improve coverage and to detect changes in vaccine coverage quickly.

From 2019/20, contingent on a successful pilot due to start in April 2019 (relating to January to March 2019 data), the collection of COVER data will be transferred from PHE to NHS Digital's Strategic Data Collection Service (SDCS) and merged with the current SDCS practice-level vaccine coverage collection (formally collected via the Child Immunisation Unify2 data collection). These practice-level data have previously been made available at CCG-level quarterly and at practice-level annually as management information by NHS England.

The analysis and reporting of the quarterly COVER report remains with PHE, and the annual vaccine coverage report is anticipated to be published as a joint PHE/NHS Digital report. From 2019/20 it is therefore anticipated that the quarterly and annual COVER reports will include both LA and GP level coverage. An updated information standard (DCB0089) covering the new collection was published on 4 April 2019.

The latest COVER report, published at the end of March 2019 for the [quarter October to December 2018](#), showed vaccine coverage evaluated at the first birthday increased by 0.4 to 0.8% for all antigens compared with the previous quarter in England. If London data were excluded coverage for all antigens in England increased by 0.1 to 0.9%, suggesting the increase was not solely due to improved data quality in London this quarter. Vaccine coverage evaluated at five years of age was above or close to 95% for the primary course of DTaP/IPV/Hib (three doses) at 95.3% and MMR1 at 94.6%. Although coverage at 24 months and five years was relatively stable compared with the previous quarter, coverage at 24 months and five years for England excluding London (primarily reflecting vaccines administered in previous years) decreased for seven of the 10 antigens, suggesting that improving data quality in London has likely offset decreasing trends in coverage in these age groups.

## Green book chapter 11: The UK immunisation schedule has been published

Green Book Chapter 11 “The UK immunisation schedule” has been republished. It has been comprehensively revised and updated and now includes the latest schedule and all the information about intervals between live vaccines which was previously published as a separate standalone document on the Green Book webpage (See [weblink 9](#)).

## Vaccine supply (centrally supplied)

### BCG vaccine (AJ Vaccines) for the national BCG programme

The BCG vaccine currently being issued expires 31 August 2019. We will be issuing this stock until the end of July 2019, therefore please do not over order for your requirements. 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 1ml, corresponding to 10 doses (of 0.1ml) for adults and children aged 12 months or over, or 20 doses (of 0.05ml) for infants under 12 months of age. In addition, a pad of 100 patient information leaflets will be included in your order.

### Update on MMR vaccine ordering restriction

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

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

## Reminder about ordering centrally supplied vaccines

PHE maintains significant stockpiles of all our vaccines in support of the national immunisation programme. Our usual ordering advice remains in place; that is do not create locally held stockpiles and order vaccines for the next 2 weeks only, as this avoids wastage from expiry and/or where there are local cold chain incidents. There is no requirement for any local stockpiling of PHE supplied products as that would adversely impact on PHE stock.

## Attention to all customers – Easter and May bank holiday deliveries warning notice

### Easter Bank Holiday

Due to the Easter Bank Holiday, there will be no deliveries or order processing by Movianto UK on Friday 19th April and Monday 22 April 2019. Please see the table below for revised order and delivery dates. For customers with standard delivery days of Friday or Monday, please be aware that:

- after Friday 12 April, your next available delivery day will be Friday 26 April
- after Monday 15 April, your next available delivery day will be Monday 29 April

Easter Bank Holidays Friday 19 April – Monday 22 April 2019		
Delivery date	Order cut-off date	Order cut-off time
Monday 15 April 2019	Thursday 11 April 2019	11:55 AM
Tuesday 16 April 2019	Friday 12 April 2019	11:55 AM
Wednesday 17 April 2019	Monday 15 April 2019	11:55 AM
Thursday 18 April 2019	Tuesday 16 April 2019	11:55 AM
<b>Friday 19 April 2019</b>	<b>Closed – No deliveries</b>	
<b>Monday 22 April 2019</b>	<b>Closed – No deliveries</b>	
Tuesday 23 April 2019	Wednesday 17 April 2019	11:55 AM
Wednesday 24 April 2019	Thursday 18 April 2019	11:55 AM
Thursday 25 April 2019	Tuesday 23 April 2019	11:55 AM
Friday 26 April 2019	Wednesday 24 April 2019	11:55 AM

### May Bank Holidays

Due to the May Bank Holidays, there will be no deliveries or order processing by Movianto UK on Monday 6 May and Monday 27 May 2019. 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 29 of April, your next available delivery day will be the 13 May 2019
- after the 20 of May, your next available delivery day will be the 3 June 2019



**May Bank Holiday orders and deliveries**

<b>Early May Bank Holiday Monday 6 May 2019</b>		
<b>Delivery date</b>	<b>Order cut-off date</b>	<b>Order cut-off time</b>
Monday 29 April 2019	Thursday 25 April 2019	11:55 AM
Tuesday 30 April 2019	Friday 26 April 2019	11:55 AM
Wednesday 1 May 2019	Monday 29 April 2019	11:55 AM
Thursday 2 May 2019	Tuesday 30 April 2019	11:55 AM
Friday 3 May 2019	Wednesday 1 May 2019	11:55 AM
<b>Monday 6 May 2019</b>	<b>Closed – No deliveries</b>	
Tuesday 7 May 2019	Thursday 2 May 2019	11:55 AM
Wednesday 8 May 2019	Friday 3 May 2019	11:55 AM
Thursday 9 May 2019	Tuesday 7 May 2019	11:55 AM
Friday 10 May 2019	Wednesday 8 May 2019	11:55 AM

<b>Late May Bank Holiday Monday 27 May 2019</b>		
<b>Delivery date</b>	<b>Order cut-off date</b>	<b>Order cut-off time</b>
Monday 20 May 2019	Thursday 16 May 2019	11:55 AM
Tuesday 21 May 2019	Friday 17 May 2019	11:55 AM
Wednesday 22 May 2019	Monday 20 May 2019	11:55 AM
Thursday 23 May 2019	Tuesday 21 May 2019	11:55 AM
Friday 24 May 2019	Wednesday 22 May 2019	11:55 AM
<b>Monday 27 May 2019</b>	<b>Closed – No deliveries</b>	
Tuesday 28 May 2019	Thursday 23 May 2019	11:55 AM
Wednesday 29 May 2019	Friday 24 May 2019	11:55 AM
Thursday 30 May 2019	Tuesday 28 May 2019	11:55 AM
Friday 31 May 2019	Wednesday 29 May 2019	11:55 AM

You are reminded to be prepared for the breaks 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 these holiday periods, bearing in mind the recommendation that only two to four weeks of vaccine stock be held at any one time.

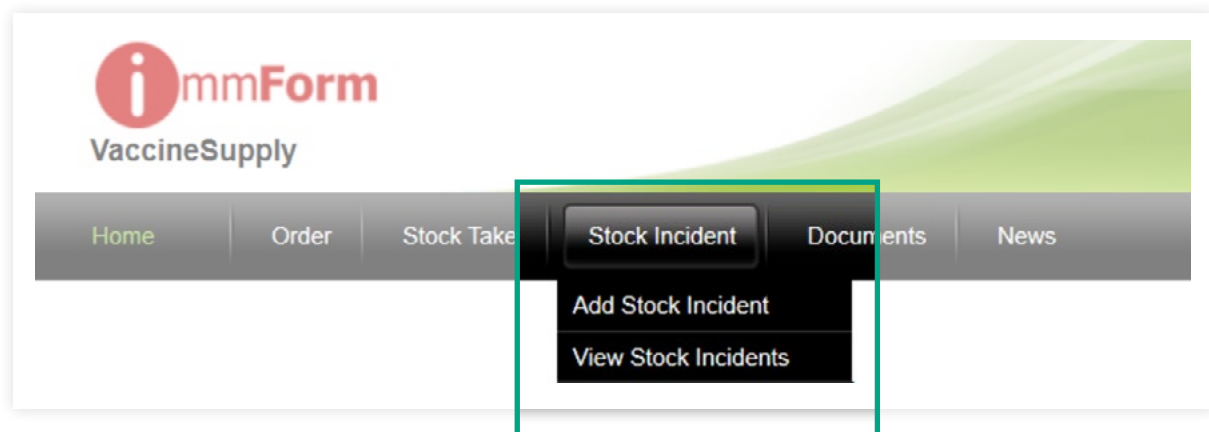
Please be advised that Emergency or “Out of Schedule” deliveries cannot be arranged for failure to place orders in good time.

## Reporting expired or unused vaccines

It is important to report stock incidents concerning centrally supplied vaccines (via ImmForm) to PHE as this ensures that all vaccines are accounted for, and supports efforts across the system to reduce the level of vaccine which goes unused.

Any vaccine ordered via ImmForm that has not been used should be recorded using the ImmForm Stock Incident page. Definitions of stock incidents include vaccines that expired before they could be used, fridge failures, or an inability to dispense a vaccine after it was prepared. To help make reporting unused vaccine easier, a full list of Incident Reasons can be found on the ImmForm Stock Incident reporting page.

**The Stock Incident reporting tab is found on the Vaccine Supply homepage:**



**To report unused vaccine via the Stock Incident reporting page:**

- select the date that the incident occurred
- select an appropriate ‘Incident Reason’ from the drop-down list
- add information to the ‘Incident description’ and ‘Actions taken or planned’ fields
- enter the number of doses for the product(s) involved in the incident in the table
- click ‘Submit Incident’ at the bottom of the page

That’s it! The data is then collated and analysed by PHE to assess national trends in unused vaccine and identify where improvements might be made to help reduce this.

A reminder that all Fluenz Tetra batches supplied for the 2018/19 children’s flu programme have now expired, and any remaining Fluenz Tetra should be recorded as above and disposed of in line with local policies.

## The EU Falsified Medicines Directive (FMD) and Delegated Regulation as applicable to centrally supplied vaccines for the National Immunisation Programme

**Since the 9 February 2019** there are legal obligations on the UK to prevent the entry of falsified medicinal products into the supply chain. The Delegated Regulation<sup>1</sup> of the Falsified Medicines Directive (FMD)<sup>2</sup> requires that prescription only medicines (POM) including vaccines entering the supply chain after this date carry safety features including an anti-tampering device (a seal) and a unique identifier (contained in a 2D barcode), and have their product data uploaded onto a central database. In addition, certain parts of the supply chain are required to perform authenticity checks, and at the end of the supply chain 'verify and decommission' products before they are supplied or administered to patients.

These changes affect all ImmForm customers across the UK who access centrally supplied products from PHE, except where the organisation is exempt (see information at the end of this article).

For the majority of PHE customers, in practice this means that at the end of the supply chain before a vaccine is administered to a patient, the integrity of the product seal should be checked and the barcode on the packaging should be scanned to **verify** authenticity and register the removal of the product from the supply chain on a central database (**decommission**).

### Important points to note on PHE supplied vaccines and FMD

- although the Regulation came into force on 9 February 2019, at the time of publication PHE (via ImmForm) are not yet issuing products that are subject to the requirements of FMD. This is due to the large volume of non-FMD compliant stock already held by PHE prior to 9 February 2019.
- products supplied by PHE that are not subject to the requirements of FMD include:
  - products in 'older style' packaging without safety features
  - products carrying safety features that were manufactured and supplied to PHE before the safety features became a legal requirement
  - products not licensed in the UK (list available in PHE guidance document available on ImmForm)

Products not subject to the requirements of FMD are exempt from the verification and decommissioning process. It is still permissible to supply or administer these products to patients.

---

<sup>1</sup> [https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-1/reg\\_2016\\_161/reg\\_2016\\_161\\_en.pdf](https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-1/reg_2016_161/reg_2016_161_en.pdf)

<sup>2</sup> [https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-1/dir\\_2011\\_62/dir\\_2011\\_62\\_en.pdf](https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-1/dir_2011_62/dir_2011_62_en.pdf)

- products carrying safety features that were manufactured and supplied to PHE before the safety features became a legal requirement may or may not be registered on the European Medicines Verification System (EMVS) database. Where such a product IS NOT registered on the EMVS database, it does not need to be verified or decommissioned. Where such a product IS registered on the EMVS database, verification and decommissioning are optional. **In either scenario, the product can still be supplied or administered to patients**
- PHE will begin distributing fully compliant packs (carrying the safety features and with product data registered to EMVS) at different times throughout 2019, and potentially into 2020 for individual product lines. It is possible that the first fully compliant packs will be distributed within the next 1 to 2 months. Please consult the ImmForm news items for regular updates on when fully FMD-compliant packs for each product line will first be distributed. Please be advised that this list will be updated as more accurate information becomes available so please do check regularly for updates.
- **It is still permissible to supply or administer older packs to patients provided they have not expired**

### **Guidance on FMD and the Delegated Regulation**

PHE has produced a guidance document to set out and clarify roles and responsibilities in the application of FMD and the Delegated Regulation to vaccines and other medicines centrally supplied by PHE to the NHS and other customers. This document is currently accessible via the ImmForm news page.

The UK FMD Working group for Community Pharmacy has produced some guidance to help end users identify the types of packs that will need scanning for verification and authentication, and those that will not. Guidance and examples of “right” and “wrong” packs can be found at [weblink 6](#).

**We would encourage all of our customers to visit the [gov.uk page on FMD](#) and spend some time becoming familiar with the content and links to various other guidance documents on the implementation of the legislation**

NHS Digital toolkits for various types of healthcare provider to help them in the implementation of FMD can be found at [weblink 4](#). Further information for NHS organisations on FMD can be requested by emailing [fmd@nhs.net](mailto:fmd@nhs.net).

Questions about FMD and the safety features more broadly should be directed to [fmd.safetyfeatures@mhra.gov.uk](mailto:fmd.safetyfeatures@mhra.gov.uk).

### Article 23 of the Delegated Regulation

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 (i.e. Movianto, in the case of PHE vaccines) to decommission on behalf of these organisations.

The MHRA has published additional guidance on the use of Article 23 which can be found at [weblink 7](#), along with additional information and guidance on FMD and the safety features. We would encourage our customers to review this guidance to determine whether the exemption provided by Article 23 applies to your organisation with respect to products ordered from PHE via ImmForm.

If you believe that Article 23 applies to your organisation, you will need to contact [helpdesk@immform.org.uk](mailto:helpdesk@immform.org.uk) quoting your vaccine ordering account number, so that PHE can agree your assessment and ensure your account is set up correctly.

Organisations classed as Article 23 by ImmForm will receive decommissioned products and will only be required to check the anti-tampering device (seal) before a vaccine is administered to a patient.

## Vaccine supply (non-centrally supplied)

### Vaccine supply for the non routine programme

#### HEPATITIS A VACCINE

##### Adult

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

##### Paediatric

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

##### Adult

- **GSK:** Engerix B PFS singles and packs of 10 are available
- **GSK:** Engerix B vials singles are available
- **GSK:** Engerix B vial packs of 10 are unavailable
- **GSK:** Fendrix is available
- **MSD:** HBVAXPRO 10 µg is unavailable until further notice
- **MSD:** HBVAXPRO 40 µg is unavailable until further notice. Please see MSD statement for further information on supply of HBVAXPRO vaccines at [weblink 5](#)

##### Paediatric

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

**COMBINED HEPATITIS A & B VACCINE**

- **GSK:** Twinrix Adult singles are available
- **GSK:** Twinrix Adult packs of 10 are unavailable. Resupply is expected in May 2019
- **GSK:** Twinrix Paediatric is available
- **GSK:** Ambirix is available

**COMBINED HEPATITIS A & TYPHOID VACCINE**

- **Sanofi Pasteur:** Viatim is available

**TYPHOID VACCINE**

- **Sanofi Pasteur:** Typhim is available
- **PaxVax:** Vivotif is available

**RABIES VACCINE**

- **GSK:** Limited supplies of Rabipur are available. GSK is currently experiencing a supply delay due to manufacturing constraints through the first half of 2019
- **Sanofi Pasteur:** Rabies BP is currently out of stock. An alternative vaccine is available, please contact Sanofi Pasteur directly for more information

**PPV (Pneumococcal Polysaccharide Vaccine)**

- **MSD:** Pneumococcal Polysaccharide Vaccine vials are currently available
- **MSD:** PNEUMOVAX 23 PFS are currently available.  
Please see [weblink 5](#) for further information

**PPV (Pneumococcal Polysaccharide Conjugate Vaccine)**

- **Pfizer:** Prevenar 13 is available
- **GSK:** Synflorix has now been discontinued from the UK market

**VARICELLA ZOSTER VACCINE**

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

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

- **Sanofi Pasteur:** Revaxis is available

**MMR**

- **MSD:** MMRvaxPro is available

**HUMAN PAPILLOMAVIRUS VACCINE**

- **MSD:** GARDASIL is currently available
- **MSD:** Gardasil 9 is currently available

**MENINGITIS ACWY VACCINE**

- **GSK:** Limited supply of Menveo is available
- **Pfizer:** Nimenrix is currently available

**YELLOW FEVER**

- **Sanofi Pasteur:** Stamaril is available

## Weblinks

- Weblink 1 <http://www.euro.who.int/en/media-centre/events/events/2019/04/european-immunization-week-2019>
- Weblink 2 <https://travelhealthpro.org.uk/>
- Weblink 3 <https://youtu.be/3TPp8ILbaHE>
- Weblink 4 <https://digital.nhs.uk/services/falsified-medicines-directive-fmd#toolkits>
- Weblink 5 <http://www.msd-uk.com/products/vaccines.xhtml>
- Weblink 6 <https://fmdsource.co.uk/2018/11/22/right-and-wrong-scanning-guidance-for-fmd-early-adopters>
- Weblink 7 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/767788/Additional\\_guidance\\_on\\_Article\\_23\\_HCI\\_s\\_and\\_Article\\_26.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/767788/Additional_guidance_on_Article_23_HCI_s_and_Article_26.pdf)
- Weblink 8 <https://www.gov.uk/government/publications/meningitis-and-septicaemia-leaflet-for-students-in-years-9-to-13>
- Weblink 9 <https://www.gov.uk/government/publications/immunisation-schedule-the-green-book-chapter-11>
- Weblink 10 <https://publichealthengland-immunisati.box.com/s/vppbluehlhczb1eixb0c2rop2a17x8lh>