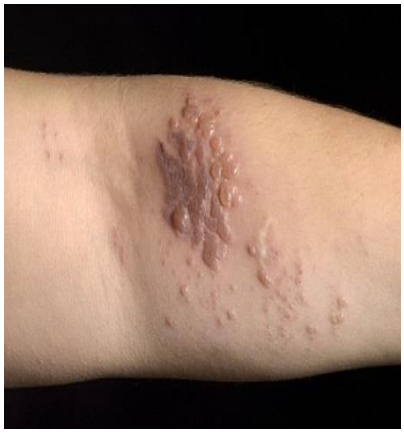
HSC Public Health Agency

Shingles (Herpes Zoster)

September 2026

Immunisation Team

Shingles (Herpes Zoster)



- An infection of the nerve & the skin around it
- Caused by reactivation of a latent varicella zoster virus infection

The initial infection with the varicella-zoster virus causes chickenpox. Following this primary infection, the virus remains latent in the body.

Many years later, individuals who have previously experienced chickenpox may develop herpes zoster, commonly known as shingles. This condition involves reactivation of the dormant virus within nerve tissues, leading to inflammation of the affected nerve and the skin around it.

The reactivation of the virus is more likely to occur in individuals with immunosuppression, HIV infection, malignancies, or advanced age.

The risk and severity of shingles tend to increase with age.

Shingles (Herpes Zoster)

- Abnormal skin sensation and pain in affected area of skin (dermatome)
- Headache
- photophobia
- malaise
- Less common fever may occur as part of prodromal phase
- Unilateral vesicular (fluid filled blisters) rash
- Post herpetic neuralgia

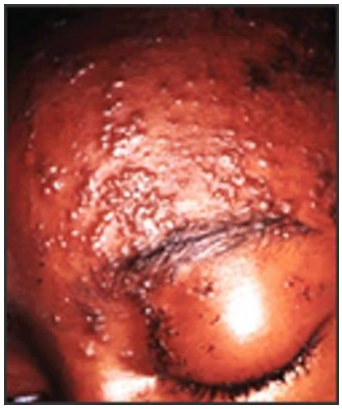


Image courtesy of CDC

Within days or weeks, a unilateral vesicular (fluid filled blisters) rash typically appears in a dermatomal distribution. The rash typically lasts between two and four weeks.

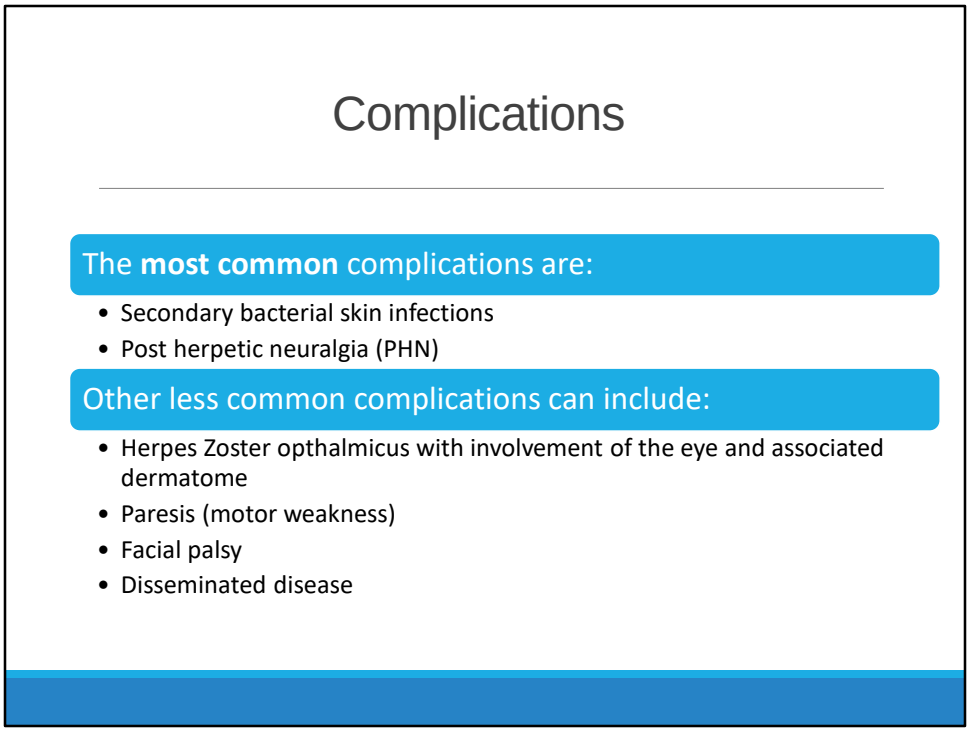
In immunocompromised individuals, a rash involving multiple dermatomes may occur .

The affected area may be intensely painful with associated paraesthesia (tingling, pricking, or numbness of the skin), and intense itching is common.

PHN is seen more frequently in older people

Pain that persists for, or appears more than, 90 days after the onset of rash is a commonly accepted definition for PHN.

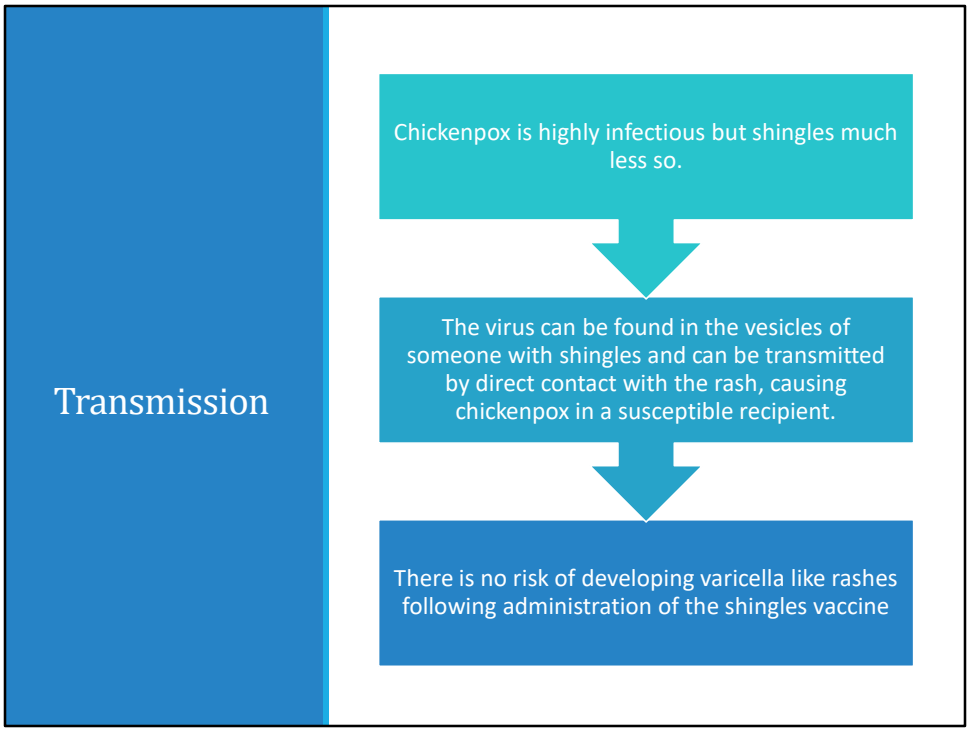
On average, PHN lasts from three to six months, but can persist for longer.
The severity of pain can vary and may be constant, intermittent or triggered by stimulation of the affected area, such as by wind on the face.



'herpes zoster ophthalmicus' may result in keratitis, corneal ulceration, conjunctivitis, retinitis, optic neuritis and/or glaucoma.

The reactivated virus can, in some cases, disseminate into the lungs, liver, gut, and brain, leading to pneumonia, hepatitis, encephalitis, and disseminated intravascular coagulopathy.

Disseminated disease is more likely to occur in those who are severely immunocompromised.



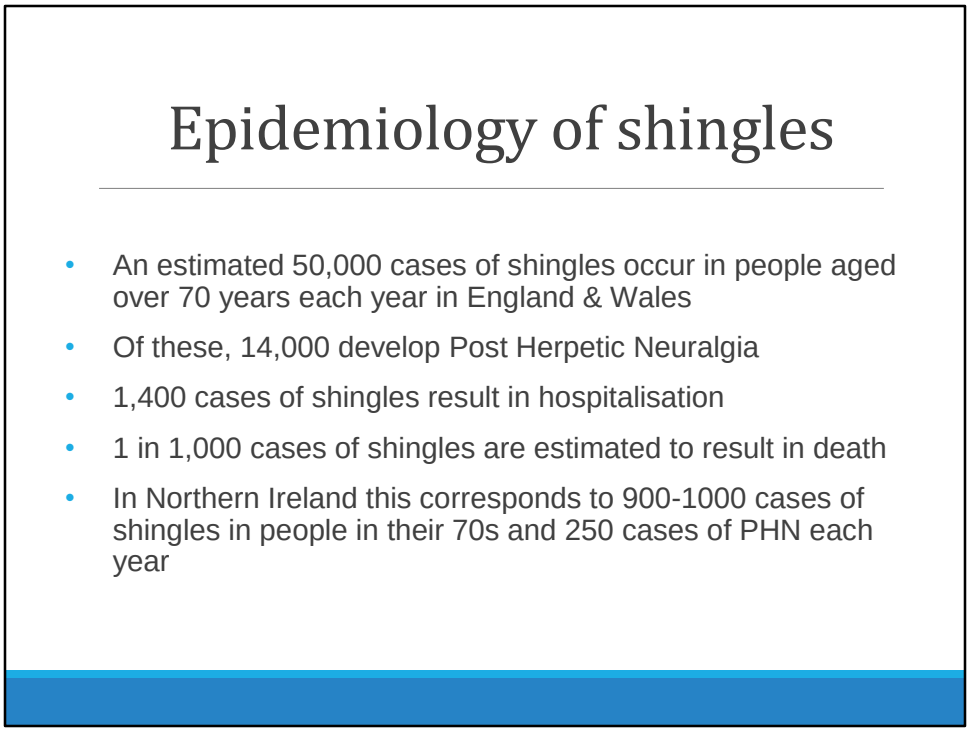
Shingles, caused by the varicella-zoster virus (the same virus that causes chickenpox), is not contagious in the sense of directly transmitting shingles to another person.

However, individuals with shingles have the potential to transmit the virus to those who have not previously had chickenpox or the chickenpox vaccine, which may result in the development of chickenpox in these individuals.

The virus can be found in the vesicles of someone with shingles (active lesions) and can be transmitted by direct contact with the rash, causing chickenpox in a susceptible individual (someone who has never had chickenpox or the chickenpox vaccine).

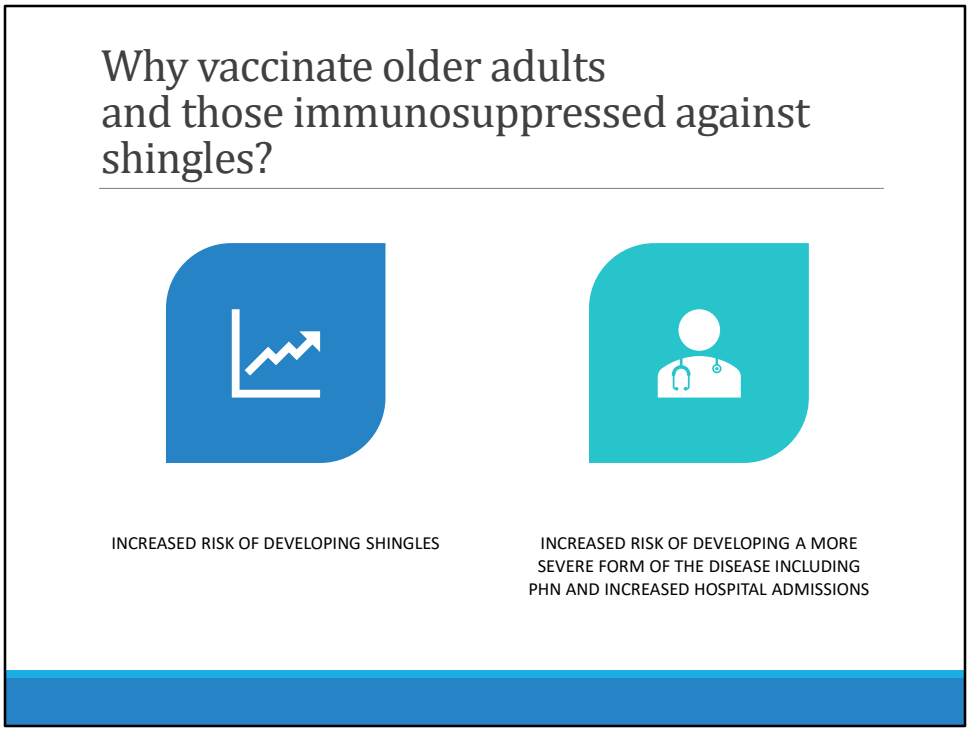
There is no evidence that shingles can be acquired from someone who has chickenpox.

Why vaccinate immunocompromised and older adults against shingles?



An estimated 50,000 cases of shingles occur in people aged over 70 years each year in England & Wales. Of these, 14,000 develop Post Herpetic Neuralgia. 1,400 cases of shingles result in hospitalisation and 1 in 1,000 cases of shingles are estimated to result in death.

In Northern Ireland this corresponds to 900-1000 cases of shingles in people in their 70s and 250 cases of PHN each year.



Individuals over 65 years of age are not only at an increased risk of developing shingles, but they also suffer a more severe form of the illness resulting in complications such as PHN and an increased rate of hospital admissions.

Vaccination for individuals over the age of 80 years is not recommended due to the decreased efficacy of the vaccine in this age group. Economic analysis suggested that the vaccine would not be cost effective in individuals over the age of 80 years.

National programme for adults aged 60-79

The JCVI recommended that:

- Shingrix should replace Zostavax® in the routine programme
- Shingrix vaccine should be offered at 60 years of age.

For this immunocompetent cohort:

- The eligible age for immunocompetent individuals will change from 70 to 60 years of age for the routine cohort, in a phased implementation over a 10 year period
  - This will be completed in 2 stages during that period

The choice of age group was based on evidence that the greatest number of cases would be prevented by administering the vaccine at this age.

National programme for adults aged 60-79 years (2)

During Stage 1 (1st September 2023 to 31st August 2028) Shingrix® will be offered to those who are aged 70 and 65 years of age on 1 September 2023(and each year up to 2028).

During Stage 2 (1 September 2028 to 31 August 2033) Shingrix® will be offered to those aged 65 and 60 years of age on 1 September 2028 (and each year up to 2033).

From 1 September 2033 and thereafter, Shingrix® will be offered routinely at age 60 years

Those who have been previously eligible (i.e. in stages 1 and 2) will remain eligible until their 80th birthday. Where an individual has turned 80 years of age following their first dose of Shingrix, a second dose should be provided before the individual's 81st birthday to complete the course

The routine offer will move from 70 to 60 years of age in 2 stages over a 10 year period as above.

Immunosuppressed individuals aged 18 years and over

From September 2021,

- Shingrix® was made available to immuno-suppressed individuals aged 70 to 79 years, who are contraindicated to receive Zostavax®, as part of the NHS shingles vaccination programme.

From 1 September 2023

- Eligibility was extended to include all immunosuppressed individuals aged 50 years and over (with no upper age limit) who should be offered two doses of Shingrix.

From 1 September 2025

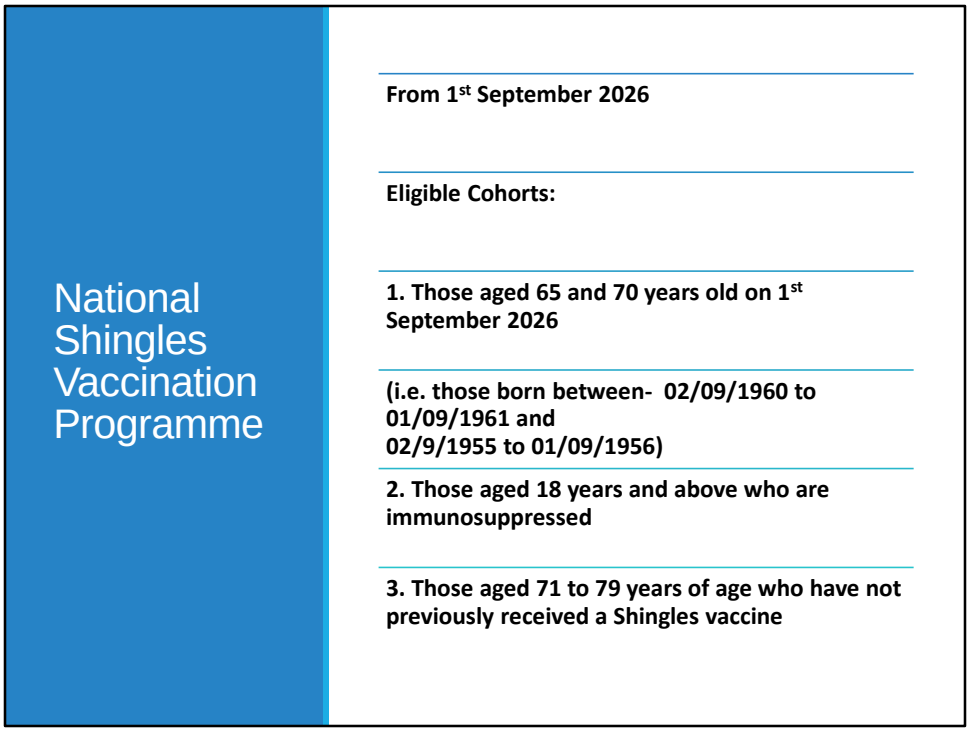
- Eligibility was extended to all immunosuppressed individuals aged 18 years and over (with no upper age limit) who should be offered two doses of Shingrix.

Immunosuppressed individuals aged 18 years and over (2)

- Immunosuppressed individuals represent the highest priority for vaccination given their risk of severe disease, and therefore the programme aimed to catch up all eligible individuals aged 50 years and over in the first year of programme implementation, and is now open to all immunosuppressed individuals aged 18 and over
- Individuals who should be offered Shingrix® amongst this cohort are summarised in:

Box: Definition of severe immunosuppression –

Shingles (herpes zoster): the green book chapter



The National Shingles Vaccination Programme began on 1st September 2013 and included both routine and catch-up cohorts.

National Shingles Vaccination Programme cont.

- The 2026/27 vaccination programme continues until 31 August 2027

- GPs should continue to ensure patients who meet the eligibility criteria for the 2025/26 programme, irrespective of their age now, are offered the vaccine, particularly those who will become ineligible due to being aged 80 or older on 1 September 2026.

National Shingles Vaccination Programme cont.

- From Autumn 2026 GP's should offer Shingrix vaccine to eligible patients **aged 65 or 70 years of age on 1 September 2026 and those over the age of 18 and are immunosuppressed.**

- Individuals who received Zostavax previously and who are now severely immunocompromised can be offered Shingrix

- Zostavax is no longer available, therefore all eligible individuals should be offered 2 doses of Shingrix

Shingles Vaccine

Shingrix powder and suspension for suspension for injection, Herpes zoster vaccine (recombinant, adjuvanted) - Summary of Product Characteristics (SmPC) - (emc) | 12054

Shingles vaccine

- Shingrix® (GSK) is the current vaccines recommended for the prevention of shingles and shingles-related PHN

Shingrix is a recombinant (non-live) shingles vaccine and is replacing Zostavax in the routine immunisation programme from September 2023.

Shingrix is recommended for the **prevention** of shingles infection and shingles related PHN only. Shingrix **should not be used** for the treatment of PHN.

Shingrix is **not** recommended for the prevention of chickenpox infection

It is important immunisers familiarise themselves with the vaccine and its product information to avoid administration errors.

After reconstitution, the vaccine should be used **promptly**. The shingles vaccine should not be reconstituted in bulk at the one time to facilitate an entire clinic. This would **not** be considered good practice. It increases the risk of microbial contamination and may contribute to loss of vaccine potency if the reconstituted vaccines are not used for an extended period of time outside the product license.

If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 6 hours at 2 °C to 8 °C.

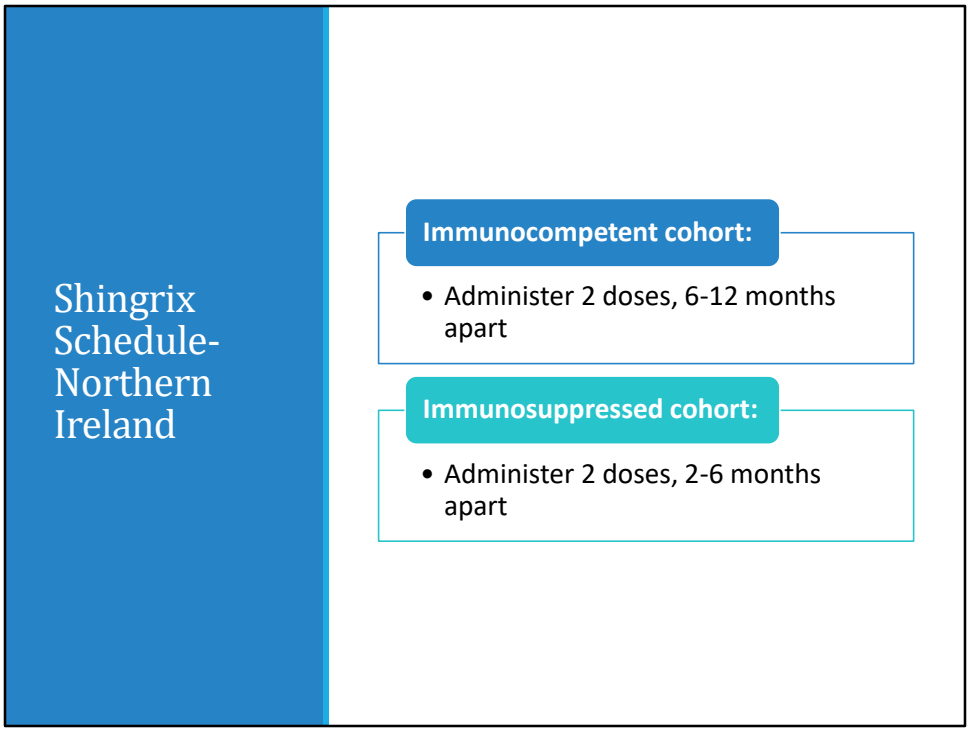
Shingrix®

Administration:

- Adults should receive two doses of 0.5ml of Shingrix® a minimum of 2 months apart
- Shingrix® should be given by intramuscular injection
- Subcutaneous administration is not recommended
- Shingrix® should be given with caution to individuals with thrombocytopenia or any coagulation disorder since bleeding may occur following intramuscular administration.

Shingrix should **not be** administered intravascularly or intradermally.

Maladministration via the subcutaneous route may lead to an increase in transient local reactions. (https://www.medicines.org.uk/emc/product/12054/smpc)



Shingrix licensed dosing schedule is 8 weeks separating doses, with flexibility of up to 6 months after the first dose if necessary.

The recommendation in the HSS letter to administer the second dose 6 – 12 months apart advocates for off-label use and is supported within the Shingles vaccine patient group direction (PGD) .

Co-administration- Shingrix®

- Shingrix® can be given concomitantly with **inactivated influenza vaccine**
- Interim data from the US on co-administration of Shingrix® with **adjuvanted influenza vaccine** is reassuring, therefore these 2 vaccines can be given together if required
- As **COVID vaccines** are considered inactivated, Shingrix® vaccine can be co-administered to individuals in an eligible cohort
- Where more than one vaccine is offered, patients should be informed about the likely timing of potential adverse events relating to each vaccine
- Concurrent administration of Shingrix® and anti-viral medications known to be effective against VZV has not been evaluated, but drugs such as aciclovir are unlikely to reduce vaccine response as the vaccine is a recombinant vaccine

In line with general advice about co-administration of inactivated or non-live vaccines, Shingrix® can be given concomitantly with **inactivated influenza vaccine**.

Initially, a seven day interval was recommended between Shingrix® and **adjuvanted influenza vaccine** because the potential reactogenicity from two adjuvanted vaccines may reduce tolerability in those being vaccinated. Interim data from a US study on co-administration of Shingrix with adjuvanted seasonal influenza vaccine is reassuring. Therefore, an appointment for administration of the seasonal influenza vaccine can be an opportunity to also provide shingles vaccine, although the latter should be offered all year round, rather than purely as a seasonal programme“

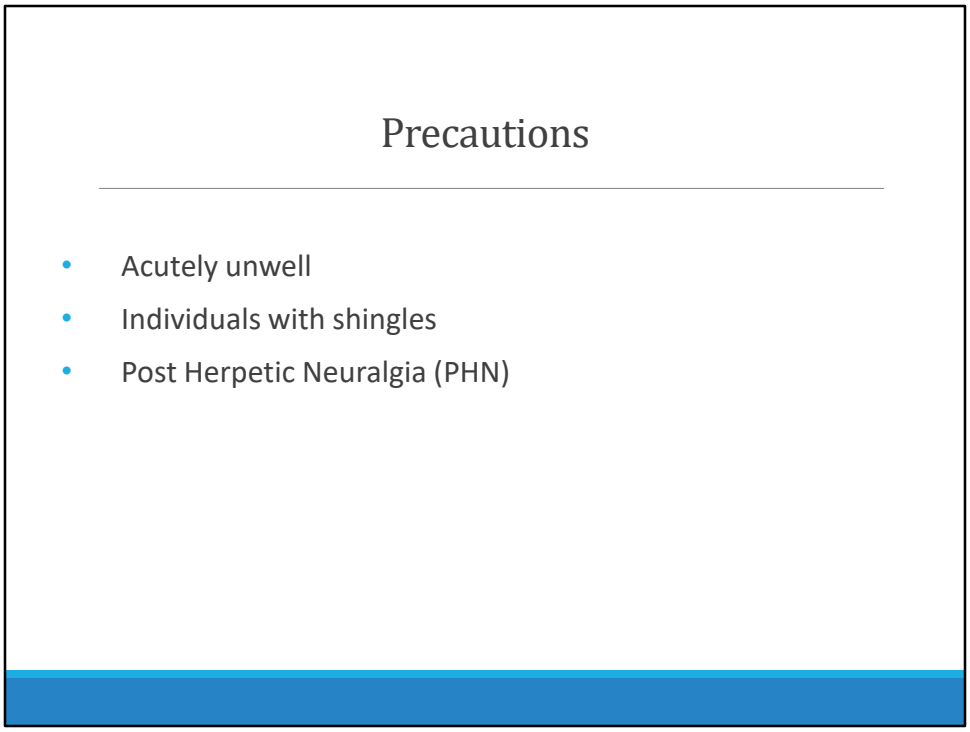
As Shingrix® is a non-live vaccine, where individuals in an eligible cohort present having recently received another inactivated or live vaccine (such as Covid-19), Shingrix® vaccination should still be offered.

A 7 day gap between administration of Shingrix® and COVID-19 vaccine is no longer required. In most cases, vaccination should proceed to avoid any further delay in protection and to avoid the risk of the patient not returning for a later appointment. In such circumstances, patients should be informed about the likely timing of potential adverse events relating to each vaccine.

Source: Shingles: the green book chapter 28a (from 1 September 2023)

Contraindications- Shingrix®

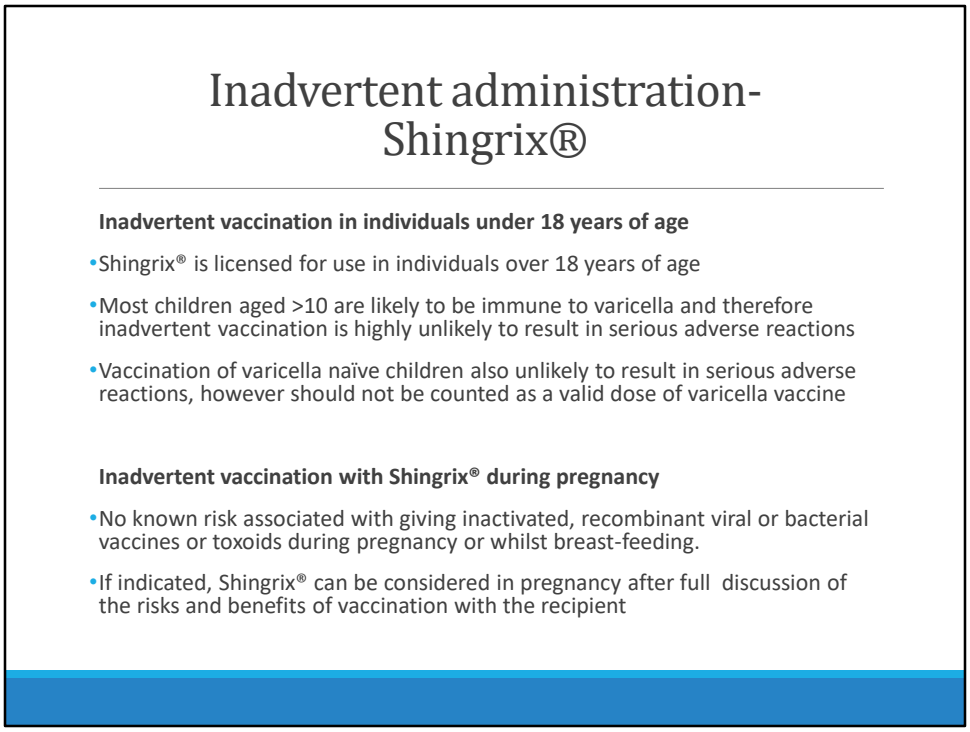
- SHINGRIX® SHOULD NOT BE ADMINISTERED TO AN INDIVIDUAL WITH A CONFIRMED ANAPHYLACTIC REACTION TO ANY COMPONENT OF THE VACCINE.



Immunisation of individuals who are acutely unwell should be postponed until they have fully recovered to avoid confusing diagnosis of any acute illness by wrongly contributing any signs and symptoms to the adverse effects of the vaccine.

Shingrix® vaccination is not recommended for the treatment of shingles or post herpetic neuralgia (PHN).

Individuals who have shingles should wait until symptoms have ceased before being considered for shingles immunisation. Patients who have two or more episodes of shingles in one year should have immunological investigation prior to vaccination.



Inadvertent vaccination in individuals under 18 years of age

Shingrix® is licensed for use in individuals over 18 years of age. However, most children above the age of 10 are likely to be immune to varicella and therefore inadvertent vaccination with Shingrix® is highly unlikely to result in serious adverse reactions. As the vaccine is a recombinant sub-unit vaccine inadvertent vaccination with Shingrix® in varicella naïve children of any age is unlikely to result in serious adverse reactions and would count as a valid dose of varicella vaccine. In this instance, children eligible for chickenpox vaccination may be offered a second dose, a minimum of 4 weeks later, to complete the course.

Inadvertent vaccination with Shingrix® during pregnancy

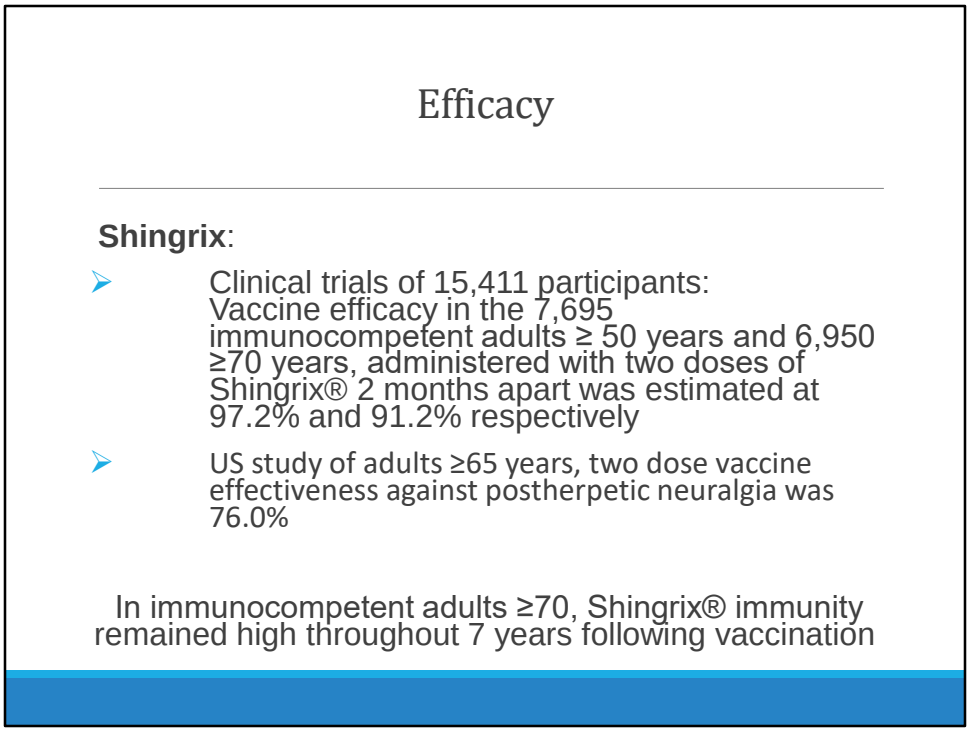
There is no known risk associated with giving inactivated, recombinant viral or bacterial vaccines or toxoids during pregnancy or whilst breast-feeding (Kroger et al., 2013). If indicated, Shingrix® can be considered in pregnancy after full discussion of the risks and benefits of vaccination with the recipient. All incidents of inadvertent administration of Shingrix ® during pregnancy should also be reported to UK Health Security Agency (UKHSA) using the vaccine administered in pregnancy reporting form (ViP). https://www.gov.uk/vaccination-in-pregnancy-vip

Possible adverse reactions- Shingrix®

Most frequently reported side effects were:

- Pain at injection site
- Myalgia
- Fatigue

A full list of side effects can be found in the Shingrix® summary of product characteristics. (https://www.medicines.org.uk/emc/product/12054/smpc)



Cases of shingles have declined by approximately 35% in England since the vaccine programme was introduced in 2013. Between 2013 and 2016, approximately 17 000 GP visits for shingles and 3300 consultations for PHN have been avoided.

Shingrix:

In the phase 3 randomized placebo controlled clinical trials of 15,411 participants, vaccine efficacy in the 7,695 immunocompetent adults ≥ 50 years and 6,950 ≥70 years, administered with two doses of Shingrix® 2 months apart was estimated at 97.2% and 91.2% respectively (Lal et al 2015),

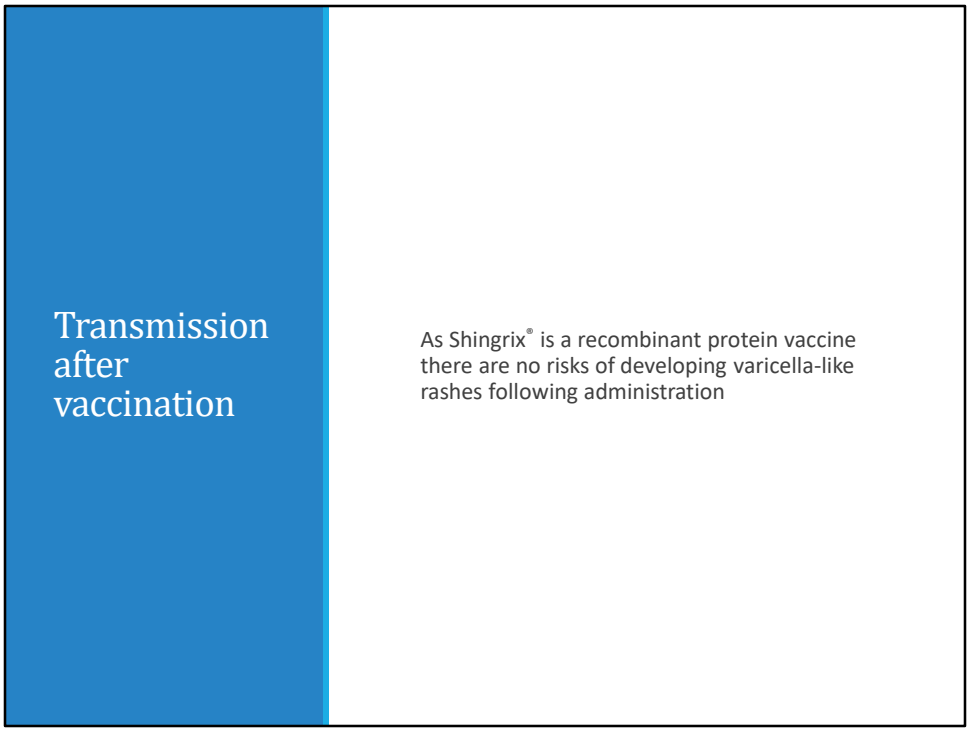
In a phase 3 clinical trial in autologous haemopoietic stem cell transplant recipients aged 18 years and above who received two doses of Shingrix® 1-2 months apart, robust humoral and cellular responses persisted at 1 year after vaccination. (Dagnew et al, 2019) Post hoc efficacy analysis revealed a vaccine efficacy of 87.2% against herpes zoster in immunocompromised patients which included non-Hodgkin B-cell lymphoma and chronic lymphocytic leukaemia.

One and two dose real world vaccine effectiveness of Shingrix® was estimated at 56.9% and 70.1% respectively in a US study of adults aged >65 years (Izurieta et al, 2021). Two dose vaccine effectiveness against postherpetic neuralgia was 76.0% (95% CI, 68.4-81.8). The two-dose vaccine effectiveness was not significantly lower for

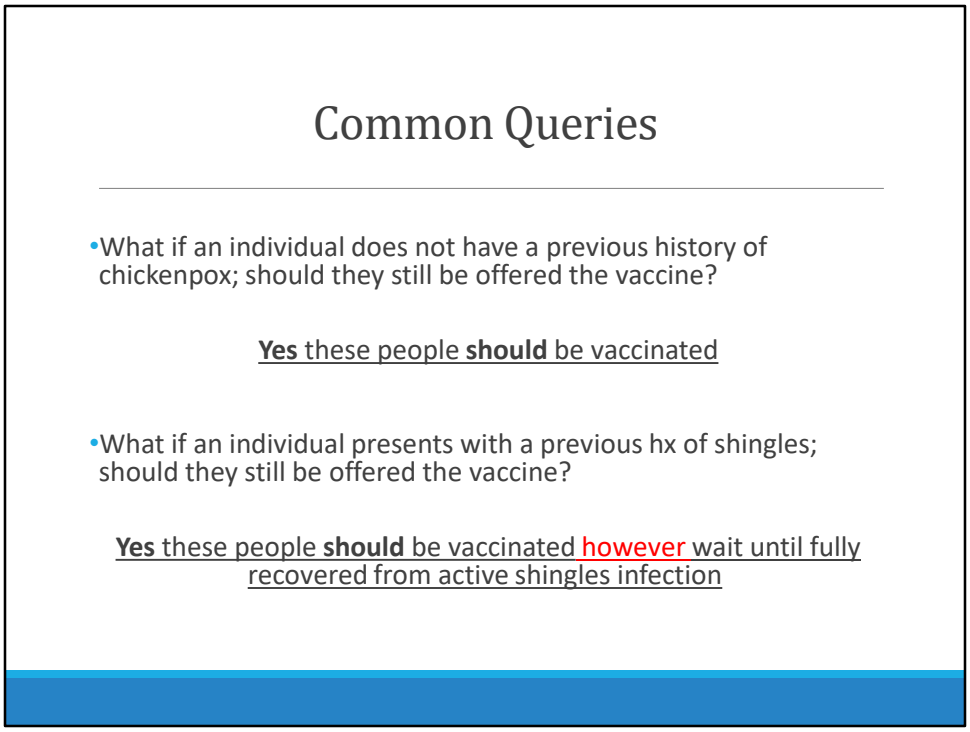
adults 80+ years, for second doses received at ≥180 days, or for individuals with autoimmune conditions

Source: The Green Book Chapter 28a (Zoster)

Shingles Vaccination: What Everyone Should Know | CDC



As Shingrix vaccine is a non-live vaccine, it should not cause the development of a vesicular rash. If a vesicular rash does develop after the Shingrix vaccine, the patient should be referred for assessment and management as it is likely that they have developed shingles naturally (not due to the vaccine).



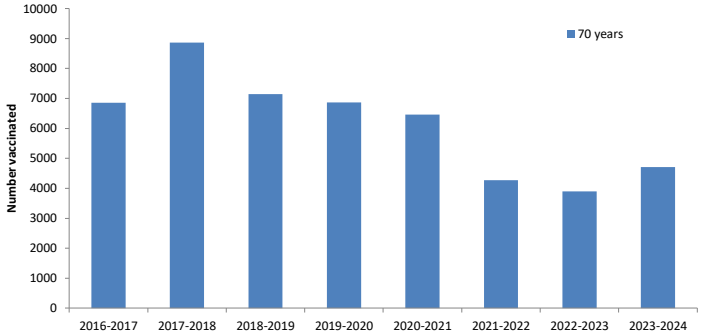
What if an individual does not have a previous history of chickenpox; should they still be offered the vaccine?

Previous clinical history of chickenpox infection is not a pre-requisite for receiving Shingles vaccine. Many people who think they haven't had chickenpox have in fact had a sub-clinical infection. **Yes** these people **should** be vaccinated.

What if an individual presents with a previous hx of shingles; should they still be offered the vaccine?

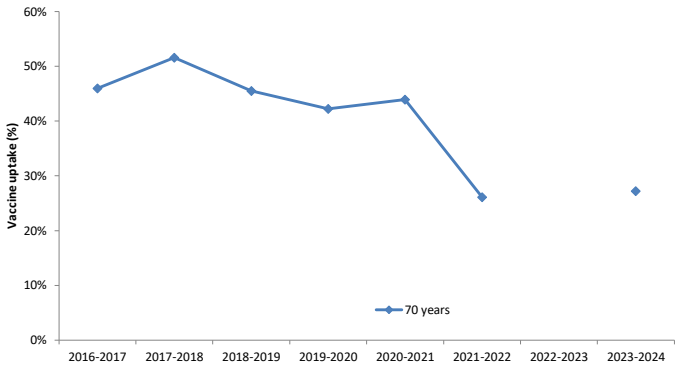
People can get shingles more than once and the vaccine will reduce the risk of further attacks. **Yes**, the individual should still be offered the vaccine despite presenting with a previous history of shingles infection. However, wait until individual is fully recovered from active shingles infection before considering vaccination.

Number of Patients Receiving Shingles Vaccine (Aged 70 Years) NI 2016-2024



Please note:
a) 2023/2024 programme counts dose 2 (complete course) of Shingrix vaccine, with data sourced from PHA annual Shingles vaccination surveillance report.
b) The number of patients receiving shingles vaccine should be interpreted with caution from 2021-2022 to 2023-2024. Noting the impact of the COVID-19 pandemic and the introduction of the new Shringrix vaccine in September 2023. Recording of shingles vaccination moved to the Northern Ireland Vaccine Management System (VMS) in 2023-2024.

Shingles Vaccine Uptake
Patients aged 70 Years: NI 2016-2024



Please note:
a) The 2023-2024 data point is sourced from PHA annual Shingles vaccination surveillance report.
b) The number of patients receiving shingles vaccine should be interpreted with caution from 2021-2022 to 2023-2024. Noting the impact of the COVID-19 pandemic and the introduction of the new Shringrix vaccine in September 2023. Recording of shingles vaccination moved to the Northern Ireland Vaccine Management System (VMS) in 2023-2024.

Reporting suspected adverse reactions

Yellow Card | Making medicines and medical devices safer

Yellow card scheme

- as with any vaccine, all suspected serious adverse reactions should be reported to the MHRA using the Yellow Card scheme
- success depends on early, complete and accurate reporting
- report even if uncertain about whether vaccine caused condition
- **anyone** (HCPs and members of the public) can report on the Yellow Card website https://yellowcard.mhra.gov.uk/ or phone 0800 731 6789 (9am to 5pm Monday to Friday)

see Vaccine safety and adverse events following immunisation: the green book, chapter 8 - GOV.UK for further details

Management of Cold Chain Incidents

Each year there is significant wastage and clinic disruption due to cold chain incidents. There are significant costs relating to vaccine purchase; therefore, every effort is needed to ensure vaccine wastage is minimal. While often talked about as fridge failures, in fact most are human error including leaving vaccines sitting out of the fridge or turning off the power supply.

Please take time to check your cold chain processes are in line with the *Guidance for Vaccine Handling and Storage in GP Practices* document found on the PHA website using the link and ensure that your practice has appropriate contingency plans in place for planned and unplanned power outages.

****Do NOT dispose of any vaccines until the appropriate advice has been sought****

All significant cold chain incidents, such as vaccines stored outside of the recommended temperature ranges, should be reported to your local or regional HSC Trust Pharmacy Medicines Information, and the PHA Health Protection Duty Room in the first instance.

For cold chain incidents occurring in:

- GP practices – refer to Guidance for Vaccine Handling and Storage in GP practices document following the link.
- Community Pharmacies - refer to the specific SPPG guidance via the BSO website using the following link.
- HSC Trusts - refer to local Trust standard operating procedures.

Resources

- HSS MD Letters and communications
- Shingles immunisation programme: introduction of Shingrix® letter - GOV.UK (www.gov.uk)
- Guidance on viral rash in pregnancy
- Revised recommendation for administration of > 1 live vaccine
- PGDs and National Protocols – Primary Care Intranet (hscni.net)

Resources (Continued)

- The Green Book (Varicella)
- Shingles (herpes zoster): The green book chapter
- Chapter 4 The Green Book (Immunisation Procedures)
- Link to immunisation factsheets and patient information leaflets (including Shingles)