

Issue 278, May 2018 Vaccine update

Protecting and improving the nation's health

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#Vaccineswork to protect people of all ages from potentially dangerous diseases



We have had a busy year as I am sure many of you know. The introduction of the hexavalent hepatitis B containing vaccine for babies born on or after 1 August 2017 was a well received addition to the routine schedule. Full details are available at weblink 1.

This year our immunisation programme

has delivered 20 millions doses of vaccine in England. We continue to make progress towards our goal of making sure all eligible individuals are offered protection by vaccines throughout their life This is only possible with the help of our dedicated staff and the high trust placed in vaccines by our population.

World Hepatitis Day saw the launch of a campaign, including videos and posters in a range of languages, to raise awareness of hepatitis, highlighting that Hepatitis A and B are vaccine-preventable.

Please visit PHE youtube at weblink 2 for the full selection of Hepatitis risk videos. We are committed to 'Finding the missing millions' as our focus for this year's campaign.



Prevent Protect Immunize

'Equitable access to immunization is the right of every individual and community' European Immunization Week

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The immunisation tour visited Public Health England, Colindale for World Hepatitis Day, 28 July 2017. Rehana Shivji and Michael Barnes

Immunisation stand tour

Our stand visited events across the UK, attending 24 events in total at Maternity, mother and baby, Nursing in practice, Royal College of midwives, Royal College of General practitioners, Vaccination matters, Oxford Vaccine Group, Student Health Association, Meningitis Research Foundation, Royal College of paediatricians, school nurses conference, CPHVA and Fundamentals of Immunisation in Oxford, Loughborough, Manchester, Bristol, Coventry, Warwick, Lincoln, Liverpool, Northampton, Sheffield, Durham and Glasgow. These events are so important as we distribute our latest resources to delegates, participate in sessions and contribute to agendas throughout.

The most important reason for our annual tour is to obtain vital feedback from nurses, midwives, paediatricians, GPs, immunisation specialists, health visitors and school nurses, our front line advocates. We are an agile service and responding to feedback is essential in improving our resources.

An exhibition by Public Health England celebrating over a century of public health marketing campaigns

Public Health England is five years old this month and the recent exhibition celebrating over a century of public health marketing can be viewed at weblink 4.

Immunisation public health marketing forms a key part of this exhibition and you can see great examples of early immunisation posters such as the ones featured here and in our exhibition at the NIN conference. Please visit the exhibition online at weblink 4.

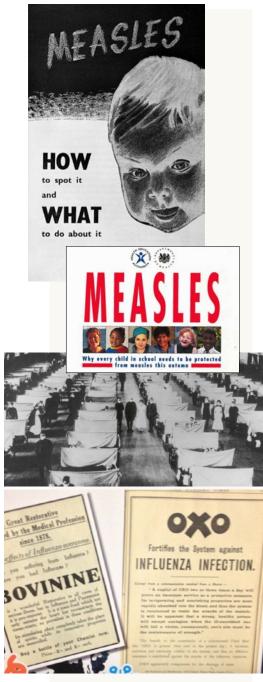


Image courtesy of the RCN Heritage Library and Centre.

1918

War ends leaving c.18 million dead worldwide; c.1.2 million in the British Empire. During the war more soldiers died from disease than from combat. In addition the Spanish-flu epidemic of 1918-1920 killed more than 20-50 million people globally.

Nurses and doctors were in short supply as they too succumbed to influenza. The nursing role was taken on by family members, siblings and sometimes children as families became decimated by the level of illness.

Without modern infection control measures and the help of a flu vaccine or antivirals the pandemic spread unchecked.

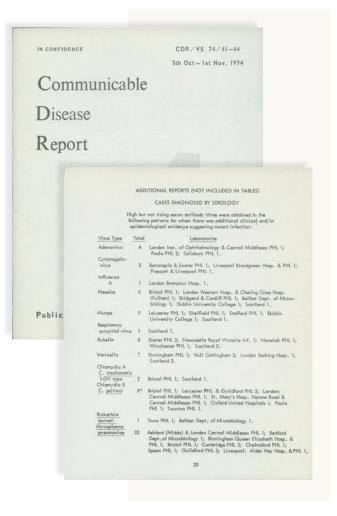
Recovery from influenza was seen as a marketing device and used by manufacturers such as OXO.

A future flu pandemic may happen at any time and emergency preparedness departments at PHE work closely with immunisation colleagues and other governmental departments to ensure we are ready for when the next flu pandemic does hit.

Contagion! The BBC Four Pandemic

We are increasingly seeing the use of new technology to approach reducing the burden of disease in our population. Representatives from PHE's Respiratory Department and colleagues from the London School of Hygiene and Tropical Medicine and the University of Cambridge have participated in a documentary that uses a smartphone App to collect data simulating the spread of a Spanish-flu type outbreak across the UK.

You may have watched this on the BBC or you can visit: Contagion! The BBC Four Pandemic at weblink 5.



The Public Health Laboratory Service

The Public Health Laboratory Service (PHLS) was established as part of the National Health Service in 1946. An Emergency Public Health Laboratory Service was established in 1940 as a response to the threat of bacteriological warfare. There was originally a central laboratory at Colindale and a network of regional and local laboratories. By 1955 there were about 1000 staff. These laboratories were primarily preventative with an epidemiological focus. They were, however, in some places located with hospital laboratories which had a diagnostic focus.

The services provided by the Emergency PHLS were at the disposal of Medical Officers of Health and to be used in the investigation and control of outbreaks of infectious disease. Many of the PHLS Directors were not only good microbiologists but were also competent epidemiologists and often assisted Medical Officers of Health in the investigation and control of outbreaks. The Central Public Health Laboratory was

based at Colindale, London NW9 (though initially based on the other side of Colindale tube station where the site is now a new housing development, replete with blocks such as Agar House, Petri House and roads such as Pasteur Close, Fleming Walk and Curie Gardens).

1946

Central Office of Information replaces the wartime Ministry of Information, acting as Government's marketing and communications agency.

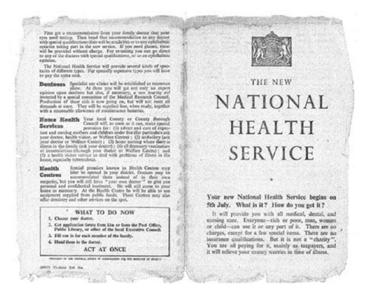


Birth of the NHS

During the years after the Second World War there was a period in British politics now known as the 'post-war consensus'. Historians use this term because for the most part, the major political parties agreed on the country's main priorities and generally cooperated in trying to achieve them. The main aim was post-war recovery, but another priority was the welfare of the people, directly involving the National Health Service (NHS). Read more about this at weblink 6.

The NHS was formed in July 5 1948, it was based on 3 core principles:

- that it meets the needs of everyone
- that it be free at the point of delivery
- that it be based on clinical need, not ability to pay



The Beveridge report

The Beveridge Report of 1943 set out plans for the future of post-war Britain. It identified the main issues facing British society, including disease, and laid the foundations of what would become known as the Welfare State. When Labour came to power in 1945, an extensive programme of welfare measures followed – including a National Health Service (NHS). The Minister of Health, Aneurin Bevan, was given the task of introducing the service.

Until now health care in Britain had been founded on insurance-based schemes as most people could not afford to pay for medical bills.

The NHS changed this, and medical care became free and based on need rather than on ability to pay. It was 100 per cent financed from taxation, which meant the rich contributed more than the poor. Everyone was eligible for treatment, even people from abroad living temporarily in Britain, and treatment could be given at any NHS institution anywhere in the country.

Immunisation was introduced to the population to combat infectious diseases such as Polio, Diphtheria, smallpox and tetanus.

The impact of vaccination

The Vaccines work table on the right shows the cases before the introduction of the vaccine and the postvaccine reductions which are impressive.



70 years of the NHS

Now the NHS is 70, the very first people who were born in the first NHS hospitals are now eligible for their shingles vaccine. In the first 3 years of the programme, there were 17,000 fewer consultations and we have worked hard to produce a comprehensive suite of healthcare professional resources as well as key patient facing material. When the NHS was launched, the Ministry of Information used all its tools to get their key health protection messages to the public including:

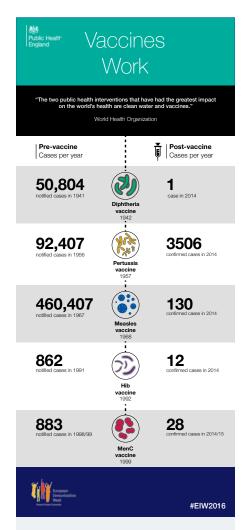
- posters
- leaflets
- public information films shown at cinemas before the main feature
- radio announcements on the BBC

The Health Protection Agency also used leaflets, posters, folders, television and adverts.

Now as the internet is the most widely used tool for information, and more and more users are using the internet to find out about vaccinations we are developing a range of



web only resources which are supported by our traditional offers of posters and leaflets. We know that the public still trust our printed materials more than ones found on the internet. We also know that our GP practices and A&E departments increasingly rely on digital display systems so we have introduced a range of resources such as the MMR banner above. We are now producing a range of digital resources including banners and short animated



#VaccinesWork

World Health Oranization (WHO) has produced an amazing quiz as part of World Immunization Week, visit weblink 26 to find our more and take the quiz to find out how much you know about vaccine preventable diseases.

WHO has also produced a measles GIF which you can use to promote the MMR vaccination, which we showed as part of our NIN meeting last week. You can find all their social media slides and the measles GIF at weblink 27.

films to promote our immunisation programmes including our new shingles vaccination animation (see weblink 3) as part of our European Immunization Week (EIW) promotion this year. If you would like a copy of this shingles animation, please email immunisation@phe.gov.uk. Have a look at our immunisation timeline at weblink 7.

Key messages for European Immunization Week 2018

#Vaccineswork to protect people of all ages from potentially dangerous diseases.

Every person deserves to be protected from vaccine-preventable diseases and plays a vital role in protecting others by choosing to vaccinate. When all eligible individuals are fully vaccinated those who cannot be vaccinated are also protected through herd immunity. Shared responsibility and shared protection.

Consult with your doctor and check your family's immunization records to make sure that you are all fully protected.

We are encouraging every family to check their Redbook (CHIS) to see if their children are up to date with their immunisations, or to check with their GP practice as a routine way of making sure they are all protected.

False information can influence choices and endanger lives. Get the facts and share only evidence-based information about vaccines.

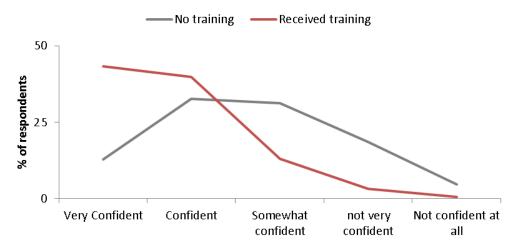
European Immunization Week – Health professionals are the most trusted source of information about vaccines for their patients. Raising awareness about vaccines saves lives.

Training and learning

We know that our network of immunisation professionals are the most trusted and we rely on their confident presentation of vaccine information to the public to help them choose to vaccinate.

In a recent survey nurses, midwives and health visitors were asked how confident respondents were about giving advice on vaccinations according to whether or not they had received training?

Q. How confident do you feel about giving advice on vaccinations in pregnancy?Q. Have you received any training about vaccinations for pregnant women?



Vaccination in pregnancy: Attitudes of nurses, midwives and health visitors in England

Bhavita Vishram, Louise Letley, Albert Jan Van Hoek, Louise Silverton, Helen Donovan, Cheryll Adams, David Green, Angela Edwards, Joanne Yarwood, Helen Bedford, Gayatri Amirthalingam & Helen Campbell (2018) Vaccination in pregnancy: Attitudes of nurses, midwives and health visitors in England, Human Vaccines & Immunotherapeutics, 14:1, 179-188, DOI: 10.1080/21645515.2017.1382789 https://doi.org/10.1080/21645515.2017.1382789

We have worked tirelessly to produce a new range of learning resources this year and are very proud of the range of guidance, slidesets and innovative new material such as video, social media banners and infographics to support all of our programmes.

View the publication of the revised PHE National Minimum Standards and Core Curriculum for Immunisation Training for Registered Healthcare Practitioners at weblink 8.

Fundamentals of Immunisation Training

Our recent two day Fundamentals of Immunisation training course jointly run with the UCL Great Ormond Street Institute of Child Health was very successful and plays an important part of our immunisation training offer. Look out for the next Fundamentals course and recommend it to colleagues requiring high quality immunisation training. Further details will be published in future editions of Vaccine Update.

E-learning immunisation resources

In collaboration with colleagues at Health Education England, the Royal College of Nursing, UCL Great Ormond Street Institute of Child Health and the Royal College of Paediatrics and Child Health, we have produced an interactive immunisation e-learning course (weblink 9). This course, written in line with the national minimum training standards (weblink 10) consists of seven knowledge sessions with accompanying assessments and is available for all healthcare practitioners with a role in immunisation – register free of charge at weblink 11.

You should also watch our 'immunology for immunisers' animation at weblink 12. In addition, you can visit weblink 13 for more learning opportunities and resources.

Intervax BCG training slideset for healthcare professionals on the use of unlicensed Intervax vaccine

We have recently updated this slide set and factsheet which were produced to accompany the supply of unlicensed Intervax BCG vaccine. It is aimed at healthcare professionals and provides information on:

- background to the supply of the vaccine
- eligibility for the vaccine
- how to reconstitute the vaccine
- how to administer the vaccine

Visit weblink 14.

Immunisation of pregnant women

The immunisation of pregnant women and neonates slidesets have been developed to support the delivery of immunisation training to health care workers providing or advising on immunisation of pregnant women:

- background, history and attitudes towards maternal vaccination
- influenza and pertussis vaccines
- selective vaccination programmes for neonates
- pre- and post-natal viral rash illness inadvertent vaccination
- governance considerations, challenges to achieving high vaccine coverage, horizon scanning and resources
- https://publichealthengland-immunisati.app.box.com/s/p0b1wkrfliu6ss5941im5eecoyvhgfkw
- https://publichealthengland-immunisati.box.com/s/dfj14tasy89d3tfj2g1e2h6ipc62uev6
- https://publichealthengland-immunisati.box.com/s/3mnbnl2ei8cklgfhsejymw2co690suls
- https://publichealthengland-immunisati.box.com/s/5yhzzyhv8snaddigoku38q602q3yy518
- https://publichealthengland-immunisati.box.com/s/4f21r0wcagf2qkw3sv0uldzzi00vhrnk



RCN heritage library and Heritage Centre

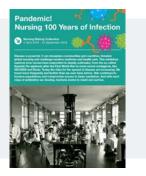
The RCN History of Nursing Society, Public Health Forum and library team have together faced the challenging task of telling a rich and expansive history in a small space. The exhibition takes you from influenza, fever nursing and TB hospitals, through nursing during the early days of HIV and AIDS, to the more recent years of the Ebola virus threat. It's a snapshot of how nurses have responded to the threat of disease, and how that nursing role has changed.



But as we cast our minds back through this history, what can we see that has not changed? Who is on the front line, time and again, when the symptoms of a new disease arrive on a ward or in a community? Nurses have always been at the forefront of infection control and prevention. A position that, through occupational exposure, does not go without risk.

On display you can see historical objects, photographs and loans from nurses working today which illustrate the story. You can see our favourite publication Vaccine Update November 2017 edition 272 at weblink 15 on the shelf in the exhibition with the current complete routine immunisation schedule at weblink 16 and the Protocol for ordering, storing and handling vaccines at weblink 17.

Anyone able to visit the exhibition may wish to visit weblink 18 and weblink 19.





Our patient and healthcare professional resources form key parts of the exhibition with our Winter Flu leaflet 2017-2018 and Keep your vaccines healthy fridge magnet shown here sitting along side a bottle of Influenza vaccine manufactured by the Royal Army Medical College between 1918 and 1920. Just one example of an attempt at a cure long before flu and its many mutating strains were understood. Kindly loaned by the Royal Pharmaceutical Society,

You can order one of the magnets at the DHSC order line at weblink 20.

By popular demand – our new Global Risks from Rabies poster



Our global rabies risks from animals poster is available to download and print from weblink 21. It is suitable for all GP and clinic settings.

Vaccine supply

Shingles vaccine all year round – change in eligibility and vaccine availability

Rather than the majority of patients being immunised in the autumn months during the flu season, patients can now be offered the shingles vaccine (Zostavax[®]) as soon as they reach eligible age (70 or 78), starting last month and to align with increased central vaccine availability. Zostavax[®] can continue be ordered online via the ImmForm website (weblink 23).

It is recommended that practices hold no more than two weeks' worth of stock. The shelf life of this vaccine can sometimes be shorter than anticipated, so taking a little and often approach to vaccine ordering is recommended. Please make sure that locally held stocks of vaccine are rotated in fridges so that any wastage is minimised.

Where possible, orders for Zostavax[®] through ImmForm should be placed with those for childhood vaccines to ensure an efficient delivery service is maintained.

Please see weblink 22 for full details of this important change in programme and new resources. Please ensure every effort is made to vaccinate throughout the year as people become of eligible age, which will support us in managing central stock availability.

Purified Protein Derivative PPD 10TU ordering through ImmForm

Purified Protein Derivative PPD 10TU/0.1ml for Mantoux testing will soon no longer be available to order through ImmForm as incoming supply has come to an end. Ordering of PPD 10TU will continue on ImmForm until the remaining stocks are used up. This will not impact on routine Mantoux testing and PPD 2TU/0.1ml will continue to be available to order through ImmForm.

In the UK, the standard concentration of Purified Protein Derivative (PPD) 2TU/0.1ml is used for routine Mantoux testing to identify latent TB infection among contacts of active TB cases, migrants and in individuals prior to immunosuppressive therapy. The higher concentration of 10 TU/0.1 ml is only used in rare circumstances, for example where the first Mantoux test (PPD 2TU) is negative (less than 5 mm in diameter) and a retest is considered appropriate for clinical purposes e.g. in immunocompromised patients/contacts (Green Book page 404).

PHE is reviewing the evidence for the use of PPD 10TU and will be issuing information in the near future on possible appropriate alternatives.

Reminder about MMR vaccine ordering restriction

There are currently 2 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.

May bank holidays and changed delivery schedule

Due to the May bank holidays, there will not be any deliveries or order processing by Movianto UK on **Monday 7 May and Monday 28 May 2018**. Please see the tables below for revised ordering and delivery dates.

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 the holiday period, bearing in mind the recommendation that only two to four weeks of vaccine stock be held at any one time.

Early May Bank Holiday

Customers with a standard delivery day of Monday should be aware that after 30 April 2018, your next available delivery day will be the **14 May 2018**.

Delivery date	Order cut-off date	Order cut-off time
Monday 30 April	Thursday 26 April	11:55 AM
Tuesday 1 May	Friday 27 April	11:55 AM
Wednesday 2 May	Monday 30 April	11:55 AM
Thursday 3 May	Tuesday 1 May	11:55 AM
Friday 4 May	Wednesday 2 May	11:55 AM
Monday 7 May	CLOSED – NO DELIVERIES	
Tuesday 8 May	Thursday 3 May	11:55 AM
Wednesday 9 May	Friday 4 May	11:55 AM
Thursday 10 May	Tuesday 8 May	11:55 AM
Friday 11 May	Wednesday 9 May	11:55 AM
Monday 14 May	Thursday 10 May	11:55 AM

Spring Bank Holiday

Customers with a standard delivery day of Monday should be aware that after 21 May, your next available delivery day will be the 4 June 2018.

Delivery date	Order cut-off date	Order cut-off time
Monday 21 May	Thursday 17 May	11:55 AM
Tuesday 22 May	Friday 18 May	11:55 AM
Wednesday 23 May	Monday 21 May	11:55 AM
Thursday 24 May	Tuesday 22 May	11:55 AM
Friday 25 May	Wednesday 23 May	11:55 AM
Monday 28 May	CLOSED – NO DELIVERIES	
Tuesday 29 May	Thursday 24 May	11:55 AM
Wednesday 30 May	Friday 25 May	11:55 AM
Thursday 31 May	Tuesday 29 May	11:55 AM
Friday 1 June	Wednesday 30 May	11:55 AM
Monday 4 June	Thursday 31 May	11:55 AM

Vaccine supply for non routine programmes

HEPATITIS A VACCINE

Adult

- **GSK:** Supplies of Havrix PFS singles, PFS packs of 10 and vials in singles are available. Please note, there may not be sufficient stock in each presentation to accommodate demand, therefore you may not be able to access supply of some presentations
- **Sanofi Pasteur:** Limited supplies of Avaxim are available. It is likely that there will be order restrictions in place
- MSD: Limited supplies of VAQTA Adult are available

Paediatric

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

HEPATITIS B VACCINE

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

Further details available a weblink 24.

Adult

- **GSK:** Engerix B PFS singles are available
- **GSK:** Engerix B PFS packs of 10 are available
- **GSK:** Very limited supplies of Engerix B vials are available
- **GSK:** Fendrix is available
- **MSD:** Limited supplies of HBVAXPRO 10µg are available. Supplies are expected to be restricted until further notice
- **MSD:** Limited supplies of HBVAXPRO 40µg are available. Supplies are expected to be restricted until further notice

Paediatric

- **GSK:** Engerix B Paediatric singles are available
- **MSD:** Limited supplies of HBVAXPRO 5µg are available. Supplies are expected to be restricted until further notice

COMBINED HEPATITIS A & B VACCINE

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

COMBINED HEPATITIS A & TYPHOID VACCINE

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

TYPHOID VACCINE

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

RABIES VACCINE

- **GSK:** limited supplies of Rabipur are available due to increased demand. Supply is being prioritised to hospitals and GPs for use in notified post-exposure cases only. Resupply anticipated mid-May 2018
- **Sanofi Pasteur:** Rabies BP is available to order without restrictions.

PPV (Pneumococcal Polysaccharide Vaccine)

• MSD: limited supply is currently available with next replenishment due early July

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:** Limited supplies of Revaxis are available. There are likely to be order restrictions in place for travellers

MMR

- **MSD:** No MMR stock is available for the private market and no further dates for further replenishment are available
- There is no impact on the National Immunisation Programme

HUMAN PAPILLOMAVIRUS VACCINE

• **MSD:** Stocks of GARDASIL are available for private market sales and for the National Immunisation Programme

MENINGITIS ACWY VACCINE

- **GSK:** Menveo is heavily constrained and supply anticipated to improve in late 2018
- **Pfizer:** Nimenrix is currently available for private sales. There is no impact on the National Immunisation Programme

Weblinks	S
weblink 1	https://www.gov.uk/government/publications/vaccine-update-issue- 266-july-2017-special-edition
weblink 2	https://www.youtube.com/watch?v=-b2R647uO_0
weblink 3	https://youtu.be/5EVaf9vjVwM
weblink 4	https://publichealthengland.exposure.co/100-years-of-public-health- marketing
weblink 5	http://www.bbc.co.uk/programmes/p059y0p1
weblink 6	http://www.nationalarchives.gov.uk/cabinetpapers/alevelstudies/ origins-nhs.htm
weblink 7	https://www.gov.uk/government/publications/vaccination-timeline
weblink 8	https://www.gov.uk/government/publications/national-minimum- standards-and-core-curriculum-for-immunisation-training-for- registered-healthcare-practitioners
weblink 9	https://www.e-lfh.org.uk/programmes/immunisation/
weblink 10	https://www.gov.uk/government/publications/national-minimum- standards-and-core-curriculum-for-immunisation-training-for- registered-healthcare-practitioners
weblink 11	https://portal.e-lfh.org.uk/Register
weblink 12	http://immunologyanimation.phe.org.uk/
weblink 13	https://www.rcn.org.uk/clinical-topics/public-health/specialist-areas/ immunisation
weblink 14	https://www.gov.uk/government/publications/intervax-bcg-vaccine- training-slideset-for-healthcare-professionals
weblink 15	https://www.gov.uk/government/publications/vaccine-update-issue- 272-november-2017
weblink 16	https://www.gov.uk/government/publications/the-complete-routine- immunisation-schedule
weblink 17	https://www.gov.uk/government/publications/protocol-for-ordering- storing-and-handling-vaccines
weblink 18	www.rcn.org.uk/whatson
weblink 19	https://www.rcn.org.uk/clinical-topics/public-health/specialist-areas/ immunisation
weblink 20	https://www.orderline.dh.gov.uk/ecom_dh/public/saleproduct. jsf?catalogueCode=CCPVM02
weblink 21	https://publichealthengland-immunisati.box.com/s/ eckme18lfdi2xq2grva8zox6a7255ix9
weblink 22	https://www.gov.uk/government/publications/vaccine-update-issue- 276-april-2018-shingles-special-edition
weblink 23	https://portal.immform.dh.gov.uk/Logon.aspx?returnurl=%2f
weblink 24	https://www.gov.uk/government/publications/hepatitis-b-vaccine- recommendations-during-supply-constraints
weblink 26	http://apps.who.int/worldimmunizationweek/
weblink 27	http://www.who.int/campaigns/immunization-week/2018/ social-media/en/

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