UK Health Security Agency

This Webinar will be recorded and made available as a video on SharePoint. Recording will begin at the start of the webinar and end before the question and answer section. No delegate information will be visible on the recording.

Primary care immunisation update webinar series

March 2023: Managing incomplete vaccination histories, using the UKHSA algorithm and other resources

Presenter: Helen Donovan

Welcome to the webinar. A few housekeeping tips please

- All delegate's lines are muted throughout the presentation
- If at other times you are in a noisy environment please mute your line by pressing the mute button on your screen (this can be found at the bottom)
- If you would like to ask a question please use the message function

  (this can be found on the left hand side of the screen)
- There will be an opportunity for questions, at this point microphones will be un-muted – you will need to unmute yourself though to be heard
- This webinar will be recorded and made available as a video on SharePoint. Recording will begin at the start of the webinar and end before the question and answer section. No delegate information will be visible on the recording.
- If you are having any technical problems please send a message to the host via the message function or email ImmsTraining@ukhsa.gov.uk

Webinar Essentials

Today's webinar

- Trainer is Helen Donovan
- 30 minutes Helen talking with slides
- 10 - 15 minutes for questions and answers from delegates

Access to slides

- Copy of slides emailed to delegates, along side a copy of the questions and answers.
- Underlined text on the slides are hyperlinks – click to go straight to the link

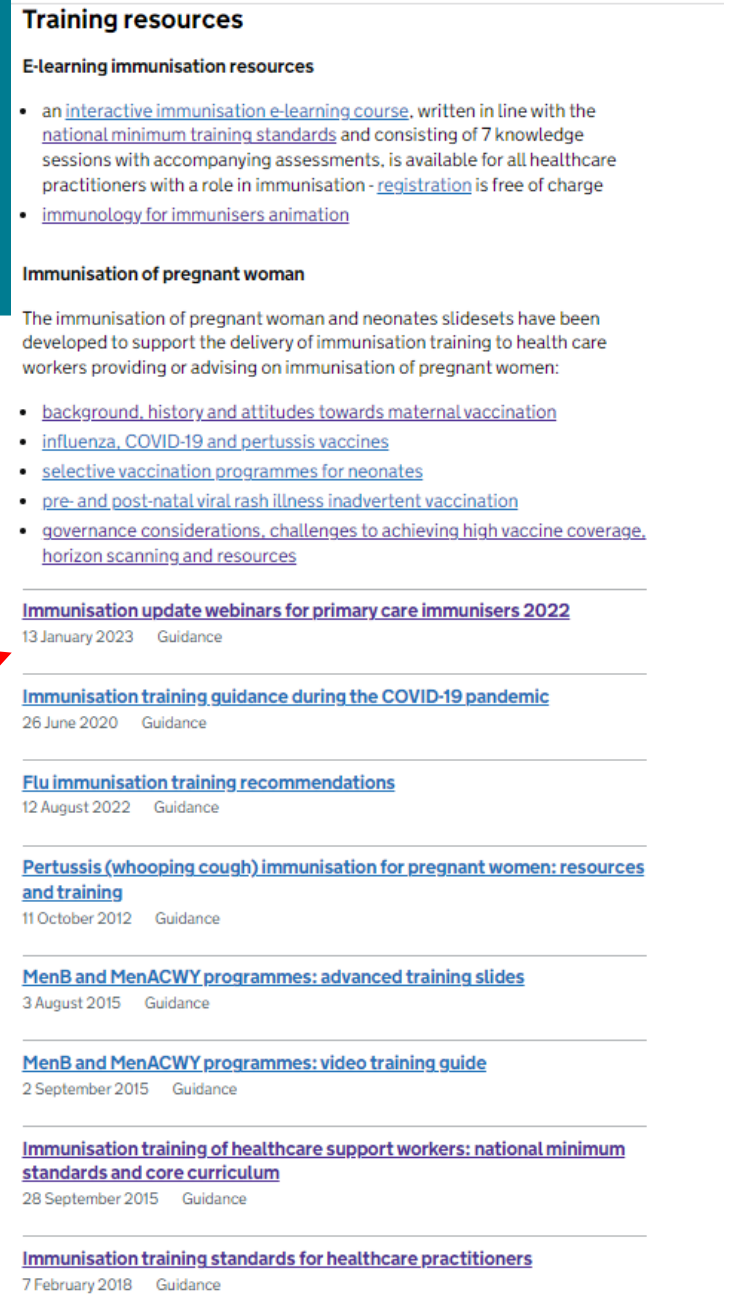
Following the webinar

- You will be emailed a link to an electronic evaluation (Select Survey)
- Your feedback is essential to support the development of the webinar series
- A certificate will be emailed once the evaluation is completed

Training resources – UKHSA Immunisation collection

The slides and recordings will be made available on the UKHSA immunisation collection portal under Training Resources and Immunisation update webinars for primary care immunisers you will be able to access:

- Copies of presentations
- Recordings of the presentations



Training resources

E-learning immunisation resources

- an interactive immunisation e-learning course, written in line with the national minimum training standards and consisting of 7 knowledge sessions with accompanying assessments, is available for all healthcare practitioners with a role in immunisation - registration is free of charge
- immunology for immunisers animation

Immunisation of pregnant woman

The immunisation of pregnant woman 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, COVID-19 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

Immunisation update webinars for primary care immunisers 2022
13 January 2023 Guidance

Immunisation training guidance during the COVID-19 pandemic
26 June 2020 Guidance

Flu immunisation training recommendations
12 August 2022 Guidance

Pertussis (whooping cough) immunisation for pregnant women: resources and training
11 October 2012 Guidance

MenB and MenACWY programmes: advanced training slides
3 August 2015 Guidance

MenB and MenACWY programmes: video training guide
2 September 2015 Guidance

Immunisation training of healthcare support workers: national minimum standards and core curriculum
28 September 2015 Guidance

Immunisation training standards for healthcare practitioners
7 February 2018 Guidance

UK Health Security Agency

This Webinar will be recorded and made available as a video on SharePoint. Recording will begin at the start of the webinar and end before the question and answer section. No delegate information will be visible on the recording.

Primary care immunisation update webinar series

March 2023: Managing incomplete vaccination histories, using the UKHSA algorithm and other resources

Presenter: Helen Donovan

Role of immunisers

Successful immunisation programmes rely on public trust and confidence

This includes trust and confidence in:

- The immunisation programme – including processes such as monitoring safety
- The vaccines being administered
- The immuniser who is knowledgeable and promotes/administers the vaccine/s

This session is an update for currently practising, trained and competent immunisers.

Foundation immunisation and vaccination training must be completed by all new immunisers

Learning outcomes

- Describe the principles of completing incomplete immunisations
- Understand how to use the UKHSA algorithm to support decision making in practice
- Confidently assess and immunise individuals with incomplete immunisation status

The session will consider;

The general principles for completing individuals vaccination history

The process and resources needed

Scenario's to work through the process using the algorithm and other resources, to identify which vaccines are needed to bring people up to date

The session links to; maximising vaccine uptake, supporting vaccine conversations and addressing concerns about vaccines and increasing vaccine acceptance.

Why is this important?

- High vaccination coverage is necessary for herd / community protection & to prevent diseases that are no longer common from resurgence in the population
- The overall aim of the UK routine immunisation schedule is to provide protection against key vaccine preventable diseases.
- All individuals have the right, under the NHS constitution, to receive the vaccinations that the Joint Committee on Vaccination and Immunisation recommends under an NHS-provided national immunisation programme, as appropriate for their age.
- If individuals are left unvaccinated, they remain susceptible and a risk to others from ongoing transmission
- People coming to the UK may not have received all the vaccines necessary to protect them and the wider population

Who might be affected?

Anyone….!

But particularly consider your local population:

- Migrants to the UK
- Families who move frequently
- Looked after children
- Gypsy Travelers
- Families who find it hard to access health services
- Children who have been unwell during childhood
- Families/individuals who are vaccine hesitant/vaccine refusers – some or all vaccines

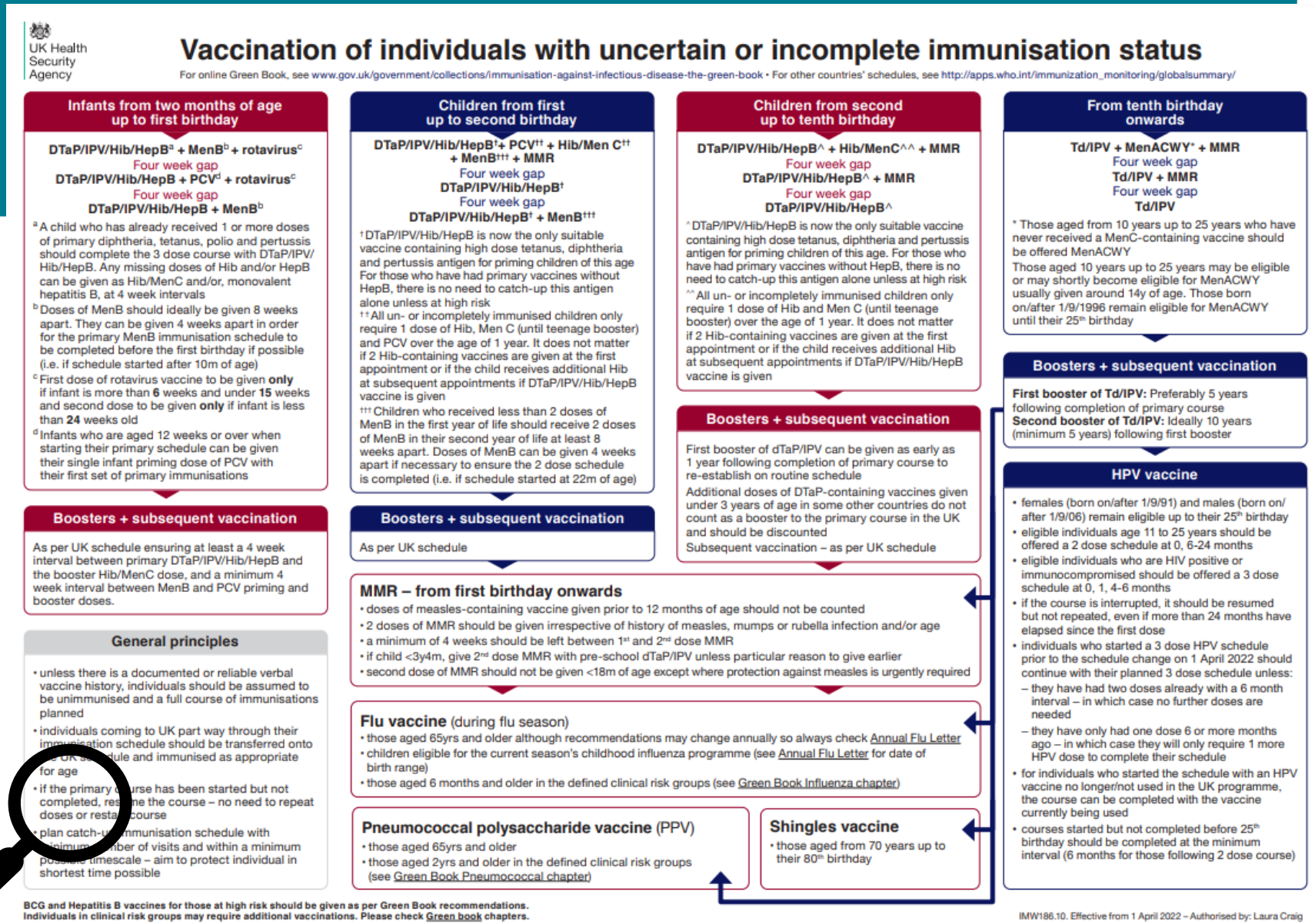
Available in a range of languages ***Immunisation information for migrants***

Local Authority (LA)	Total under 10
London	**224,000**
Barking and Dagenham	7,000
Barnet	9,000
Bexley	4,000
Brent	7,000
Bromley	5,000
Camden	6,000
Croydon	11,000
Ealing	8,000
Enfield	8,000
Greenwich	6,000
Hackney	12,000
Hammersmith and Fulham	4,000
Haringey	8,000
Harrow	5,000
Havering	4,000
Hillingdon	6,000
Hounslow	7,000
Islington	4,000

Local Authority (LA)	Total under 10
Kensington and Chelsea	5,000
Kingston upon Thames	3,000
Lambeth	7,000
Lewisham	6,000
Merton	5,000
Newham	12,000
Redbridge	8,000
Richmond upon Thames	6,000
Southwark	5,000
Sutton	3,000
Tower Hamlets	6,000
Waltham Forest	8,000
Wandsworth	9,000
Westminster	5,000

Notes: The 'Not fully vaccinated' numbers are calculated by subtracting the number of vaccinated children (according to the requirements of their age cohort) from the total number of children in their age cohort. All the data is taken from published **annual reports**, except age one, which is the sum of 4 quarters from the **2021 to 2022 quarterly reports** (2021 to 2022 annual data has not yet been published). From age 6 and above, the data is taken from the 5 year age cohort. These show more children as 'Not fully vaccinated', because they are eligible for the pre-school booster (DTaP/IPV) and vaccine coverage for this fourth dose is always lower than for the 3 doses of the primary course (DTaP/IPV/Hib/HepB).

The Algorithm



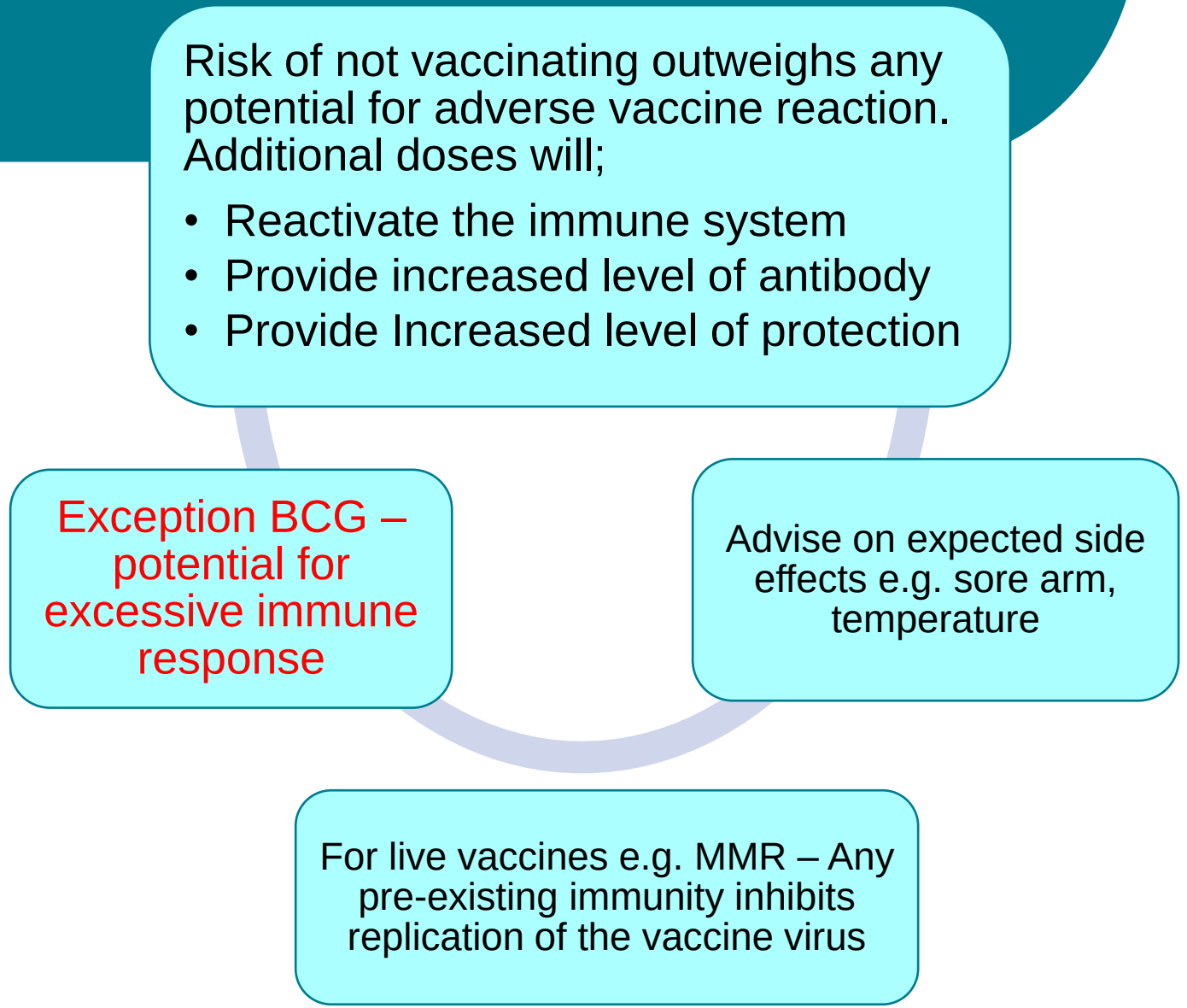
[Vaccination of individuals with uncertain or incomplete immunisation status]

The process to catch-up / manage incomplete vaccination – this takes time!

Establish	Identify	Plan
Establish the vaccine history	Identify the missing vaccines and recommend	Plan the schedule and offer missing vaccines

General principles

- ✓ Unless there is a documented or reliable vaccine history, assumed individuals are unimmunised, plan and offer a full course of vaccines.
- ✓ Transfer individuals onto the UK schedule and offer vaccines as appropriate for age.
- ✓ If a primary course has been started but not completed, resume the course – no need to repeat doses or restart course.



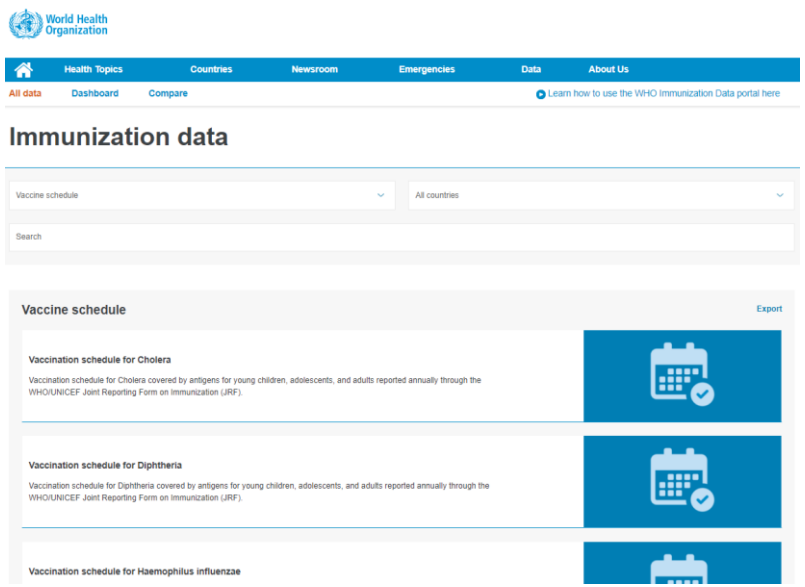
Establishing the vaccine history

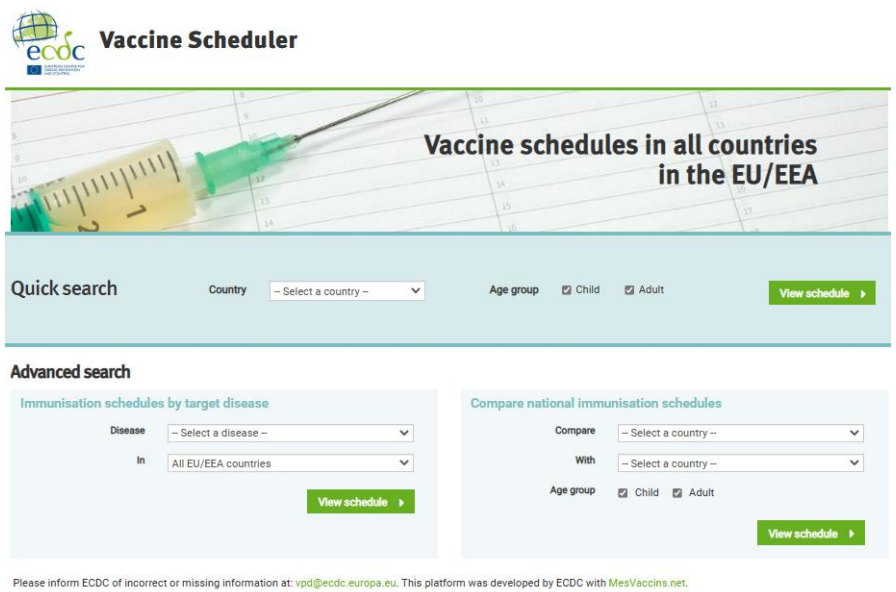
‘Documented or reliable vaccine history’

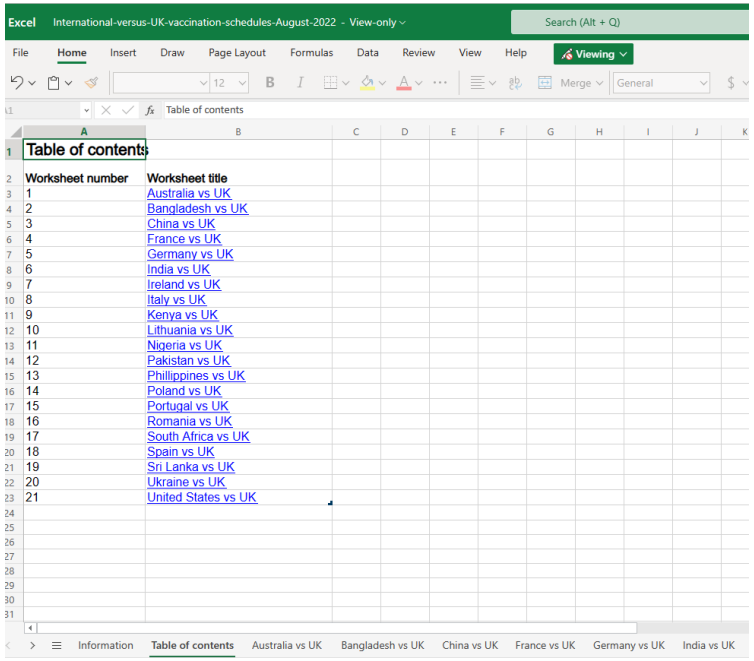
Unless there is a documented or reliable vaccine history, individuals should be assumed to be unimmunised and a full course of vaccines should be offered and then planned

- Written records
- Verbal history
- Pictures on mobile phone
- Web search vaccine names/translations
- Document any investigation and conversations with individuals and families
- Comparison of the records or history with web-based resources

Establishing the vaccine history – Useful tools







- ✓ WHO immunisation data portal
- ✓ UK and international immunisation schedules comparison tool
- ✓ European Centre for Disease Prevention and Control (this doesn't include the UK now)
- ✓ Useful foreign language translation tool adapted from CDC

Identify the missing vaccines - and recommend

The algorithm process is grouped by age.

For some vaccines there is an age limit generally based on the risk of specific disease for the UK population over a certain age

For example;

PCV and MenB vaccines are not routinely given > 2 years and

Hib and pertussis not routinely given in UK > 10 years

Recommend missing vaccines for the individual according to age for them or parents to consent

Plan the schedule

Plan catch-up immunisation schedule with minimum number of visits and within a minimum possible timescale – aim to protect the individual in shortest time possible

- Provide prompt protection – best to offer the missing vaccines as soon as possible
- Maximise opportunity to vaccinate, having too many appointments risks people not completing and coming back - there is no limit to the number of vaccines you can give
- If the vaccine records subsequently turn up and individuals end up having additional vaccines this is not an ‘error’. Your offer is based on the best advice and in the best interest of the patient with the history available this is part of the consent process.

Scheduling guidance

UK immunisation schedule: the green book, chapter 11

- ✓ In most cases vaccines can be given together on the same day. The immune system will respond to each individual antigen.
- ✓ Additional doses of one antigen may be required to complete a course of other antigens; e.g. DTaP/IPV/Hib/HepB vaccine will be needed to complete a course of tetanus, diphtheria and pertussis in a child over 2 and additional doses of HIB and Hep b vaccine will be given.
- ✓ In general, - minimum 4-week gap is recommended for doses of the same vaccine.
- ✓ Where the primary course consists of 2 doses only; - a longer gap between the 1st and 2nd dose provides better protection [i.e meningococcal B vaccine, COVID-19 vaccines and Shingrix®].
- ✓ A longer interval will often produce a better immune response - risks the individual being left susceptible for longer.
- ✓ Where children have received a booster dose of dip tet polio and other vaccines between one and 2 years they will still need the UK pre school booster, at 3 years 4 months to ensure there is enough of a gap between doses.
- ✓ Shorter intervals may be advised for rapid protection, e.g. for travel, individuals particularly susceptible or during an outbreak. *NB this may lead to a lower immune response, particularly in infants.*

Scenario 1

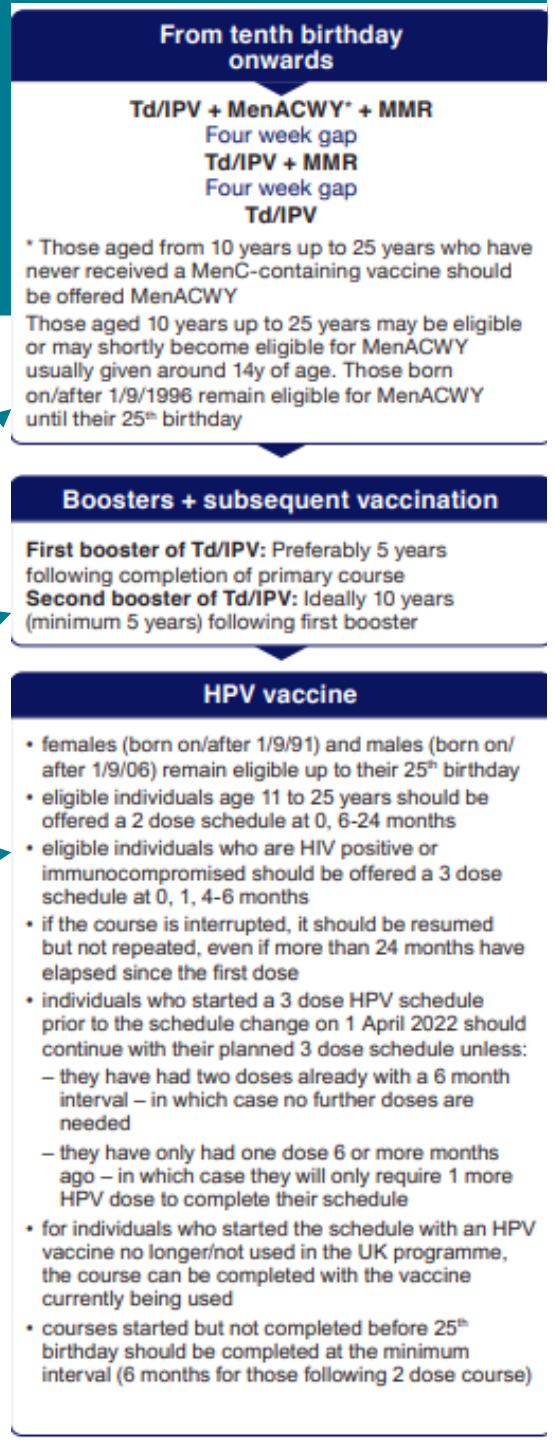
15 year old refugee with no reliable vaccine history and no medical records available
- Therefore need to assume they are unimmunised and proceed

Plan the catch up schedule and recommend:

- Tetanus, diphtheria, polio,
- meningococcal ACWY and
- MMR

Provide advice on booster doses at 5 years and 10 years

- Need to also include HPV



From tenth birthday onwards

Td/IPV + MenACWY* + MMR
Four week gap
Td/IPV + MMR
Four week gap
Td/IPV

* Those aged from 10 years up to 25 years who have never received a MenC-containing vaccine should be offered MenACWY

Those aged 10 years up to 25 years may be eligible or may shortly become eligible for MenACWY usually given around 14y of age. Those born on/after 1/9/1996 remain eligible for MenACWY until their 25th birthday

Boosters + subsequent vaccination

First booster of Td/IPV: Preferably 5 years following completion of primary course
Second booster of Td/IPV: Ideally 10 years (minimum 5 years) following first booster

HPV vaccine

- females (born on/after 1/9/91) and males (born on/after 1/9/06) remain eligible up to their 25th birthday
- eligible individuals age 11 to 25 years should be offered a 2 dose schedule at 0, 6-24 months
- eligible individuals who are HIV positive or immunocompromised should be offered a 3 dose schedule at 0, 1, 4-6 months
- if the course is interrupted, it should be resumed but not repeated, even if more than 24 months have elapsed since the first dose
- individuals who started a 3 dose HPV schedule prior to the schedule change on 1 April 2022 should continue with their planned 3 dose schedule unless:
  - they have had two doses already with a 6 month interval – in which case no further doses are needed
  - they have only had one dose 6 or more months ago – in which case they will only require 1 more HPV dose to complete their schedule
- for individuals who started the schedule with an HPV vaccine no longer/not used in the UK programme, the course can be completed with the vaccine currently being used
- courses started but not completed before 25th birthday should be completed at the minimum interval (6 months for those following 2 dose course)

Scenario 2

Infant aged 14 months Immunisation history:

- 8 weeks: DTaP/IPV/Hib/HepB, MenB, & rotavirus
- 12 weeks: DTaP/IPV/Hib/HepB, rotavirus and PCV

- They have therefore missed out on receiving the 16 week and 12 month vaccines

Plan the schedule:

- MMR, HIB/MenC, PCV, MenB
- 3rd DTaP/IPV/Hib/HepB, to complete primary course

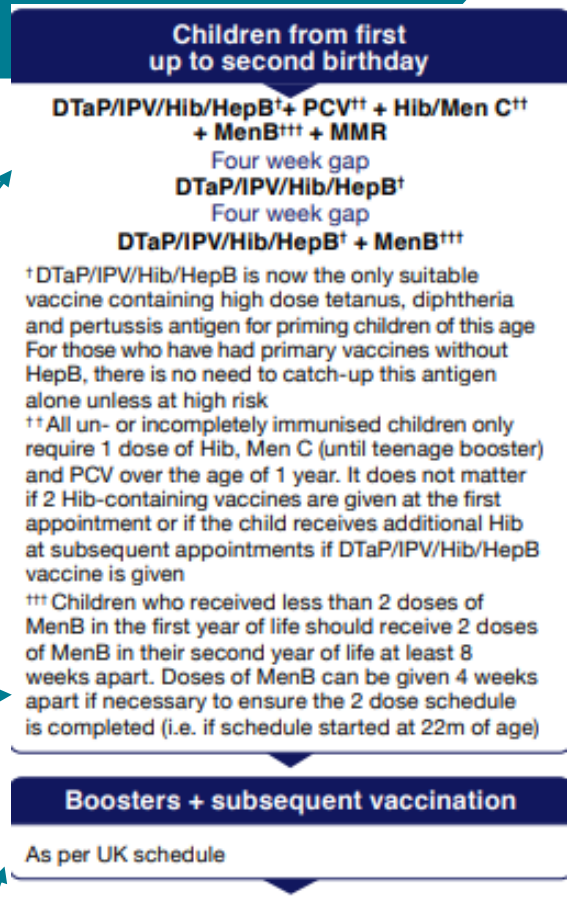
Footnotes;

- Men B - will need 2nd dose of Men B after 8 weeks.

Assurance that additional doses of HiB are ok to give

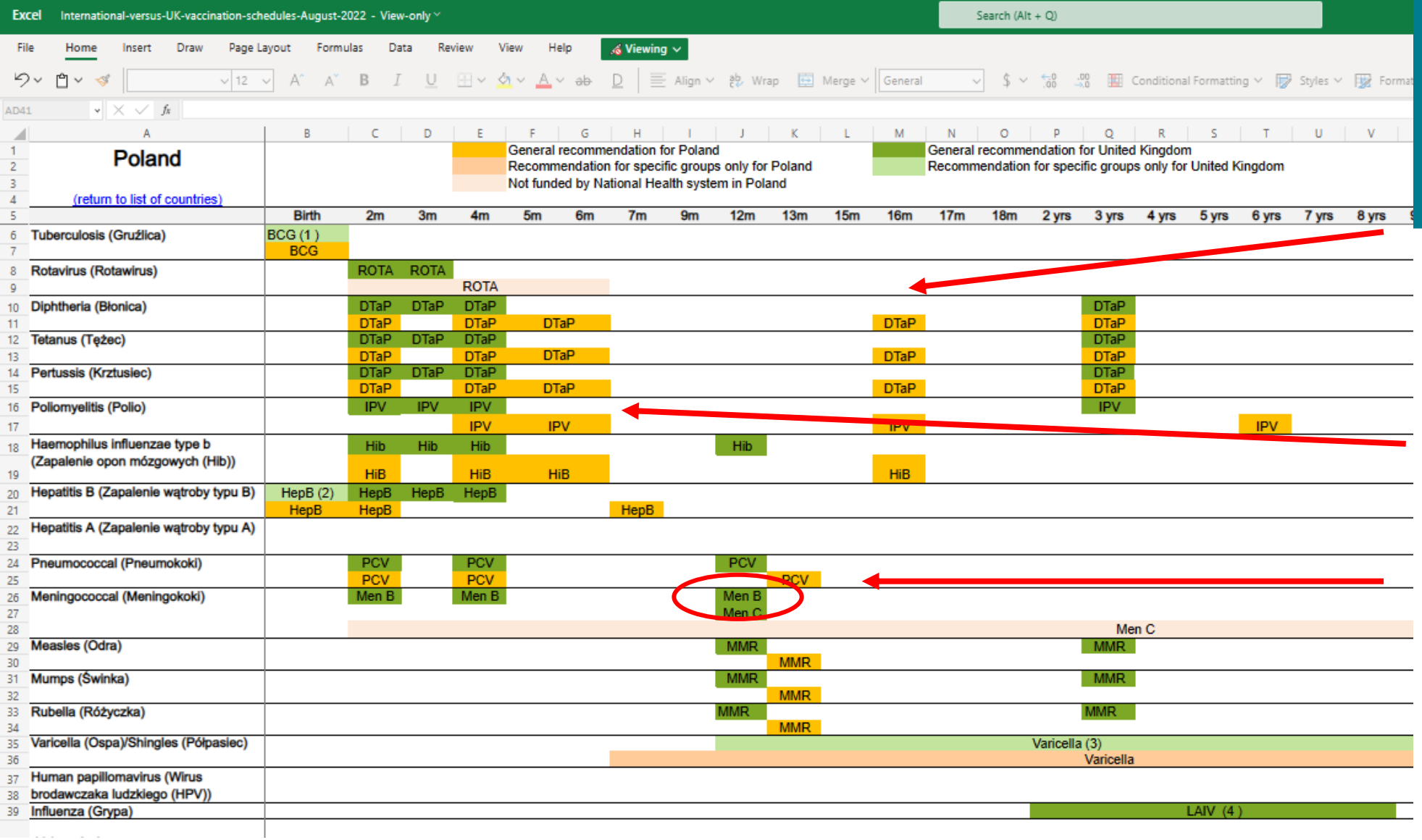
Provide advice re boosters, pre school and teenage; *transfer onto the UK schedule and immunised as appropriate for age*

Pre school booster can be given at 3 years 4 months providing there is a minimum of 1 year gap from the end of the primary course



Scenario 3

- Child born in Poland is now 7 years of age hasn’t received any vaccines since arriving in the UK age 2
- Records show they have received all vaccines as per the Polish schedule up till then



Note 4th dose of DTaP and HiB at 16 months

Different schedule for IPV but 3 doses given

No Men C (or Men B) given in Poland

Also needs annual influenza LAIV

[UK and international immunisation schedules comparison tool](#) ***last updated August 2022***

Scenario 3

Plan the schedule

- Preschool booster dose DTaP/IPV

  a 4th dose of DTaP was given around 16 months; they still need to have the pre school booster and 4th polio

- Child under 10 – needs Men C so give Hib/MenC

  Although a 4th dose of Hib was given under the current UK schedule they need the MenC so additional Hib is also given

- 2nd MMR

Advise that a second booster dTIPV can be given alongside school year cohort as a teenager

This child is 7 years of age so no longer eligible for the Men B vaccine

Children from second up to tenth birthday

DTaP/IPV/Hib/HepB^ + Hib/MenC^^ + MMR

Four week gap

DTaP/IPV/Hib/HepB^ + MMR

Four week gap

DTaP/IPV/Hib/HepB^

^ DTaP/IPV/Hib/HepB is now the only suitable vaccine containing high dose tetanus, diphtheria and pertussis antigen for priming children of this age. For those who have had primary vaccines without HepB, there is no need to catch-up this antigen alone unless at high risk

^^ All un- or incompletely immunised children only require 1 dose of Hib and Men C (until teenage booster) over the age of 1 year. It does not matter if 2 Hib-containing vaccines are given at the first appointment or if the child receives additional Hib at subsequent appointments if DTaP/IPV/Hib/HepB vaccine is given

Boosters + subsequent vaccination

First booster of dTaP/IPV can be given as early as 1 year following completion of primary course to re-establish on routine schedule

Additional doses of DTaP-containing vaccines given under 3 years of age in some other countries do not count as a booster to the primary course in the UK and should be discounted

Subsequent vaccination – as per UK schedule

The algorithm – further information

Public Health England

Vaccination of individuals with uncertain or incomplete immunisation status

For online Green Book, see www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book • For other countries' schedules, see http://apps.who.int/immunization_monitoring/globalsummary/

Infants from two months of age up to first birthday	Children from first up to second birthday	Children from second up to tenth birthday	From tenth birthday onwards
DTaP/IPV/Hib/HepB[a] + MenB[b] + rotavirus[c] Four week gap DTaP/IPV/Hib/HepB + PCV[d] + rotavirus[c] Four week gap DTaP/IPV/Hib/HepB + MenB[b]	DTaP/IPV/Hib/HepB[†] + PCV[††] + Hib/Men C[††] + MenB[†††] + MMR Four week gap DTaP/IPV/Hib/HepB[†] Four week gap DTaP/IPV/Hib/HepB[†] + MenB[†††]	DTaP/IPV/Hib/HepB^ + Hib/MenC^^ + MMR Four week gap DTaP/IPV/Hib/HepB^ + MMR Four week gap DTaP/IPV/Hib/HepB^	Td/IPV + MenACWY* + MMR Four week gap Td/IPV + MMR Four week gap Td/IPV

MMR – from first birthday onwards

- doses of measles-containing vaccine given prior to 12 months of age should not be counted
- 2 doses of MMR should be given irrespective of history of measles, mumps or rubella infection and/or age
- a minimum of 4 weeks should be left between 1st and 2nd dose MMR
- if child <3y4m, give 2nd dose MMR with pre-school dTaP/IPV unless particular reason to give earlier
- second dose of MMR should not be given <18m of age except where protection against measles is urgently required

Flu vaccine (during flu season)

- those aged 65yrs and older although recommendations may change annually so always check Annual Flu Letter
- children eligible for the current season's childhood influenza programme (see Annual Flu Letter for date of birth range)
- those aged 6 months and older in the defined clinical risk groups (see Green Book Influenza chapter)

Pneumococcal polysaccharide vaccine (PPV)

- those aged 65yrs and older
- those aged 2yrs and older in the defined clinical risk groups (see Green Book Pneumococcal chapter)

Shingles vaccine

- those aged from 70 years up to their 80th birthday

Boosters + subsequent vaccination

First booster of dTaP/IPV can be given as early as 1 year following completion of primary course to re-establish on routine schedule

Additional doses of DTaP-containing vaccines given under 3 years of age in some other countries do not count as a booster to the primary course in the UK and should be discounted

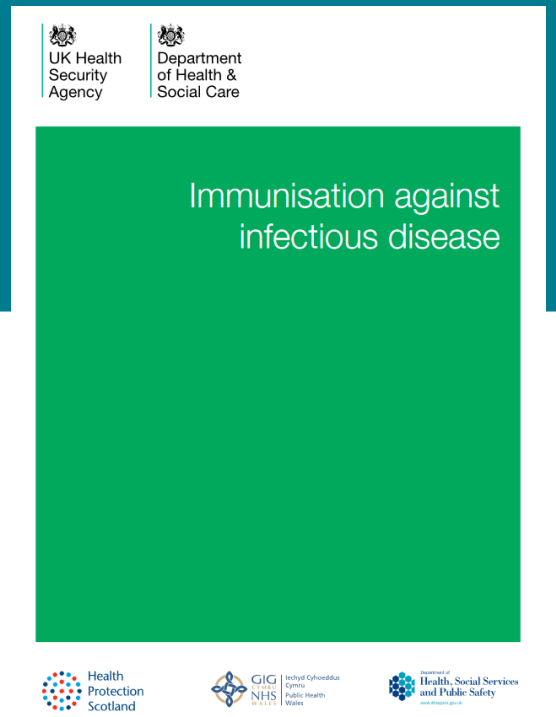
Subsequent vaccination – as per UK schedule

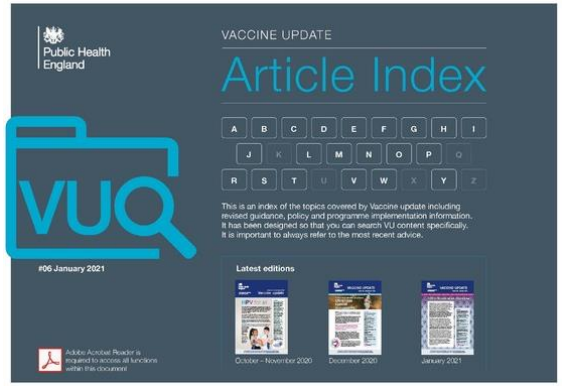
Summary

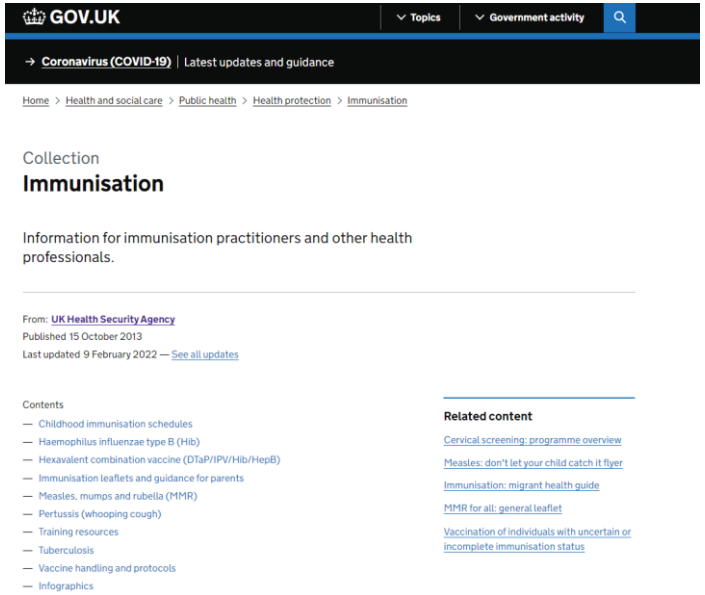
- Immunisation programmes aim to protect individuals and the wider population
- Every effort is needed to complete immunisation schedules to ensure maximum protection
- Unless there is a reliable vaccine history, assume individuals are unimmunised.
- Offer and plan for a full course of immunisations, as advised for their age
- The risk of not vaccinating outweighs any potential for adverse vaccine reaction.
- Some individuals may need additional vaccines beyond the ‘algorithm’ if in specific clinical risk groups
- You cannot ‘overdose’ on vaccines so better to give more than risk not being immunised
- The exception is BCG vaccine where there is a potential for adverse reaction, if additional doses are given.
- Many people get extra doses of vaccines with no major ill effects.

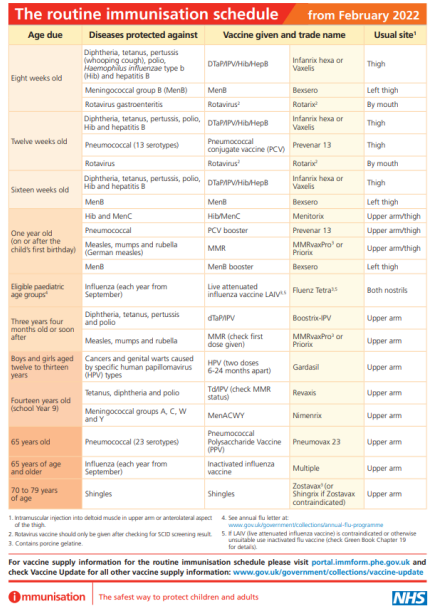
Questions

- Have access to and be familiar with:
- [Online Green Book]
- [Vaccine update] and [Vaccine update Index]
- [UKHSA immunisation collection webpages]









Immunisation training and updates

- The National Immunisation training Standards recommend all immunisers have core foundation education in immunisation and annual updates so they can keep up to date with the changes to the vaccine programmes.
- There is no specified criteria for updates, immunisers will need to determine what education they need in order to safely deliver vaccine programmes.
- The Immunisation competency tool can be a useful way to identify learning needs.
- The e-learning from e-lfh provide useful updates; see Immunisation e-learning programme for the routine programme and specific e-learning resources for influenza and COVID-19 vaccines.
- This webinar series provides additional bite sized sessions to support specific areas in immunisation delivery and support immunisers being updated.

Immunisation training standards for healthcare practitioners (2018)

Immunisation training of healthcare support workers: national minimum standards and core curriculum (2015)

RCN Immunisation Knowledge and Skills Competence Assessment Tool (2022)

Immunisation and health protection advice (London)

NHS E London Immunisation Clinical Advice Response Service (ICARS) for Immunisation queries from primary care. Email: london.immunisationqueriescars@nhs.net

North East and North Central London HPT

UK Health Security Agency
Nobel House, Smith's Square
London SW1P 3JR

Email:
necl.team@ukhsa.gov.uk
phe.nenclhpt@nhs.net

Telephone
020 3326 1658

Out of hours advice:
01895 238 282

North West London HPT

UK Health Security Agency
61 Colindale Avenue
London NW9 5EQ

Email:
phe.nwl@nhs.net

Telephone
020 3326 1658

Out of hours advice:
01895 238 282

South London HPT

UK Health Security Agency
Nobel House Smith's Square
London SW1P 3JR

Email:
slhpt@ukhsa.gov.uk
phe.slhpt@nhs.net

Telephone
020 3326 1658

Out of hours advice:
01895 238 282

Primary care immunisation update webinar series 2023

March to July

- Vaccine ordering, storage & handling
- Incomplete immunisation schedules
- Vaccination of individuals with underlying medical conditions
- Vaccine administration – best practice
- Child and adolescent immunisation update
- Addressing concerns around vaccines – supporting acceptance

September to December

- Influenza and Covid-19
- Shingles and pneumococcal (adult) vaccines
- Adverse events following immunisation
- Current Issues vaccine schedule changes. Session to be confirmed

UKHSA London Immunisation Update Webinar March 2023: Managing incomplete vaccination histories, using the UKHSA algorithm and other resources

After the webinar, please remember to:

- Complete the evaluation (link being emailed to you today from Eventbrite)
- Print/save the certificate (emailed to you once the survey complete)
- Use the prompts to capture your reflections on the certificate
- Book for future webinars

If you need to contact the webinar team, please email: ImmsTraining@phe.gov.uk

Webinar Series

	Date	Start time	Link to register
March 2023	**Vaccine ordering, storage and handling.**		
1	09/03/2023	14:00	https://March23-Webinar1-VaccineOrderingStorageandHandling.eventbrite.co.uk
2	15/03/2023	14:00	https://March23-Webinar2-VaccineOrderingStorageandHandling.eventbrite.co.uk
3	16/03/2023	09:30	https://March23-Webinar3-VaccineOrderingStorageandHandling.eventbrite.co.uk
March 2023	**Incomplete immunisation schedules**		
1	07/03/2023	09:30	https://March23-Webinar1-IncompleteImmunisationSchedules.eventbrite.co.uk
2	07/03/2023	13:00	https://March23-Webinar2-IncompleteImmunisationSchedules.eventbrite.co.uk
3	23/03/2023	09:30	https://March23-Webinar3-IncompleteImmunisationSchedules.eventbrite.co.uk
April 2023	**Vaccination of individuals with underlying medical conditions**		
1	05/04/2023	14:00	https://April23-Webinar1-VaccinationWithUnderlyingConditions.eventbrite.co.uk
2	26/04/2023	09:30	https://April23-webinar2-vaccinationwithunderlyingmedicalconditions.eventbrite.co.uk
3	26/04/2023	14:00	https://April23-Webinar3-VaccinationWithUnderlyingConditions.eventbrite.co.uk