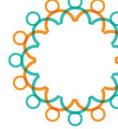






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## Zostavax Program 12 months on....



Angela Newbound Immunisation Hub Coordinator



## Commonwealth resources - posters



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## Protect yourself against Shingles! FREE VACCINE is now available for people aged 70–79 years old Shingles can be very painful and lead to serious, long-term complications for older people Talk to your doctor, nurse or healthcare worker about the FREE Shingles VACCINE Vaccinations don't stop at childhood. MMUNISE ustralian Governm www.immunise.health.gov.au

Protect yourself against **Shingles** 

A **FREE VACCINE** is now available for people aged 70–79 years old

Shingles can be very painful and lead to serious, long-term complications

Australian Government Department of Health Talk to your doctor or nurse about the FREE Shingles VACCINE

Vaccinations don't stop at childhood.

www.immunise.health.gov.au



# Commonwealth resources – tri fold brochure



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### Your vaccinations don't stop at childhood.

It is important for adults to

be vaccinated too.

People aged 65 years and over are eligible for other free vaccinations under the National Immunisation Program including: Pneumococcal vaccine which can reduce

your risk of pneumonia.

Autumn each year to help protect you against the flu virus.

Talk to your doctor or nurse about the FREE Shingles VACCINE

## Protect yourself against **Shingles**

A FREE VACCINE is now available for people aged 70-79 years old



long-term complications.

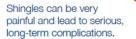
immunise.health.gov.au or call the Immunise Australia Information Line 1800 671 811

> Australian Government Department of Health

Shingles can be very

painful and lead to serious,

Í M M U N Í S E AVSTRALLA FROGRAM In Australian, State and Territory Government initiative



### What is shingles?

Shingles is a painful blistering rash caused by reactivation of the varicella zoster virus – the same virus that causes chickenpox.

Sometimes pain in the affected region can be severe and prolonged. When it lasts more than three months it is called post herpetic neuralgia.

Other complications may include scarring, skin infections, loss of vision or hearing, pneumonia and/or neurological complications.



#### Am I really at risk of shingles? One in three people will develop shingles in

their lifetime.

As a person gets older, the risk of getting shingles and neurological complications increases.

### Who can have a free shingles vaccine?

All people aged 70 years old, with a five-year catch up program for people aged 71–79 years old until 31 October 2021.

Those who are not eligible for a free vaccine can purchase it with a prescription from their general practitioner or vaccination provider.

#### Where can I get the shingles vaccine?

The vaccine is available from November 2016 from your general practitioner or vaccination provider.

#### Vaccinations don't stop at childhood

Ask your general practitioner or vaccination provider about other free vaccines you may be eligible for.

www.immunise.health.gov.au

### If I've had shingles before should I still get vaccinated?

Discuss with your general practitioner or vaccination provider. Vaccination is still recommended for those who have had shingles infection in the past. However, you should wait at least a year between an episode of shingles and having the vaccine.

### Is the vaccine safe?

The shingles vaccine is safe for most people aged 70–79 years of age, including those people with chronic diseases.

Certain people may be unable to have the vaccine, particularly those who have a very weakened immune system. Please speak with your general practitioner for advice.

The most common vaccine side effects occur around the injection site including redness, swelling and/or pain. Occasionally, headache, liching or a rash around the injection site may occur.

### How many vaccine doses do I need?

A single dose of shingles vaccine is currently recommended.

immunisationHUB

## **Commonwealth resources**



Australian Government

<u><u><u>I</u> M M U N <u>I</u> S E</u> AUSTRALIA PROGRAM An Australian, State and Territory</u>

### The National **Shingles** Vaccination Program

### Vaccination provider fact sheet

This document provides recommendations on the use of Zostavax® that will be available free to eligible people under the National Immunisation Program (NIP).

Zostavax® recommendations have been updated in the online version of The Australian Immunisation Handbook 10<sup>th</sup> edition available at www.immunise.health.gov.au.

#### Eligibility

 ${\sf Zostavax} \ensuremath{\mathbb{R}}$  is free for all adults 70 years of age from November 2016.

A single catch-up dose will be funded for adults aged 71–79 years until 31 October 2021.

#### Administration

Zostavax® contains live attenuated varicella-zoster virus.

A single dose (0.65ml) vaccine is given by subcutaneous injection in the deltoid region.

Zostavax® must be reconstituted with the diluent before administration and given immediately (discard if not used within 30 minutes).

#### **Co-Administration**

Zostavax® can be given at the same time as the influenza vaccine or pneumococcal polysaccharide vaccine, using separate syringes and injection sites.

Zostavax® can be administered at the same visit as, or at any time before or after receipt of, inactivated vaccines (e.g. tetanus-containing vaccines).

Take care to ensure that the appropriate route of injection is used for all vaccinations.

Note: recommendations for co-administration have been taken from the online version of The Australian Immunisation Handbook 10th edition and may differ from the product information.

#### Contraindications

Zostavax® is safe for most older people, including those with common chronic diseases (arthritis, hypertension, chronic renal failure, diabetes, COPD and other similar conditions).

Zostavax® is contraindicated in persons with significant immunocompromise due to either a primary or acquired medical condition, or due to medical treatment

Anaphylaxis to any component of the vaccine.

Note: Detailed information on contraindications and precautions is provided in the online version of The Australian Immunisation Handbook 10<sup>th</sup> edition, Chapter 4.

#### Recommendations

Zostavax® is recommended, but not funded, for people 60 years and over as this age group is at an increased risk of shingles and its complications.

People who are not eligible to receive the free vaccine are able to purchase the vaccine on the private market.

Note: Routine vaccination of persons aged 70–79 years is expected to obtain the greatest benefits against singles and its complications. Further information is provided in the online version of The Australian Immunisation Handbook 10th edition. Zostavax® is not registered for the treatment of shingles or shingles related post-herpetic neuralgia (PHN). Individuals presenting with an acute illness should defer immunisation until they are fully recovered. A person who has had an episode of shingles is recommended to wait at least a year between recovering from the infection and having the vaccine.

A previous history of chickenpox infection is not a pre-requisite for receiving Zostavax®. The vast majority of adults aged over 60 years in Australia have had primary infection with the varicella zoster virus (VZV) and are therefore at risk of reactivation of latent VZV, causing shingles. Although an individual aged over 60 years may not remember having had chickenpox, they can still receive the shingles vaccine.

#### Efficacy

The Shingles Prevention Study assessed efficacy in >38,000 subjects aged 60 years and older and found that Zostavax® reduced the risk of shingles by 51.8 per cent and the risk of post-herpetic neuralgia (PHN) by 66.6 per cent.

Shingles can still occur in people who have received the vaccine, but it is likely to be milder and less likely to result in PHN.

One dose of the vaccine is thought to be protective for approximately 5–10 years, and possibly longer. Studies to monitor the duration of protection of the vaccine are being undertaken.

#### Safety

The Shingles Prevention Study and other smaller similar studies demonstrate that Zostavax® is safe and generally well tolerated. The most common mild side effects include: redness, soreness, swelling, or itching at the site of the injection, headache and fatigue.

#### Adverse events following immunisation

Adverse events following immunisation should be reported through the usual reporting mechanisms in your state or territory.

#### Reporting to the Australian Immunisation Register

The Australian Childhood Immunisation Register has now become the Australian Immunisation Register (AIR) and from September 2016, will accept data on vaccines administered to people of all ages. Providers are required to submit data to the AIR on all Zostavax® doces administered.

The need for a booster dose has not yet been determined, however should surveillance data indicate one is needed in the future, vaccine recipients will be able to be recalled using data captured in the AIR.

#### Vaccine supply

Immunisation providers will be able to order supplies of Zostavax® using the usual NIP vaccine ordering channels. Your state or territory health department will inform you when you can commence ordering Zostavax®. You can begin administering the vaccine as soon as you receive your supplies.

health	Contacts and further information State and territory department contact details:
ACT	02 6205 2300
SA	1300 232 272
NSW	1300 066 055
TAS	1800 671 738
NT	08 8922 8044
VIC	1300 882 008
QLD	13 HEALTH (13 43 25 84)
WA	08 9388 4999

Information brochures for patients and waiting room posters have been produced to support the introduction of this vaccine.

You can order or print copies of these products through the Immunise Australia website at www.immunise.health.gov.au.

www.immunise.health.gov.au





## Background



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1<sup>st</sup> November 2016





......

Currently





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- Vesicular, "grape-like" lesions
- Unilateral distribution in 1-2 adjacent sensory dermatomes
- Thoracic dermatome (~50-70%)
- Cervical dermatome or ophthalmic branch of trigeminal (each ~10-20%)
- Vesicles crust in 7-10 days; full healing may take up to 1 month







- Most common symptom of zoster is pain
- Pain often precedes rash by days or weeks
- Continuum: mild to severe
- Throbbing, aching, stabbing, burning, tingling, itching
  - Allodynia: pain induced by minimal/non-painful stimuli
- Paresthesias e.g., burning and tingling
- Dysesthesia : altered or painful sensitivity to touch
- Hyperesthesia: exaggerated or prolonged response to pain
- Pruritus is also commonly associated with herpes zoster
- May be confused with other pain syndromes: Myocardial infarction, renal colic, cholecystitis, musculoskeletal pain
- Skin sensitivity in a dermal distribution may exclude other pain syndromes
- Zoster sine herpete: nerve pain without rash

Most common complication of zoster is PHN (Post Herpetic Neuralgia)





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Slide information courtesy A/Prof John Litt



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### **Risks**:

- Prior chicken pox infection
- Increasing age
- Female
- Family history
- People with compromised or suppressed immune systems who have an increased risk for herpes zoster include those:
  - with cancer, especially leukemia and lymphoma,
  - with human immunodeficiency virus,
  - who have undergone bone marrow or solid organ (renal, cardiac, liver, and lung) transplantation, or
  - who are taking immunosuppressive medications, including steroids, chemotherapy, or transplantrelated immunosuppressive medications.





Slide information courtesy A/Prof John Litt

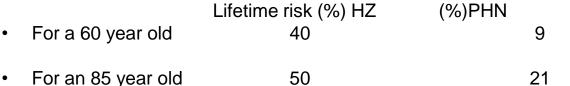


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• More that 95% of adults have the Varicella-Zoster virus within their dorsal root ganglion

Notification rate per 100,000

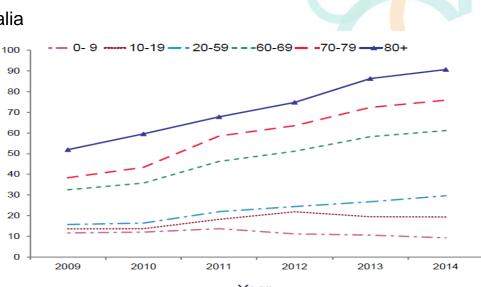
• Overall lifetime risk of zoster in the population is between 20% and 30%



• 120,000 cases of shingles per year in Australia

Notification rate for shingles, Australia,\* 2009 to 2014, by year and selected age groups

\* Excludes NSW



Year

Adapted from NNDSS, 2016.1 Courtesy A/Pro<mark>f J</mark>ohn Litt







OSTAVAY.

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### Zostavax vaccine:

- contains live attenuated varicella-zoster virus. The amount of virus in the zoster vaccine is approximately 14 times greater than in varicella (chickenpox) vaccines
- contains hydrolyzed porcine gelatin and trace quantities of neomycin, and bovine calf serum
- should be protected from light
- is a 0.65 mL dose and administered by SC injection
- requires reconstitution
- should be administered immediately after reconstitution, to minimize loss of potency
- once reconstituted, if needed, can be stored at room temperature for up to 30 minutes
- can be administered at the same time as:
  - influenza vaccine
  - pneumococcal vaccine (Product Information which states 4 week interval conflicts with the Immunisation Handbook recommendation)
  - · any inactivated vaccine
  - another live virus vaccine (same day or at least 4 weeks apart)



## Vaccine safety



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- safe and well tolerated among adults aged 50 years and over
- injection site reactions
- headache
- fatigue

Providers are encouraged to notify AEFI's to SA Health:

- phone 1300 232 272 during business hours
- complete the Vaccine Reaction Reporting Form <u>https://extapps.health.sa.gov.au/savss/</u>

and return to:

- email healthvaccinesafety@sa.gov.au
- fax (08) 8226 7197



## **Pre-vaccination**

Prior to administration of Zostavax, check:

- AIR for previous doses
  - Do you have secure site access?
- patient notes
- other providers



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If no evidence of previous dose, undertake the Zostavax pre-vaccination screening





Insert logo

#### LIVE SHINGLES VACCINE (Zostavax) SCREENING FOR CONTRAINDICATIONS

#### Name:

Date of birth:

Questions – This section can be completed by the Health Care Provider/Patient/Guardian Nate for Patient/Guardian: If you are unsure about an answer, please leave it blank and discuss with your Health Care Prov	ider
1. Have you ever had a shingles vaccine before? When:	Y/N
2. Do you feel unwell today? Details:	Y/N
3. Have you had shingles or post herpetic neuralgia (nerve pain following shingles) in the past year? Details:	Y/N
4. Have you had a serious allergic reaction (anaphylaxis) to a previous dose of shingles or varicella (chickenpox) vaccine or any vaccine components including neomycin or <u>gelatio</u> ? Details:	Y/N
5. Have you ever had cancer, leukaemia, lymphoma, an organ, bone marrow transplant, stem cell thera or another health condition that weakens your immune system, including blood disorders, graft versus disease or HIV/AIDS? Detoils:	
5. In the past 12 months, have you <u>been on any treatment</u> for rheumatoid arthritis, multiple sclerosis, osoriasis, polymyositis, sarcoidosis, inflammatory bowel disease or other inflammatory conditions? Detoils:	Y/N
7. In the last 12 months have you <u>taken medicine</u> that weakens your immune system such as oral orednisolone, or other steroids, anti-cancer drugs, biological therapy, radiotherapy or chemotherapy? Details:	Y/N
8. Have you been treated recently with oral antiviral medication such as <u>aciclovic</u> for conditions such as herpes? <i>Detoils:</i>	Y/N
Outcome – This section is to be completed by Health Care Providers ONLY (check relevant boxes)	
<ul> <li>There are no contraindications to Zostavax vaccination. Discussion of side effects of vaccination occurred and informed consent for vaccination obtained</li> <li>Zostavax is contraindicated</li> <li>Zostavax should be delayed         <ul> <li>until recovery from acute illness</li> <li>until treatment is completed and for months afterwar</li> <li>until current episode of shingles has resolved and for a</li> </ul> </li> </ul>	
minimum of 1 year  Specialist advice regarding immune status is required. Not for vaccination at this time.	

Date: Provider:





#### Notes for Health Care Providers

Shingles vaccine is a live attenuated vaccine.

If there is any doubt to the person's suitability then do not vaccinate and seek further advice.

#### 1. Have you ever had a shingles vaccine before?

Currently in Australia, Zostavax<sup>e</sup> is recommended as a single dose only and is provided free for people aged 70 years under the National Immunisation Program. There is also a five year catch-up program for people aged 71 - 79 years until 31 October 2021. Revaccination with Zostavax® is not recommended for people who have received a shingles vaccination at this time.

#### 2. Do vou feel unwell today?

Minor illnesses without fever or systemic upset are not valid reasons to postpone immunisation. Immunisation of individuals who are acutely unwell should be postponed until they have recovered fully. This is to avoid confusing the diagnosis of any acute illness by wrongly attributing any sign or symptoms to the adverse effects of the vaccine.

#### 3. Have you had shingles or post herpetic neuralgia (nerve pain following shingles) in the past year?

Zostavax<sup>®</sup> is not recommended for the treatment of shingles or post-herpetic neuralgia (PHN). Individuals with shingles or PHN should wait until symptoms have ceased before being considered for vaccination. If the individual has had shingles in the last year and they have a fully functioning immune system (i.e. the individual does not have any of the conditions listed below), vaccination should be delayed for one year. Patients who have two or more episodes of shingles in one year should have investigation for an underlying cause of immune suppression prior to vaccination. Investigations performed will depend on findings from history and examination.

#### 4. Have you had a serious allergic reaction (anaphylaxis) to a previous dose of shingles or varicella (chickenpox) vaccine or any vaccine components including neomycin or gelatin?

Anaphylaxis following vaccine is rare. The vaccine should not be given to an individual who has had a confirmed anaphylactic reaction to a previous dose of shingles or varicella vaccine or any of the vaccine components including neomycin or gelatin.

5. Have you ever had cancer, leukaemia, lymphoma, an organ or bone marrow transplant, stem cell therapy, or another health condition that weakens your immune system, including blood disorders, graft versus host disease or HIV/AIDS?;

6. In the past 12 months, have you been on any treatment for rheumatoid arthritis, multiple sclerosis, psoriasis, polymyositis, sarcoidosis, inflammatory bowel disease or other inflammatory conditions?; and

7. In the last 12 months have you taken medicine that weakens your immune system such as oral prednisolone, or other steroids, anti-cancer drugs, biological therapy, radiotherapy or chemotherapy?

Zostavax<sup>e</sup> is a live vaccine. The decision to administer Zostavax<sup>e</sup> to immunosuppressed individuals should be based on a clinical risk assessment. If the individual is under specialist care, and it is not possible to obtain full information on that individual's treatment history, then vaccination should not proceed until the advice of the specialist or a local immunologist/haematologist has been sought. If healthcare professionals administering the vaccine have concerns about the nature of therapies (including biologicals) or the degree of immunosuppression they should contact the relevant specialist for advice.

Immunocompromising conditions that would contraindicate Zostavax® include:

Primary or acquired immunodeficiency

- o Haematologic neoplasms: leukaemias, lymphomas, myelodysplastic syndromes (including: those who remain under follow up for chronic lymphoproliferative disorders; and individuals who are currently not receiving treatment or who have never received treatment)
- o Post-transplant: certain solid organ (on immunosuppressive therapy or who have used immunosuppressive therapy within last 6 months), haematopoietic stem cell transplant (within 24 months, or longer if immunosuppression or graft versus host disease is present) and only if in remission
- Immunocompromised due to primary or acquired (e.g. HIV/AIDS) immunodeficiency
- Other significantly immunocompromising conditions



Insert logo

Insert logo

Immunosuppressive therapy (current or recent)

- o Chemotherapy or radiotherapy within the last 6 months, even if for a condition other than cancer
- o Corticosteroids (short-term high dose, long-term lower dose) see below
- o All biologics and most disease-modifying anti-rheumatic drugs (DMARDs) see below

#### Guide to safe doses of immunosuppressive therapy for Zostavax administration:

Mechanism of action	Examples*	Safe dose**	Comments	
Anti-TNF	Etanercept Infliximab Adalimumab	NONE	Vaccinate 1 month before treatment initiation OR 12 months after treatment cessation	
IL-1 inhibition	Anakinra	NONE		
Costimulation blockade	Abatacept	NONE		
B-cell depletion/inhibition	Rituximab	NONE		
Immunomodulators (antimetabolites)	Azathioprine 6-Mercaptopurine Methotrexate	≤3.0 mg/kg/day ≤1.5 mg/kg/day ≤0.4 mg/kg/week	Vaccinate 1 month before treatment initiation OR 3 months after treatment cessation	
Corticosteroids	Prednisone	Any dose when duration <14 days OR <20 mg/day when duration ≥14 days	If≥20mg/day for ≥14 days, vaccinate 1 month before treatment initiation OR 1 month after treatment cessation	
T-cell activation/inhibition	Tacrolimus Cyclosporine	NONE	Vaccinate 1 month before treatment initiation OR 3 months after treatment cessation	
Others	Cyclophosphamide Mycophenolate	NONE		

NOTE: This is not a complete list of all licensed biologics, or medications within each class, but serves as a guide only.
 \*\* Refer to <u>The Australian Immunisation Handbook</u> 10th edition, Chapters 3.3.3 and 4.24.

Individuals on long term stable low dose corticosteroid therapy (defined as s20mg prednisone per day for a 14 days) either alone or in combination with low dose non-biological oral immune modulating drugs (e.g. methotrexate s0.4 mg/kg/week, azathioprine s3.0mg/kg/day or 6-mercaptopurine s1.5mg/kg/day) can receive the vaccine. Specialist advice should be sought for other treatment regimes. Zostavax® is not contraindicated for use in individuals who are receiving topical/inhaled corticosteroids or corticosteroid replacement therapy.

8. Have you been treated recently with oral antiviral medication such as accidovir for conditions such as herpes? Zostavax<sup>®</sup> may have a lower effectiveness if given while an individual is being treated with oral or intravenous antivirals (such as aciclovir) or within 48 hours of such treatment. Delay vaccination until after this time. The use of topical aciclovir is not a contraindication to vaccination.

#### Adapted from:

- www.hps.scot.nhs.uk/resourcedocument.aspx?id=5455
- Zostavax and individuals who are immunocompromised at www.immunise.health.gov.au
   National Centre for Immunisation Research & Surveillance fact sheets:
   www.ncirs.edu.au/assets/provider resources/fact-sheets/zoster-vaccine-FAQ.pdf, and
   www.ncirs.edu.au/assets/provider resources/fact-sheets/zoster-vaccine-fact-sheet.pdf

#### For Further Information

State or territory immunisation service [insert your local contact details]



phn South Australia PHNs

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http://www.immunise.health.gov.au/internet /immunise/publishing.nsf/Content/clinicalupdates-and-news#toc\_zostavax-check

NCIRS: <u>http://www.ncirs.edu.au/provider-</u> resources/ncirs-fact-sheets/

- fact sheet
- FAQ



Cohort 70 year old's with catch up for 71 – 79 year old's

AIR002A – Number (or percentage) of individuals who have received valid vaccination:

Individuals born 31 October 1937 to 31 October 1947 (70-80 years of age) receiving Zostavax between 01 November 2016 and 31 October 2017:-

- 38,236 individuals received dose 1 of Zostavax
- 208 individuals have received 2 doses of Zostavax

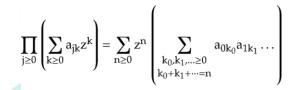
Total 38,444 doses reported to AIR

The AIR011A – Due/Overdue Report identifies only those born 1946 and 1947 – not those in the 'catch up age' group



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$$\begin{split} \pi(n) &= \sum_{m=2}^{n} \left[ \left( \sum_{k=1}^{m-1} \lfloor (m/k) / \lceil m/k \rceil \rfloor \right)^{-1} \right] \\ A &= \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & a_{mn} \end{pmatrix} \\ & \left\{ \begin{matrix} \alpha &= f(z) \\ \beta &= f(z^2) \\ \gamma &= f(z^3) \end{matrix} \right\} \qquad \begin{cases} x &= \alpha^2 - \beta \\ y &= 2\gamma \end{cases} \\ p_1(n) &= \lim_{m \to \infty} \sum_{\nu=0}^{\infty} (1 - \cos^{2m}(\nu!^n \pi/n)) \end{split}$$



 $1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + x^2}}}}}$ 

 $\sqrt[3]{i}^{n+1}\sqrt{4+5+6+7}$ 

 $\iint_{0}^{a=n} x dx \left(\frac{a+b}{c}\right)^{2}$ 



## Uptake



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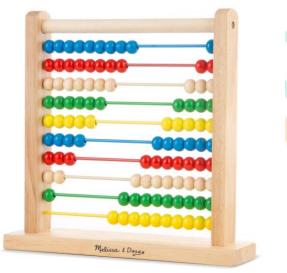
19,575 - number of 70 year old individuals (born 1947) in SA

- 2,769 number of doses administered in SA recorded on the AIR (7 individuals have received a 2<sup>nd</sup> dose)
- 82,419 number of Zostavax doses distributed by SA Health to providers in SA since 1<sup>st</sup> November 2016

Zoster doses overdue 1 January – 30 September 2017 = 12,138

- 3,228 reporting as overdue "Y" status
- 8,910 reporting with "N" status but .....should be reported as "Y" as overdue date is prior 31 October 2017 – issue reported to AIR National Office

Zoster doses due between 1 October – 31 December 2017 = 4,674







## Uptake



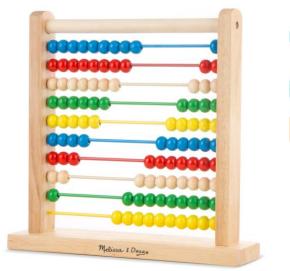
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18,869 - number of 71 year old individuals (born 1946) in SA

4,827 – number of doses administered to individuals born in 1946 in SA recorded on the AIR (26 individuals have received a 2nd dose)

3,441 – number born November and December 1946

- 849 number of doses administered to those born between 1<sup>st</sup> November and 31<sup>st</sup> December 1946 in SA recorded on the AIR
- 2,612 number reporting as overdue



Do the math...... 82,419 distributed vaccine doses minus 43,255 doses reported = 39,164 doses of Zostavax are potentially in provider fridges.....





Your mother is 75 years of age. She lives alone, is very socially active and is in good health – no medical conditions except a 'bit of arthritis' and a 'bit of blood pressure' which she has monitored regularly by her GP.

She calls you one morning at 0630 complaining of feeling unwell and has dull, central chest pain radiating to the left arm.

What is your advice to her?

Seek medical advice immediately







## A case study



On arrival in the Emergency Department, your mother is still in pain, alert, apyrexial and well perfused peripherally with an unremarkable cardiac and chest examination.

An ECG revealed Left bundle branch block (LBBB). As your mother is a healthy woman, there were no previous ECG's for comparison.

With suggestive history and abnormal ECG an initial diagnosis of acute myocardial infarction was made.

You FaceBook her siblings and your siblings with the news. You explain the situation to 20 people who call you.

She received narcotic analgesia and was thrombolysed with Rapilysin and transferred to coronary care unit (CCU) for continued care.

On admission to CCU, her chest pain has almost subsided.



## A case study



You go home 14 hours later, anxious and exhausted – physically and emotionally.

Next morning, her cardiac enzymes were within the normal limits.

Later on during the day, she had a further episode of chest pain radiating to her left arm. On examination, she was pyrexial (38.6°C) with wide spread erythematous rash on left hand without neurovascular deficit or lymph adenopathy.

A few hours later her skin became itchy and developed into classical vesicular bullous appearance on forearm and hand involving C8-T1 distribution.

A Dermatologist opinion was sought and diagnosis of herpes zoster was made.



## A case study



An Australian Government Initiative

She is discharged from hospital. You ask her if her GP has given her the shingles vaccine.

She informs you that the GP has never mentioned it, nor has the nurse who normally takes her blood pressure.

How does this make you feel?







but ..... there is a high level of stock holding so possibly only 45-50% have been administered

Overall, distributed doses to clinics represents 65% uptake Australia wide

How do we get doses in fridges into arms?

What are the barriers?

- there is ample of vaccine stock
- recalls and reminders
- maximise the media campaign (TV, radio, print and on-line ongoing until November)



NATIONAL IMMUNISATION PROGRAM RECALL TOOLKIT

Tools and strategies to implement patient recall programs in your practice





An Australian Government Initiative

For use by healthcare professionals only.

## **Consumer Activation - TV Commercial**



### Influenza:

There have been 23,625 cases of influenza notified year-to date (14<sup>th</sup> October 2017), compared with 5,415 cases reported for the same period last year

- Waning immunity around 4 months post vaccination
- H3 strain difficult strain

Influenza in South Australia: number of clinical and laboratory diagnoses per week, notified in 2015 - 2017 YTD Influenza A Influenza B 3000 100 Sentinel general practitioner Influenza diagnoses (ASPREN) Emergency Department Influenza diagnoses (HASSED) 90 2500 80 70 2000 60 1500 50 5 1000 30 Number 20 500 10 diagnose 2015 Notification week 2017

Data sourced from Communicable Disease Control Branch SA Health

Please note: Whilst all reasonable care has been taken in its preparation, SA Health does not make any representations or warrantie:

as to its accuracy or otherwise.

The information and data is subject to change without notice.

Data may not be reproduced or published without the written permission of SA Health.

Web accessed 23rd October:

http://www.sahealth.sa.gov.au/wps/wcm/connect/0572038042ec8c1f8e9abe9d0fd82883/Item+2 Influenza+171017.pdf?MOD=AJPERES&CACHEID=0572038042ec8c1f8e9abe9d0fd82883





HASSED

clinica

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### Pertussis:

There have been 1,409 cases of pertussis notified year-to date, compared to 1,219 cases reported for the same period last year.

### Invasive Pneumococcal Disease:

There have been 176 cases of invasive pneumococcal disease notified year-to-date, compared to 103 cases reported for the same period last year. Pneumo Smart Vaccination Tool: <u>http://immunisationcoalition.org.au/pvt/</u>

### Varicella infection:

Of the cases of varicella-zoster virus infection that have been characterised year-to-date, 2,093 were shingles and 348 were chickenpox.







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### **Global Hepatitis B vaccine shortage:**

- adult formulation hepatitis B vaccine shortage is likely to persist for several months at a minimum
- supplies of paediatric formulation are expected to increase from December 2017
- ATAGI has written advice on the use of hepatitis B vaccines during supply shortages
- supplies for the National Immunisation Program have not been affected at this time
- SA Health is continuing to supply vaccine for:
  - the high risk hepatitis B program
  - the birth dose and primary course for neonates and infants
  - management of post-exposure situations where a significant exposure has occurred
- Some Twinrix Adult available on the private market





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### Join the Immunisation Provider Network (IPN)!!

https://www.surveymonkey.com/r/SAPHN\_Immunisation\_Membership

Next IPN meeting is on Monday 4<sup>th</sup> December at EDC, Hindmarsh

- 0900 0930 SIP
- 0930 registration
- 1000 1200 IPN meeting
- Guest Speaker: Patricia Berryman from AIR

## The Immunisation Hub website has been officially launched (but is still under construction!!)

http://immunisationhub.com.au/





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## Thank you all for attending

## Special thanks also to Seqirus for sponsoring this event and SAPMEA for facilitating

