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

October 2023: Shingles and Pneumococcal(ADULT) vaccination Programmes

Helen Donovan

Welcome to the webinar. Please take a note of the following tips below

- 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, please keep questions relevant to the session (the chat message function 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, the 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
- 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

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Primary care immunisation update webinar series

October 2023: Shingles and Pneumococcal (ADULT) vaccination Programmes

Helen Donovan

Learning outcomes

Update on the Shingles and pneumococcal vaccine programmes in the UK

Describe the UK Shingles vaccination programme and the changes being implemented from 2023

Describe the UK pneumococcal vaccination programme for adults

Reflect on areas for best practice and further development within your own clinical workplace

Utilise the UKHSA and NHS England resources available to support safe and effective delivery of the vaccine programmes

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

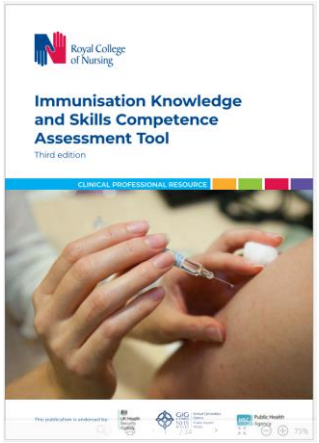
This session is an update for currently practising, trained and competent immunisers.

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

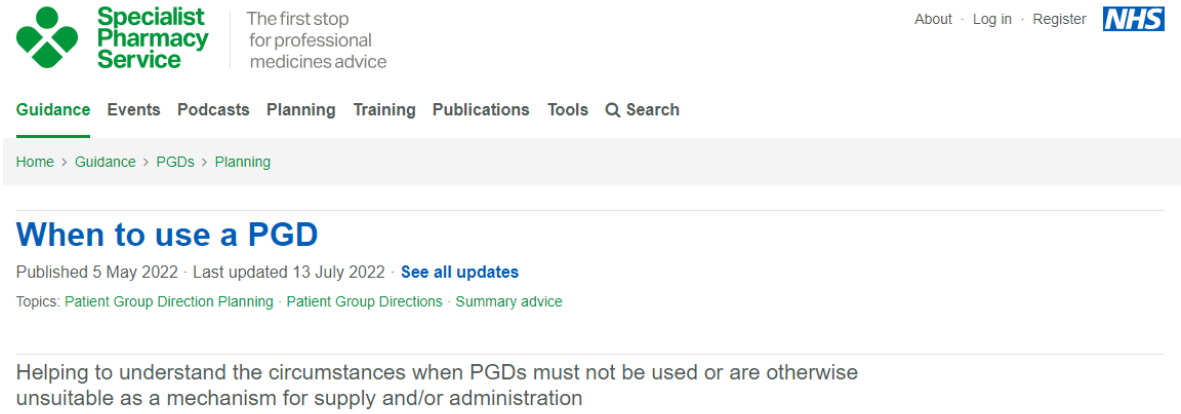
Immunisation training publications

[Registered Healthcare Practitioners]

[HealthCare Support Workers]



[Immunisation Knowledge and Skills Competence Assessment Tool (22 Feb 22)]



[Specialist Pharmacy services advice and guidance on when and who can use a PDG]

Shingles

GOV.UK

Home > Infectious diseases

Collection

Shingles: guidance and vaccination programme

The characteristics, management and surveillance of shingles (herpes zoster).

From: UK Health Security Agency

Published 13 September 2013

Last updated 17 July 2023 — See all updates

Get emails about this page

Contents

- Guidance
- Management
- Leaflets, posters and resources
- Programme documents
- Data collection
- Research and analysis

UKHSA Shingles programme

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UK Health Security Agency

Guidance

Shingles immunisation programme: information for healthcare practitioners

Updated 7 September 2023

Applies to England

Contents

- Background history
- Shingles
- The Green Book Shingles chapter 28a
- The shingles vaccination programme
- Eligible cohorts – until 31 August 2023
- Eligible cohorts – from 1

Background history

In 2010, the Joint Committee on Vaccination and Immunisation (JCVI) was asked by the Secretary of State for Health to review the available evidence relevant to the introduction of a universal vaccination programme to protect against shingles (Herpes Zoster).

JCVI considered a range of issues including disease epidemiology, vaccine efficacy, vaccine safety and the cost effectiveness of introducing a routine shingles vaccination programme in the UK. Based on the findings of the cost-effectiveness analysis, JCVI

Shingles vaccination: guidance for healthcare practitioners


Chapter 28a: Shingles (herpes zoster) 23 August 2021

28a

Shingles (herpes zoster)

The disease

Shingles (herpes zoster) is caused by the reactivation of a latent varicella zoster virus (VZV) infection, generally decades after the primary infection.

Primary VZV infection typically occurs during childhood and causes chickenpox (varicella); further information on this can be found in Chapter 34. Following primary VZV infection, the virus enters the sensory nerves and travels along the nerve to the sensory dorsal root ganglia and establishes a permanent latent infection. Reactivation of the latent virus leads to the clinical manifestations of shingles and is associated with immune senescence or suppression of the immune system i.e. immunosuppressive therapy, HIV infection, malignancy and/or increasing age. The annual incidence of shingles for those aged 70 to 79 years is estimated to be around 790 to 880 cases per 100,000 people in England and Wales (van Hoek *et al.*, 2009), see Figure 1. The risk and severity of shingles increases with age.

The first signs of shingles begin most commonly with abnormal skin sensations and pain in the affected area of skin (dermatome). Headache, photophobia, malaise and less commonly fever may occur as part of the prodromal phase. Within days or weeks, a unilateral vesicular (fluid filled blisters) rash typically appears in a dermatomal distribution. In immunocompromised individuals, a rash involving multiple dermatomes may occur. The affected area may be intensely painful with associated paraesthesia (tingling, pricking, or numbness of the skin), and intense itching is common (Gilden *et al.*, 1991). The rash typically lasts between two and four weeks.

Updated in 2021 Shingles: the green book chapter 28a (up to 31 August 2023)


Chapter 28a: Shingles (herpes zoster) 26 July 2023

28a

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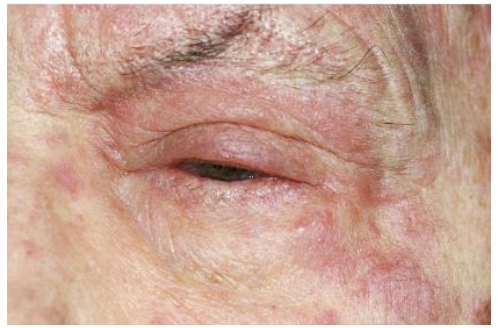
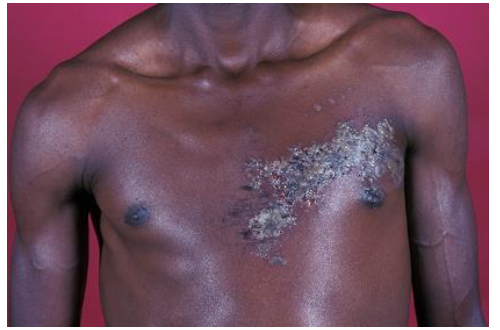
Updated in July 2023 Shingles: the green book chapter 28a (from 1 September 2023)

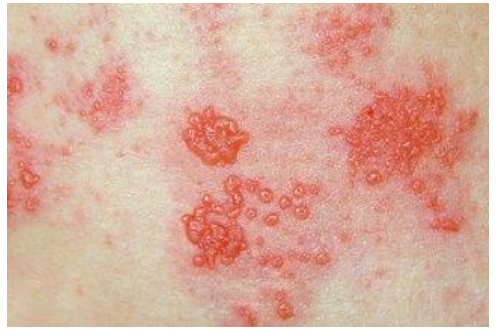
Chapter 28a - 1

Varicella Zoster virus - Shingles Disease

- Chickenpox and Shingles are caused by the varicella zoster virus also called herpes zoster virus,
- Herpes zoster virus is one of the wider herpesvirus group - DNA viruses
- The first infection with the herpes zoster virus results in chickenpox infection.
- On recovery the virus lies dormant in the dorsal nerve endings
- Shingles infection develops as a result of reactivation of the virus
- This can occur at any time, but the risk increases with age and in those who are immunosuppressed.
- Shingles presents as vesicular rash of the nerve cells and surrounding skin. It is usually confined to the area of skin related to the sensory nerve in which the virus had been lying dormant.

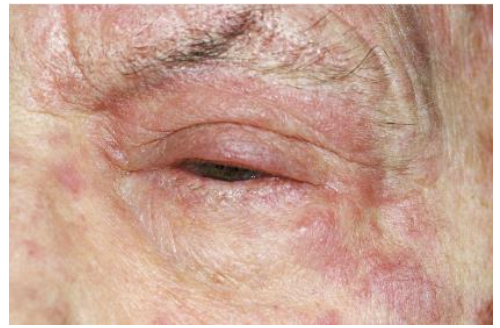


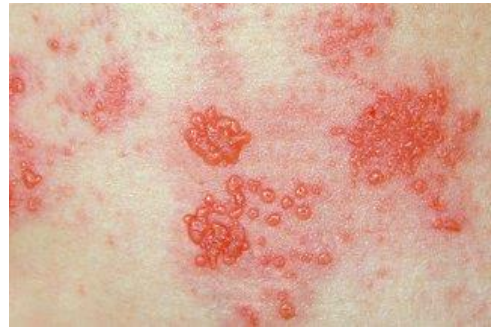




Causes and Transmission

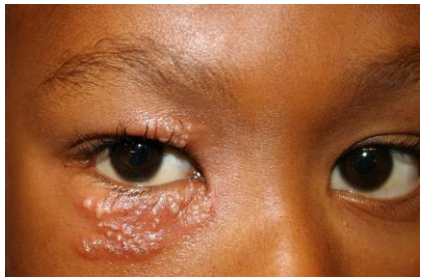
- Chickenpox is a common disease of childhood.
- It is highly infectious ~ 90% of susceptible household contacts will develop disease.
- In the UK >90% of infections occur before adolescence, <5% of adults are susceptible.
- The disease is more severe in adults and neonates, pregnant women are particularly at risk depending on the time of infection during pregnancy.
- Shingles cannot be caught from someone else, whether they have chickenpox or shingles.
- The virus from the shingles lesions can be transmitted to those who are susceptible to cause chicken pox but there is no evidence that chicken pox lesions can cause shingles.
- Cause of reactivation is unclear.
- It is increasingly common in the elderly but also associated with malignancy, immunosuppressant therapy or HIV infection.

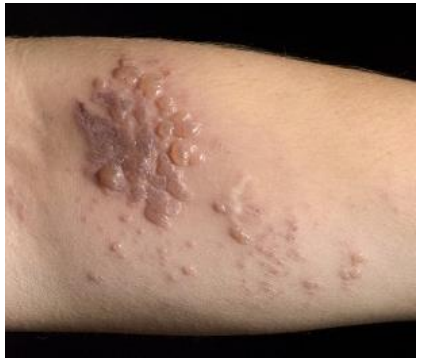


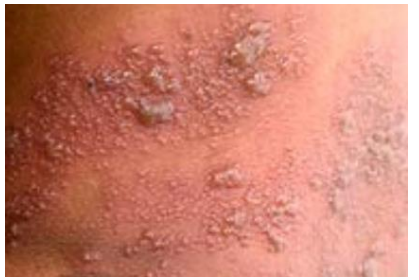


Herpes Zoster (Shingles) Disease - morbidity

- Severe scarring may remain after the rash has gone, if the cornea was involved, this can lead to blindness.
- Other complications include, secondary bacterial skin infections and more rarely, ophthalmic zoster (leading to keratitis, corneal ulceration, conjunctivitis, retinitis, optic neuritis and/or glaucoma) and peripheral motor neuropathy.
- The rash is usually accompanied by pain, neuralgia, which may be so severe that an opioid analgesic is needed. The intense pain may precede the rash.
- The pain may persist for years after the rash has gone, post herpetic neuralgia (PHN). This can be very debilitating. PHN is commoner in patients who are older and those who are immunocompramised when they develop shingles.
- ~ 50,000 cases of shingles occur in people aged 70 and above each year in E&W
- Of these, 14,000 develop painful and long-lasting Post Herpetic Neuralgia (PHN)
- 1,400 cases of shingles result in hospitalisation
- 1 in 1,000 cases of shingles are estimated to result in death







Shingles Vaccination Programme

Aim:

To boost immunity in individuals with pre-existing varicella zoster virus (VZV) immunity. Reduce the incidence and severity of shingles disease and subsequent post-herpetic neuralgia (PHN)

Vaccination in the UK

- Introduced in 2013 with the Zostavax®, live vaccine and a catch-up programme up to 80 years of age
- Vaccination for all those aged 70
- Catch up – people remain eligible up to their 80th birthday
- As a live vaccine Zostavax® is contraindicated in those who are immunosuppressed
- The Shingrix® vaccine was introduced in 2018 for all severely immunosuppressed individuals
- Shingrix® to replace Zostavax® from 1st September 2023

The Shingles vaccines:

Zostavax®

- Used in the UK Since 2013
- A live vaccine with a one dose schedule
- contraindicated in those who are immunosuppressed.
- No longer manufactured, UK using up existing stocks.

Image c… …steur
MSD Take… …slide set

Shingrix®

- Is a Recombinant adjuvanted (non-live) subunit vaccine
- Part of UK programme since 2018 for severely immunocompromised individuals
- To replace Zostavax from September 2023 in a phased implementation
- 2 dose schedule, the second dose enhances cellular immune response
- The vaccine has a good efficacy and safety profile

The UK Singles Vaccine programme

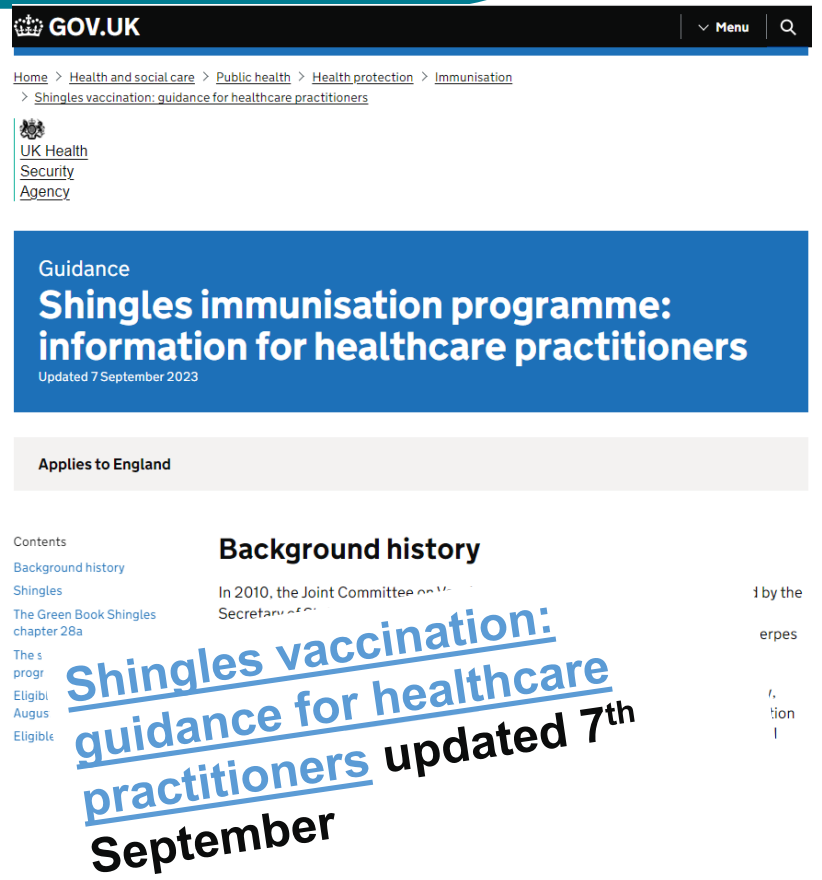
- **From 1st September 2023 - Shingrix® will gradually replace Zostavax® vaccine with an increase to the eligible groups**
  1. **Immunosuppressed cohort,** all severely immunosuppressed individuals from 50 years of age (as defined in the Green Book) from 1st September 2023
  2. **Immunocompetent cohorts,** individuals will become eligible from 60 years of age in a phased implementation over 10 years
- Those previously eligible aged 70 – 79 should be offered the Zostavax® vaccine until supplies are exhausted.
- Green Book Shingles (herpes zoster) chapter 28a 2 versions until this time
  - ✓ the new version with Shingrix® information
  - ✓ the existing version with information about Zostavax®, will be removed once Zostavaz® is no longer available.

Vaccine update: July 2023, shingles special edition

SINGLES VACCINE PROGRAMME

1. Immunosuppressed cohort:

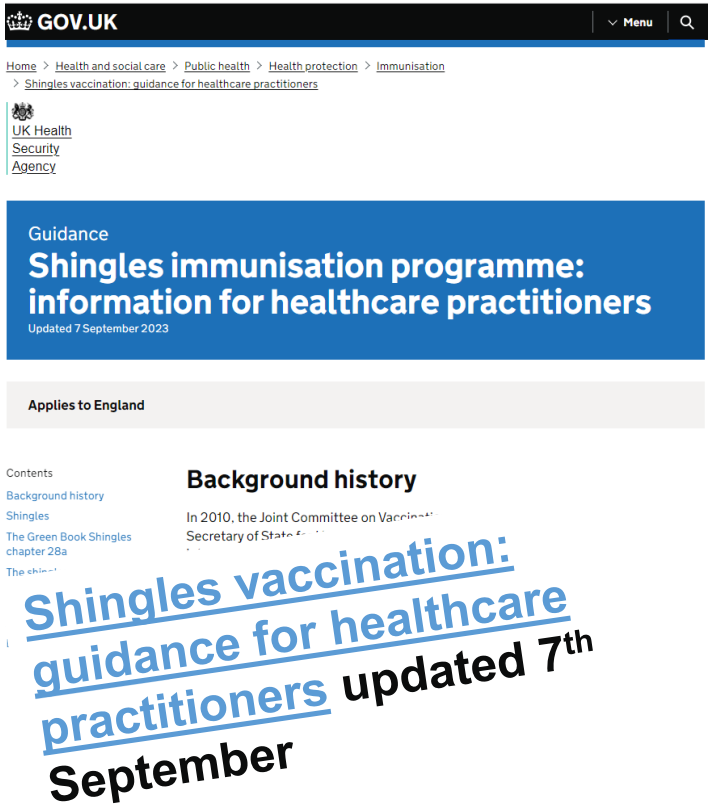
- ✓ Eligible cohort include all those 50 years and over who are immunosuppressed (as defined by the green book) if not previously vaccinated against shingles.
- ✓ These individuals remain eligible throughout their lives, no upper age limit. People should be offered the vaccine as soon as they become eligible.
- ✓ Those who are immunosuppressed are the highest priority for vaccination and are at the highest risk of shingles disease and complications



SINGLES VACCINE PROGRAMME

2. Immunocompetent cohort. In a 2 stage phased implementation over 10 years

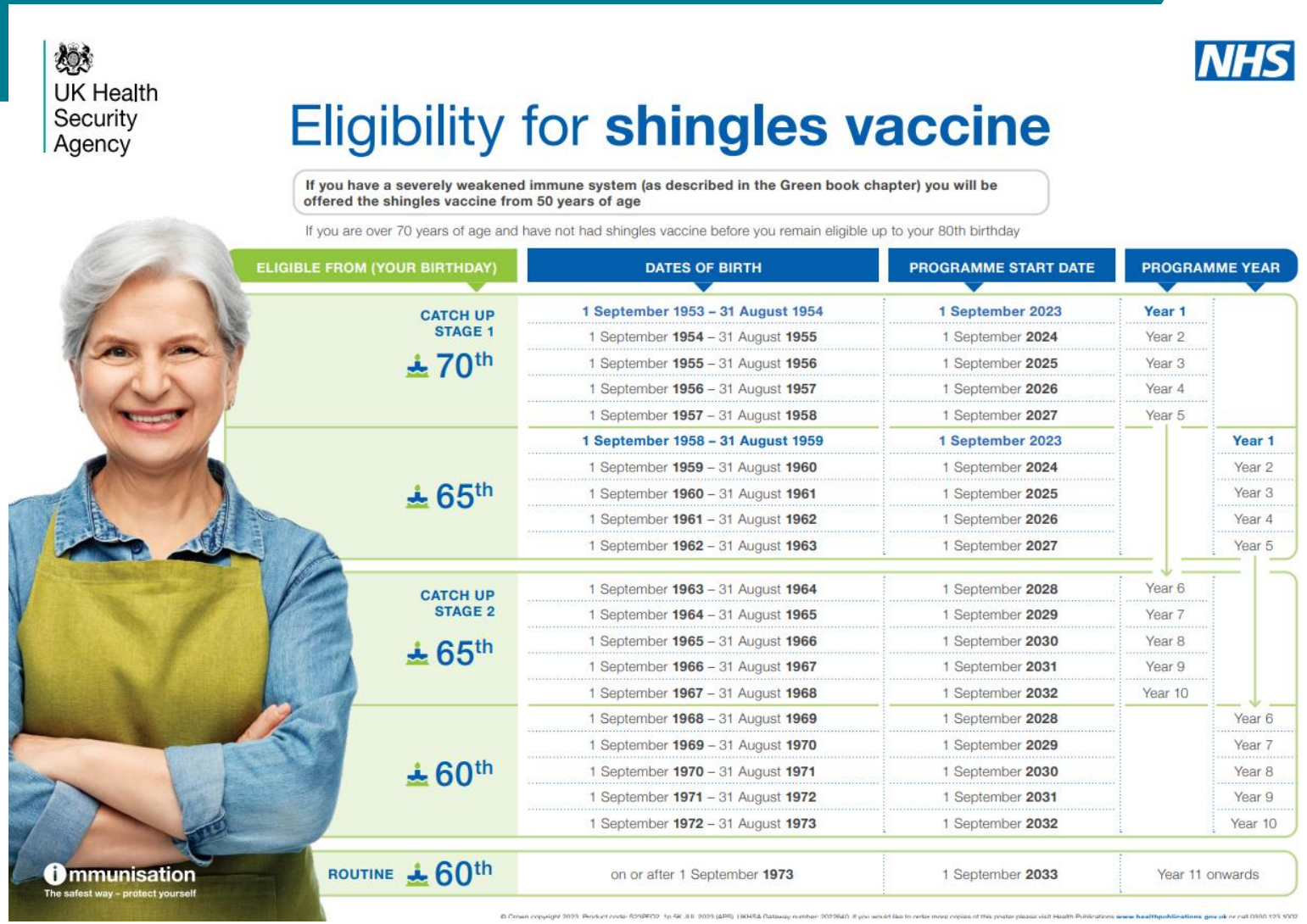
- **Phase 1: From 1st September 2023;** Shingrix® to be offered to those turning 65 and 70 years from 1st Sept 2023. Those individuals turning 66, 67, 68, and 69 will become eligible in the year they turn 70.
- **Phase 2: From 1st September 2028**; Shingrix® to be offered to those turning 60 and 65 years. Those individuals aged 61, 62, 63 and 64 will become eligible in the year they turn 65.



✓ Individuals remain eligible up to their 80th birthday

✓ Ongoing offer -from 1 September 2033 and thereafter, Shingrix® will be offered routinely at age 60 years

- **Immunocompetent patients**
- **Timeline for the phased implementation of the change to eligible age**



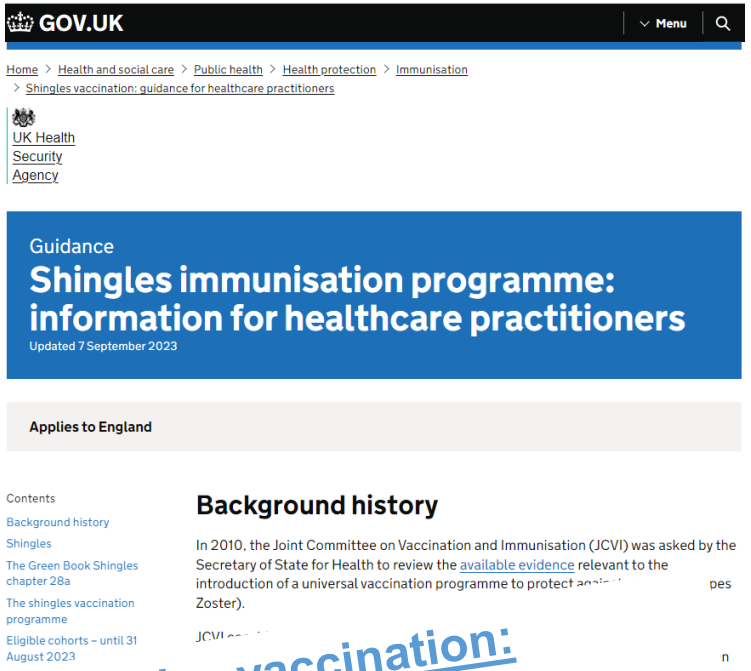
UK eligibility for Shingles vaccine from September 2023

From 1st September 2023	All those severely immunocompromised (Green Book) from 50 years of age – No Upper age limit	Shingrix®
From 1st September 2023	Phase 1 All immunocompetent Individuals Turning 65 or 70 during the year - 1st Sept 2023 and 31st Aug 2024 Those in between will need to wait until the year they are turning 70 People remain eligible until 80 years of age	Shingrix®
Previously eligible Before 1st September 2023	Those previously eligible remain so until they reach 80 years of age and where appropriate should get Zostavax until supplied exhausted	Zostavax®

From 1st September 2028	• Phase 2 All immunocompetent Individuals, turning 60 or 65 • Gradual catch up for those in between, as they turn 65 • People remain eligible until 80 years of age	**From Sept 2033** Ongoing routine offer for immunocompetent individuals

SINGLES VACCINE DOSING

- Zostavax® requires one dose
- Shingrix® requires 2 doses, the SmPC schedule is for the 2nd dose to be given a minimum of 8 weeks after the 1st dose
- For operational guidance:
  - For those who are immunosuppressed 2nd dose to be given, 8 weeks to 6 months after the first dose
  - For those Immunocompetent 2nd dose to be given 6 months – 12 months after the first dose
- There is no need to repeat doses
- Zostavax® and Shingrix® can be given at any time of the year and alongside all other vaccines
- All vaccine ordered via ImmForm.


GOV.UK

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UK Health Security Agency

Guidance

Shingles immunisation programme: information for healthcare practitioners

Updated 7 September 2023

Applies to England

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Shingles

The Green Book Shingles chapter 28a

The shingles vaccination programme

Eligible cohorts – until 31 August 2023

Background history

In 2010, the Joint Committee on Vaccination and Immunisation (JCVI) was asked by the Secretary of State for Health to review the available evidence relevant to the introduction of a universal vaccination programme to protect

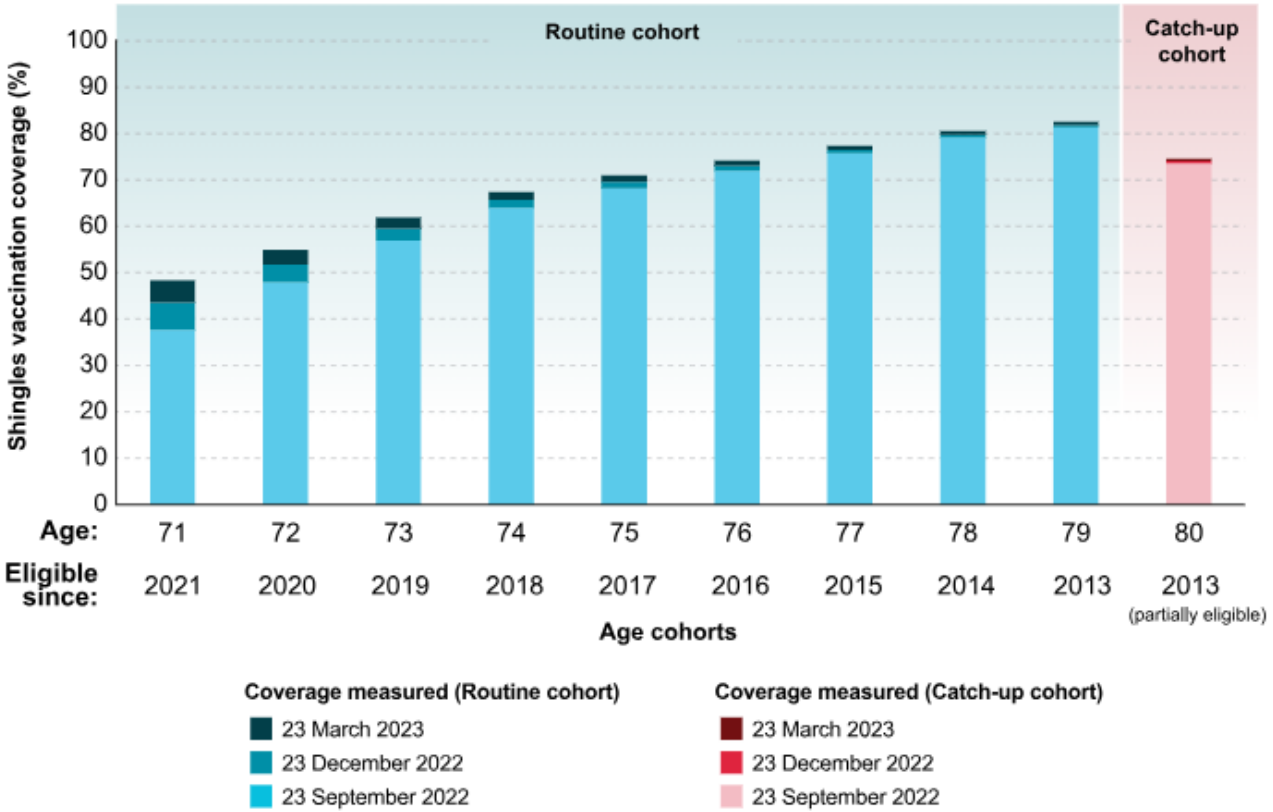
Zoster).

Shingles vaccination: guidance for healthcare practitioners

last update 7th September 2023

Impact of vaccination

Shingles vaccine coverage at 23 December 2022 for cohorts turning 71 to 80 from 1 April 2022 to 31 March 2023.

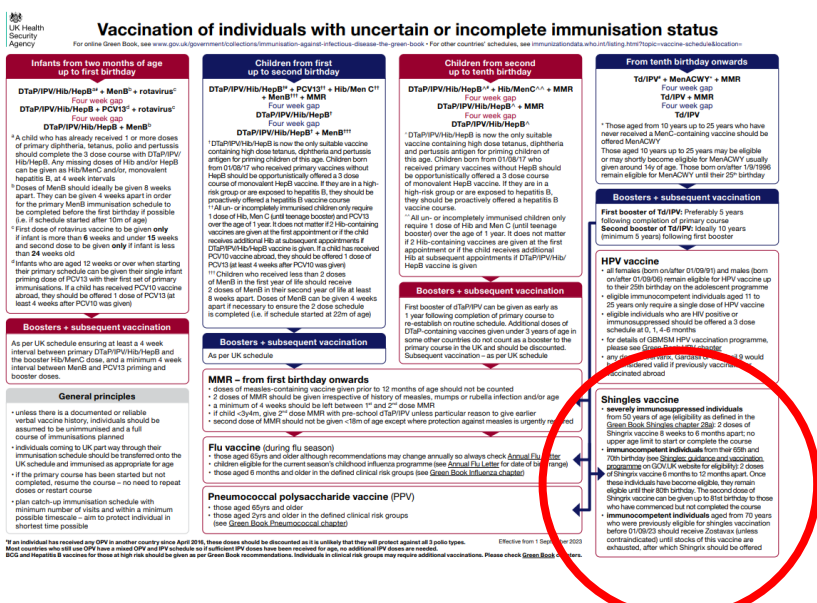


- Reductions in both GP consultations and hospitalisations for herpes zoster and post-herpetic neuralgia in the five years following introduction of the programme.
- Every effort should be made to vaccinate individuals as soon as they become eligible.

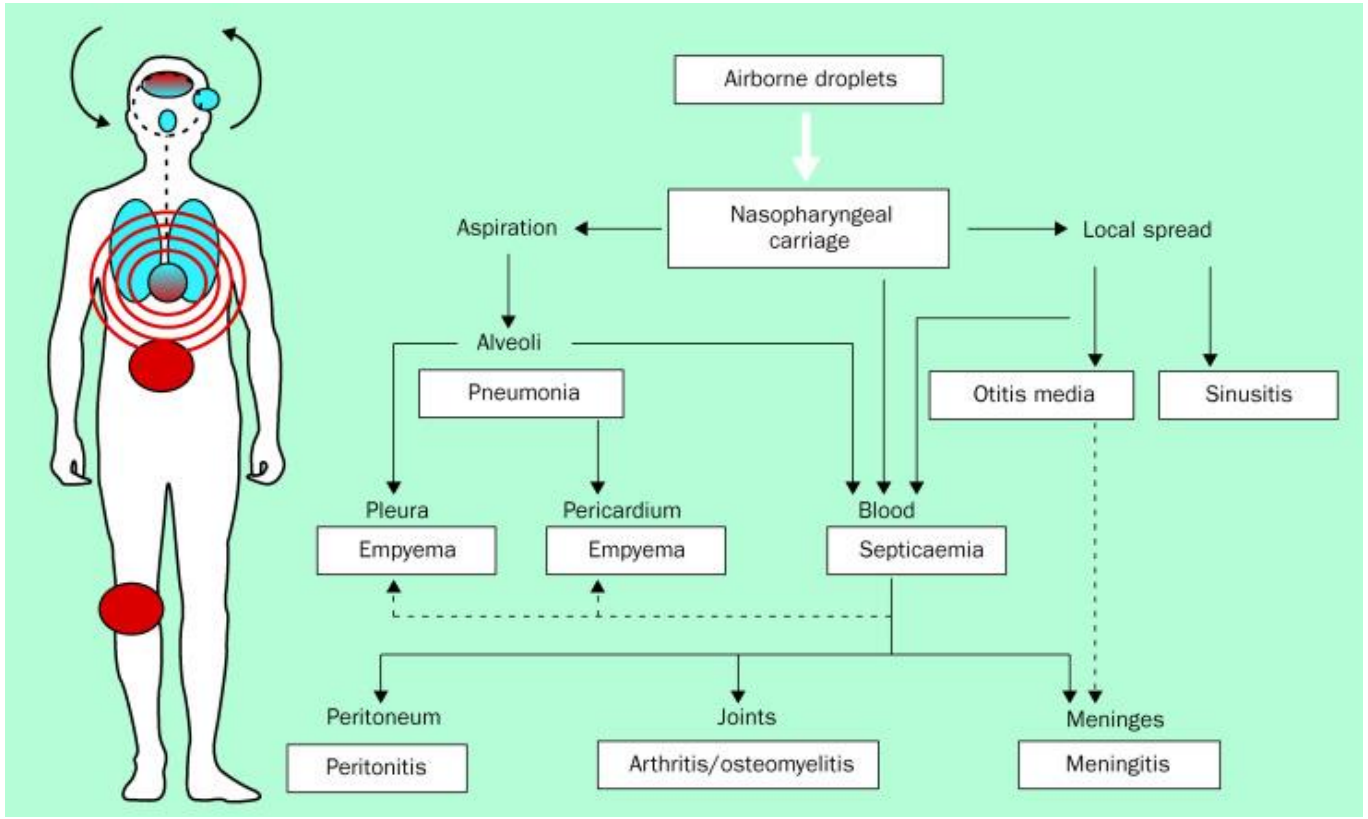
[Shingles vaccine coverage (England): report for quarter 3 of the financial year 2022 to 2023]

Summary

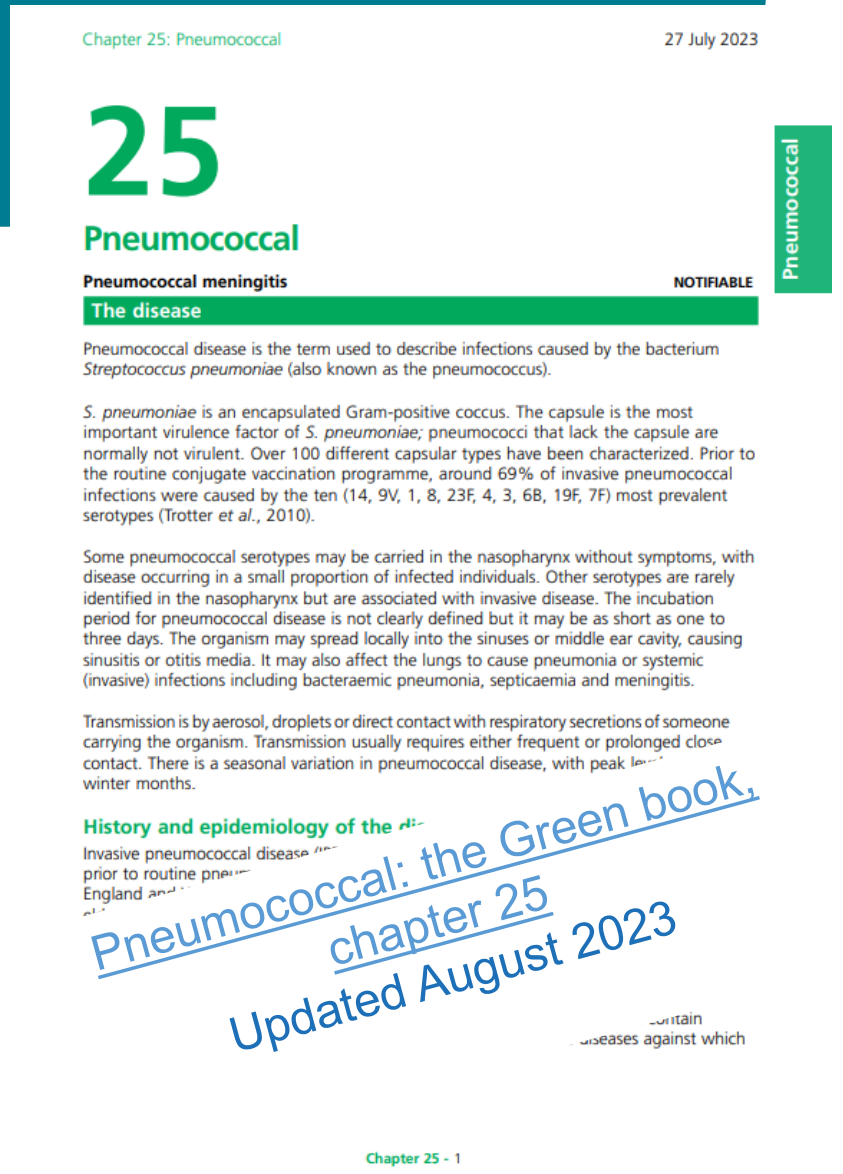
- ✓ **Severely immunosuppressed individuals from 50 years of age**
  - 2 doses of Shingrix vaccine 8 weeks to 6 months apart;
  - no upper age limit to start or complete the course
- ✓ **Immunocompetent individuals from their 65th and 70th birthday**
  - 2 doses of Shingrix vaccine 6 months to 12 months apart.
  - Once these individuals have become eligible, they remain eligible until their 80th birthday.
  - The second dose of Shingrix vaccine can be given up to 81st birthday to those who have commenced but not completed the course
- ✓ **Immunocompetent individuals aged from 70 years**
  - Those eligible before 01/09/23 should continue to receive Zostavax (unless contraindicated) until stocks of this vaccine are exhausted, after which Shingrix should be offered



PNEUMOCOCCAL



D Bogaert et al (2004) Streptococcus pneumoniae colonisation: the key to pneumococcal disease Lancet



Chapter 25: Pneumococcal 27 July 2023

25

Pneumococcal

Pneumococcal meningitis NOTIFIABLE

The disease

Pneumococcal disease is the term used to describe infections caused by the bacterium *Streptococcus pneumoniae* (also known as the pneumococcus).

S. pneumoniae is an encapsulated Gram-positive coccus. The capsule is the most important virulence factor of *S. pneumoniae;* pneumococci that lack the capsule are normally not virulent. Over 100 different capsular types have been characterized. Prior to the routine conjugate vaccination programme, around 69% of invasive pneumococcal infections were caused by the ten (14, 9V, 1, 8, 23F, 4, 3, 6B, 19F, 7F) most prevalent serotypes (Trotter *et al.*, 2010).

Some pneumococcal serotypes may be carried in the nasopharynx without symptoms, with disease occurring in a small proportion of infected individuals. Other serotypes are rarely identified in the nasopharynx but are associated with invasive disease. The incubation period for pneumococcal disease is not clearly defined but it may be as short as one to three days. The organism may spread locally into the sinuses or middle ear cavity, causing sinusitis or otitis media. It may also affect the lungs to cause pneumonia or systemic (invasive) infections including bacteraemic pneumonia, septicaemia and meningitis.

Transmission is by aerosol, droplets or direct contact with respiratory secretions of someone carrying the organism. Transmission usually requires either frequent or prolonged close contact. There is a seasonal variation in pneumococcal disease, with peak le
winter months.

History and epidemiology of the di

Invasive pneumococcal disease
prior to routine pneu
England and

Pneumococcal: the Green book, chapter 25
Updated August 2023

contain
diseases against which

Chapter 25 - 1

Pneumococcal

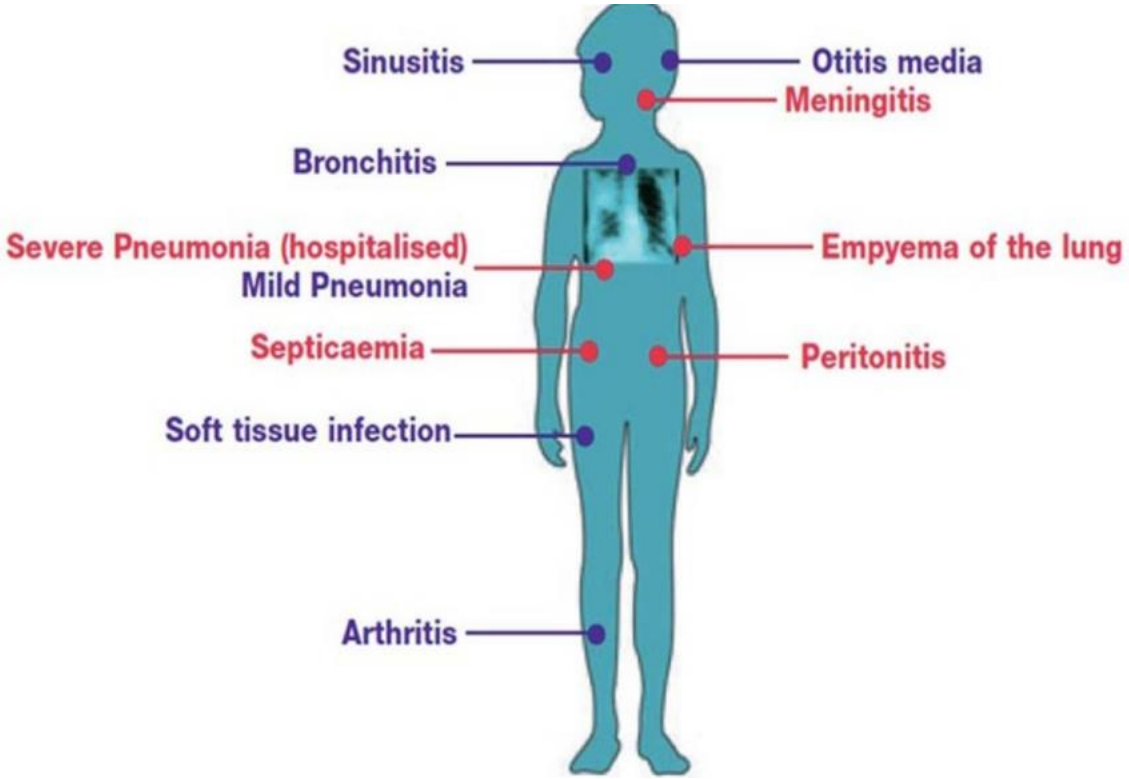
Pneumococcal Infection

- There are over 90 serotypes (sub types) of the pneumococcus bacteria (*Streptococcus pneumoniae*).
- Around 20 – 30 of these are responsible for the majority of disease
- The bacterium can cause a wide range of disease caused by different serotypes of the bacteria with invasive and non-invasive pneumococcal disease; Invasive pneumococcal disease (IPD) includes septicaemia, pneumonia and meningitis.
- IPD particularly affects the very young, the elderly, those who are immunosuppressed or hyposplenic or have no spleen. In the UK, around 40,000 people a year are hospitalised with pneumococcal pneumonia.
- Pneumonia causes death in up to 20% of cases.
- Across the world different sub types are prevalent and, different ages are affected.
- Worldwide, pneumonia is the leading cause of death in children.

Pneumococcal disease

- Transmission;
  - Generally, via aerosol, droplets or direct contact with respiratory secretions of an infected person.
  - typically requires either frequent or prolonged close contact.
- Seasonal variation in levels of infection, peak levels in the winter months.
- The incubation period is not clear but possibly as short as 1 – 3 days.
- Individuals may carry the organism in the nasopharynx (nose and throat) for some months and remain asymptomatic.
- Before vaccination this carriage rate was as high as 40% in pre-school children.
- The infections are generally isolated, although clusters have been reported in closed settings such as day care centres, hospitals, prisons, etc.

Pneumococcal disease – clinical presentation



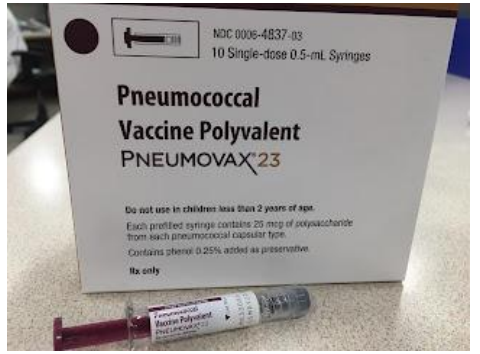
Pre vaccination:

- Meningitis: 247 cases 2004-05
- Bacteraemia: 6000 cases 2004-05
- Pneumonia: 70-80 000 admissions per year
- Otitis media: prior to the introduction of a vaccine, 1 in 3 children each year had otitis media of which 25-30% of cases were caused by pneumococcal bacteria

Disease most common in those with underlying risk factors and those who are immunosuppressed

Pneumococcal vaccines

Pneumococcal Polysaccharide Vaccine [PPV]
– available since 1979
Part of a routine programme for at risk groups since 1992 and for all those over 65 since 2003



Pneumococcal Conjugate Vaccine [PCV]

Prevenar 7 (protection against 7 pneumococcal serotypes) since 2006

Prevenar 13 (protection against 13 pneumococcal serotypes) since 2010

NB PCV 15 and 20 also licenced and PCV 10

Pneumococcal vaccines

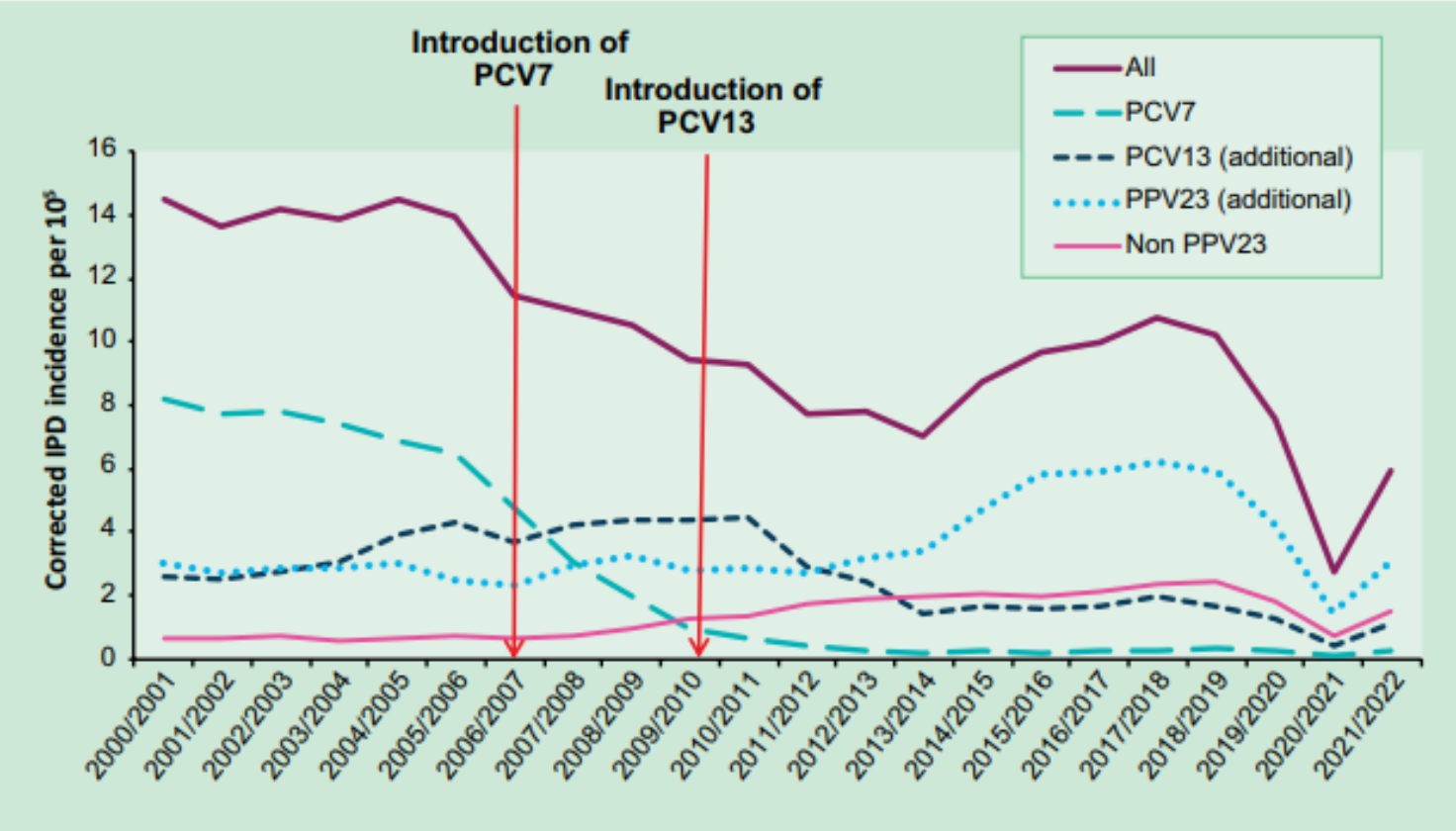
Pneumococcal Polysaccharide Vaccine [PPV]

- Protects against 23 different serotypes accounting for 96% of pneumococcal disease in UK.
- Given in the UK to at risk groups (similar to flu programme)
- Generally one dose, no evidence that boosting provides additional protection
- Five yearly boosters ***only*** for those with asplenia, splenic dysfunction or renal disease.

Pneumococcal Conjugate vaccine [PCV]

- Current vaccine PCV 13, protects against 13 common serotypes. PCV15 also licenced, protects against a further 2 serotypes.
- Part of the infant vaccination programme given at 12 weeks and 12 months of age.
- Provides excellent protection to infants.
- Reduces the nasopharyngeal carriage of pneumococcal bacteria leading herd immunity, highly successful in controlling the 13 serotypes across all age groups, including the elderly.

Invasive pneumococcal disease incidence in England between 2000/01 and 2017/2018 by serotype group



Green Book Pneumococcal chapter 25 p3 fig 25.1 Corrected IPD incidence in England between 2000/01 and 2021/2022 by serotype group

The remaining 10 serotypes in the PPV23, and other pneumococcal serotypes not covered in any vaccine, are now responsible for the majority of residual disease

Pneumococcal polysaccharide vaccine (PPV) eligibility policy

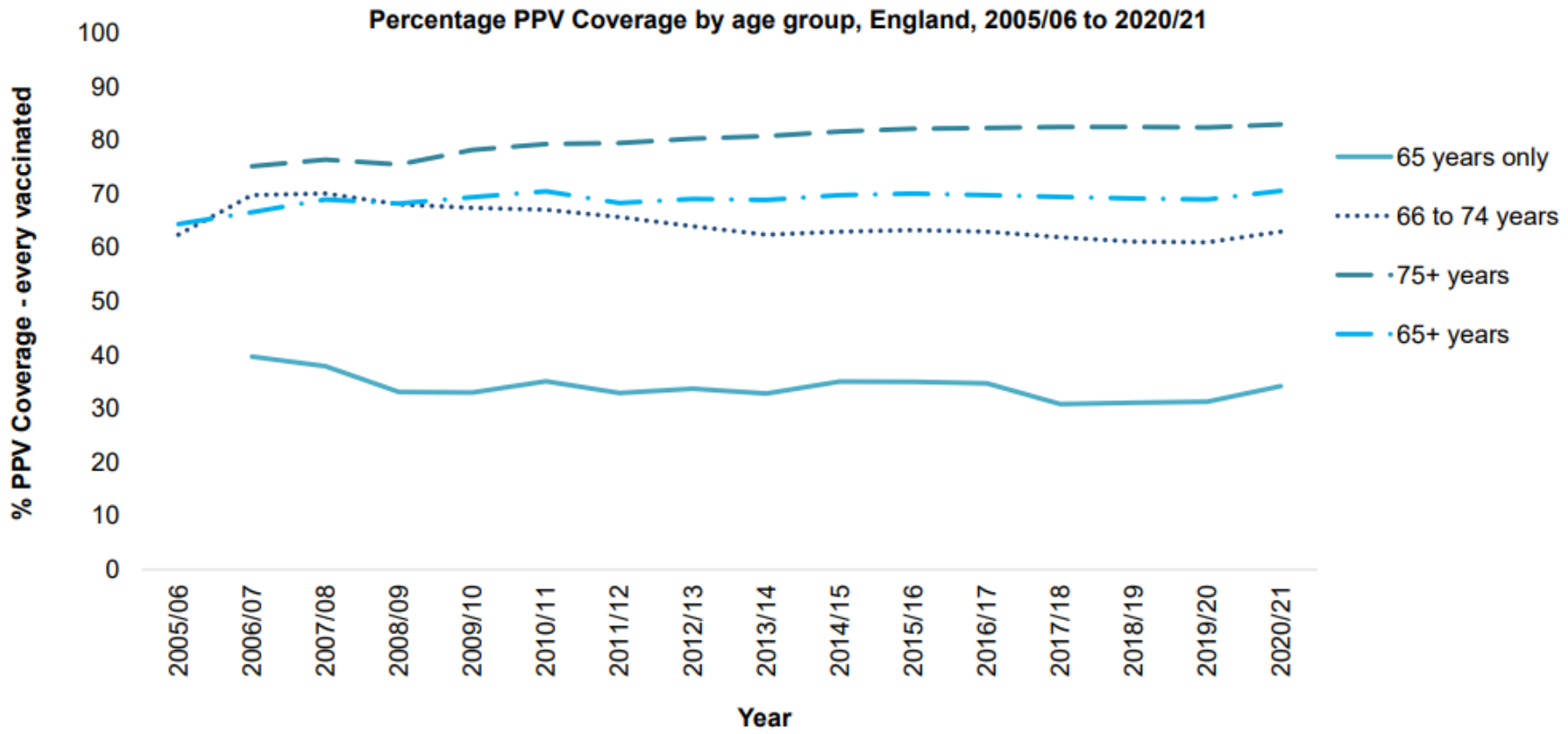
- All those aged 65 or over
- The vaccine can only be given to those 2 years and over
- All those aged **over 2 years** in the following risk groups
  - Immunosuppression
  - Chronic respiratory disease
  - Chronic Heart disease
  - Chronic renal disease
  - Chronic liver disease
  - Diabetes
  - Individuals with cochlear implants
  - Individuals with SF shunts
  - Children under 5 with previous history of pneumococcal disease
- Metal workers, i.e. welders at risk of occupational exposure to metal fume have a higher risk of pneumococcal pneumonia, as an occupational vaccine.
- In general one dose is recommended apart form those with renal disease asplenia or hyposplenia

The clinical risk groups recommended for pneumococcal vaccination are listed in Green Book Pneumococcal chapter 25
For some risk groups, both the PCV and PPV vaccines are recommended, for others it is only the PPV indicated.

Vaccine update March 2020
Pneumococcal: the green book, chapter 25

Pneumococcal vaccine uptake

Figure 2. Percentage PPV coverage – vaccinated any time up to 31 March each year, by age group, England, 2005/06 to 2020/21



UK Health Security Agency

Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2020 to March 2021

Health Protection Report
Volume 15 Number 19
23 Novermber 2021

[Updated Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2021 to March 2022]

[Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2021 to March 2022]

Resources

Shingles


GOV.UK

Menu

Home > Health and social care > Public health > Health protection > Immunisation > Shingles vaccination: guidance for healthcare practitioners

UK Health Security Agency

Guidance

Shingles immunisation programme: information for healthcare practitioners

Updated 7 September 2023

Eligible cohorts – from 1 programme in the UK. Based on the findings of the cost-effectiveness analysis, JCVI

Shingles vaccination: guidance for healthcare practitioners

last update 7th September 2023


Chapter 28a: Shingles (herpes zoster) 23 August 2021

28a

Shingles (herpes zoster)

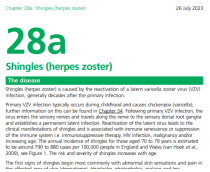
The disease

Shingles (herpes zoster) is caused by the reactivation of a latent varicella zoster virus (VZV) infection, generally decades after the primary infection.

Primary VZV infection typically occurs during childhood and causes chickenpox (varicella); further information on this can be found in Chapter 34. Following primary VZV infection,

leading to pneumonia, hepatitis, encephalitis, and disseminated intravascular coagulopathy. Disseminated disease is more likely to occur in those who are severely immunocompromised, with a case fatality rate reported to be between 5 and 15%, and most deaths being attributable to pneumonia (Rogers et al., 1995; Gnann et al., 1991).

Updated in 2021
Shingles: the green book chapter 28a (up to 31 August 2023)


Chapter 28a: Shingles (herpes zoster) 26 July 2023

28a

Shingles (herpes zoster)

The disease

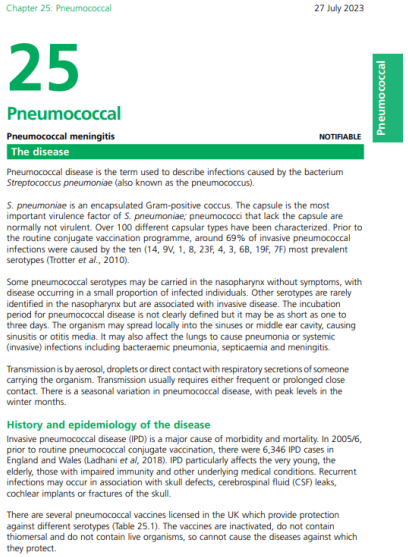
Shingles (herpes zoster) is caused by the reactivation of a latent varicella zoster virus (VZV) infection, generally decades after the primary infection.

Primary VZV infection typically occurs during childhood and causes chickenpox (varicella); further information on this can be found in Chapter 34. Following primary VZV infection, the virus enters the sensory nerves and travels along the nerve to the sensory dorsal root ganglia and establishes a permanent latent infection. Reactivation of the latent virus leads to the development of shingles. The risk of shingles is increased by conditions that reduce the competence of the immune system i.e. immunosuppressive therapy, HIV infection, malignancy, and/or increasing age. The annual incidence of shingles for those aged 70 to 79 years is estimated to be around 790 to 880 cases per 100,000 people in England and Wales (van Hoek et al., 2009), see Figure 1. The risk and severity of shingles increases with age.

The first signs of shingles begin most commonly with abnormal skin sensations and pain in

Updated in July 2023
Shingles: the green book chapter 28a (from 1 September 2023)

Pneumococcal


Chapter 25: Pneumococcal 27 July 2023

25

Pneumococcal

Pneumococcal meningitis NOTIFIABLE

The disease

Pneumococcal disease is the term used to describe infections caused by the bacterium *Streptococcus pneumoniae* (also known as the pneumococcus).

S. pneumoniae is an encapsulated Gram-positive coccus. The capsule is the most important virulence factor of *S. pneumoniae*; pneumococci that lack the capsule are normally not virulent. Over 100 different capsular types have been characterized. Prior to the routine conjugate vaccination programme, around 69% of invasive pneumococcal infections were caused by the ten (14, 9V, 1, 8, 23F, 4, 3, 6B, 19F, 7F) most prevalent serotypes (Trotter *et al.*, 2010).

Some pneumococcal serotypes may be carried in the nasopharynx without symptoms, with disease occurring in a small proportion of infected individuals. Other serotypes are rarely identified in the nasopharynx but are associated with invasive disease. The incubation period for pneumococcal disease is not clearly defined but it may be as short as one to three days. The organism may spread locally into the sinuses or middle ear cavity, causing sinusitis or otitis media. It may also affect the lungs to cause pneumonia or systemic (invasive) infections including bacteraemic pneumonia, septicaemia and meningitis.

Transmission is by aerosol, droplets or direct contact with respiratory secretions of someone carrying the organism. Transmission usually requires either frequent or prolonged close contact. There is a seasonal variation in pneumococcal disease, with peak levels in the winter months.

History and epidemiology of the disease

Invasive pneumococcal disease (IPD) is a major cause of morbidity and mortality. In 2005/6, prior to routine pneumococcal conjugate vaccination, there were 6,346 IPD cases in England and Wales (Ladhani *et al*, 2018). IPD particularly affects the very young, the elderly, those with impaired immunity and other underlying medical conditions. Recurrent infections may occur in association with skull defects, cerebrospinal fluid (CSF) leaks, cochlear implants or fractures of the skull.

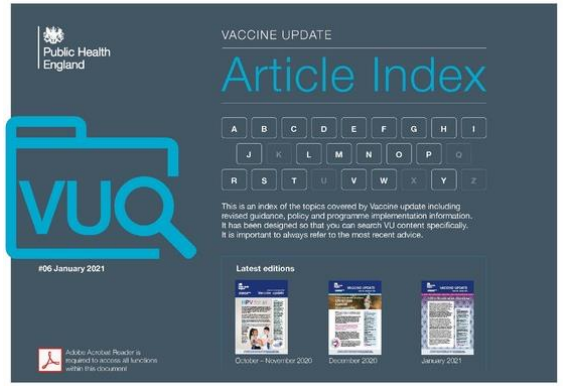
There are several pneumococcal vaccines licensed in the UK which provide protection against different serotypes (Table 25.1). The vaccines are inactivated, do not contain thiomersal and do not contain live organisms, so cannot cause the diseases against which they protect.

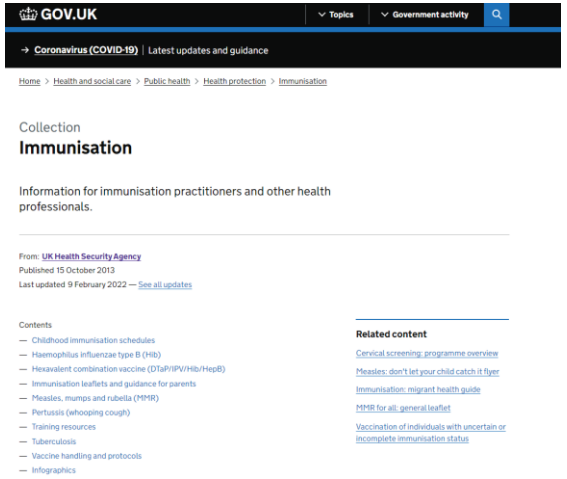
Pneumococcal

Pneumococcal: the Green book, chapter 25
Updated August 2023

Questions

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





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
- ✓ Look out for the slides and Q&A content (being emailed to you)
- ✓ Book for future webinars

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

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

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

Primary care immunisation update webinar series 2023 2024

September to January 2024

Influenza and Covid-19

Shingles and pneumococcal (adult) vaccines

Adverse events following immunisation

Current Issues vaccine schedule changes.

Legal issues Consent and medicines management

Webinar Series - booking

	Date	Start time	Link to register
September		Influenza and COVID - 45 minute session plus 15 mins Q&A	
1	05/09/2023	09:30	https://Sept23-Webinar1-InfluenzaAndCOVID.eventbrite.co.uk?aff=oddtdtcreator
2	05/09/2023	14:00	https://Sept23-Webinar2-InfluenzaAndCOVID.eventbrite.co.uk?aff=oddtdtcreator
3	19/09/2023	14:00	https://Sept23-Webinar2-InfluenzaAndCOVID.eventbrite.co.uk?aff=oddtdtcreator
October		Shingles and pneumococcal (adult) vaccines	
1	03/10/2023	09:30	https://Oct23-Webinar1-ShinglesAndPneumococcalAdultVaccines.eventbrite.co.uk?aff=oddtdtcreator
2	03/10/2023	13:00	https://Oct23-Webinar2-ShinglesAndPneumococcalAdultVaccines.eventbrite.co.uk?aff=oddtdtcreator
3	12/10/2023	09:30	https://Oct23-Webinar3-ShinglesAndPneumococcalAdultVaccines.eventbrite.co.uk?aff=oddtdtcreator
November		Adverse events following immunisation	
1	09/11/2023	09:30	https://Nov23-Webinar1-AdverseEventsFollowingImmunisation.eventbrite.co.uk?aff=oddtdtcreator
2	28/11/2023	09:30	https://Nov23-Webinar2-AdverseEventsFollowingImmunisation.eventbrite.co.uk?aff=oddtdtcreator
3	28/11/2023	14:00	https://Nov23-Webinar3-AdverseEventsFollowingImmunisation.eventbrite.co.uk?aff=oddtdtcreator