Free Influenza Vaccine

Influenza is highly contagious and spreads easily from person to person through the air and on the hands. Annual vaccination is one of the most important measures to prevent influenza and its complications.

Immunisation providers play an important role in promoting vaccination and should take every opportunity to identify and offer vaccination to eligible individuals, particularly people in at-risk groups.

To ensure your patients in at-risk groups are aware of the free seasonal influenza vaccine it may be necessary to recall them.

Influenza vaccination can be administered throughout the year, whenever you have flu vaccines in your fridge. In particular, those in at-risk groups including pregnant women, people with chronic diseases and Aboriginal and Torres Strait Islander children under five years of age, can benefit from vaccination at any time of the year.

All influenza vaccinations administered should be recorded on the Australian Immunisation Register.

What flu vaccines will be available for the National Immunisation Program (NIP) in 2017?

Only quadrivalent influenza vaccines (QIV) formulations are available in Australia in 2017. The influenza virus strains included in the 2017 seasonal influenza vaccines are:

- A (H1N1): an A/Michigan/45/2015 (H1N1)pdm09* like virus
- A (H3N2): an A/Hong Kong/4801/2014 (H3N2) like virus
- B: a B/Brisbane/60/2008 like virus
- B: a B/Phuket/3073/2013 like virus

* New strain (differs from strain in 2016 vaccine)

There will be four flu vaccines available under the NIP in 2017. Age restrictions apply to these vaccines.

~ Before you administer a flu vaccine check your patient’s age and check that you have the correct vaccine. The packaging and syringe have the age groups written on them ~
Who should be vaccinated

Influenza vaccine is provided free under the NIP for:

❄ Anyone over 65 years;
❄ Aboriginal and Torres Strait Islanders 6 months to 5 years;
❄ Aboriginal and Torres Strait Islanders 15 years and over;
❄ Pregnant women and;
❄ Anyone over 6 months old who have medical conditions associated with the highest risk of influenza disease complications (including heart conditions, asthma and other lung conditions, diabetes, kidney problems or impaired immunity).

Annual influenza vaccination is also strongly recommended, but not funded, for the following persons: Aboriginal and/or Torres Strait Islander children aged 5 years to <15 years; persons with Down syndrome; persons with class III obesity (body mass index ≥40 kg/m\(^2\)); persons with chronic liver disease; children aged 6 months to <5 years; persons who may transmit influenza to children or adults at increased risk of influenza complications (e.g. healthcare workers); homeless people; persons providing essential services; persons travelling during the influenza season, and anyone who wishes to have it.

Any adverse events following immunisation should be reported to Health Protection Service on 6205 2300.

When will flu vaccinations start?

❄ The Vaccine Management Unit will deliver a starting stock of flu vaccine and information resources in mid April. You can start immunising as soon as you have the stock in your fridge.
❄ Remember that influenza vaccine can be administered throughout the year, whenever you have stock in your fridge that has not yet expired.

All vaccines administered should be recorded in the Australian Immunisation Register.

<table>
<thead>
<tr>
<th>Recommended ages and doses of influenza vaccine available under the NIP 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>6 mths &lt; 3 yrs</td>
</tr>
<tr>
<td>≥3 yrs – &lt;9 yrs</td>
</tr>
<tr>
<td>≥ 9 yrs - 18 yrs</td>
</tr>
<tr>
<td>18 years and over</td>
</tr>
</tbody>
</table>
Influenza in the ACT during 2016

Between 1 January and 31 December 2016, there were a total of 1,603 cases of laboratory-confirmed influenza reported to ACT Health (Figure). There were more cases of influenza reported during the 2016 influenza season than in any of the previous five years (2011-2015). Between 2011 and 2015, the average total number of cases reported per year was 791 (range 270-1264 cases per year). Generally, notified cases represent only a small proportion of influenza cases occurring in the community, as cases must present to a health professional, be tested for influenza, and have a positive test result, in order to be notified to ACT Health.

In the ACT, influenza notifications began to increase in the week beginning 17 July 2016 (week 30), and continued to increase for the following six weeks, peaking in the week beginning 28 August 2016 (week 36) (Figure). In week 36, there were 219 influenza cases reported, which was 13.7% of all notifications received in 2016. Following the peak, influenza activity declined and returned to background (inter-seasonal) levels over an eight week period.

In 2016, notifications were highest in adults aged 30-39 years (14.3% of total notifications, n=230) and 40-49 years (13.7%, n=219), as well as in children aged 0-9 years (12.9 %, n=207). Overall, 54.9% of influenza notifications were female.

Of all notifications received in 2016, 90.1% (n=1,444) of notifications were influenza A and 8.9% (n=143) were influenza B. There were also 16 notifications of cases co-infected with influenza A and B. Of the 352 influenza A notifications with subtype information available, 67 (19.0%) were H1N1 and 285 (81.0%) were H3 (presumed H3N2).

Figure: Number of laboratory-confirmed influenza notifications to ACT Health, 1 January 2012 to 31 December 2016, ACT.
Influenza Testing

Routine laboratory testing of all potential cases of influenza is unnecessary for management of community-acquired cases. Confirmation of influenza infection is a greater priority for your patients who are at higher risk of complications of influenza, including those:

- Who are hospitalised or who are critically ill;
- At an increased risk for severe disease including pregnant women and those with underlying chronic medical conditions;
- Who may be part of an influenza-like illness outbreak, particularly individuals living or working in a residential care setting;
- Health care workers in high-risk settings.

Asymptomatic cases should not be tested. If testing is required, PCR is the preferred and most reliable method of diagnosis for influenza. Serology is of little benefit in diagnosing acute influenza.

Request a PCR test on a nasopharyngeal or throat swab and include relevant clinical notes on the pathology request form (e.g. symptoms, travel history, onset date). For more information, please call the Communicable Disease Control section on 6205 2155.

Adult Pneumococcal Vaccination Program

Pneumovax23® vaccine is used to prevent life-threatening infections caused by pneumococcal bacteria. The vaccine is available free to anyone 65 years and older, Aboriginal and Torres Strait Islander people 50 years and older, and Aboriginal and Torres Strait Islander people over 15 years old with medical risk factors.

Pneumovax 23® revaccination recommendations

A dose of Pneumovax23® should be given to adults at 65 years of age. Every effort should be made to provide a dose to anyone aged ≥65 years who has not previously received a dose. For non-Indigenous adults aged ≥65 years, a second dose (a single revaccination) of Pneumovax23®, to be given aged ≥5 years after the first dose, is recommended for those who have a condition that predisposes them to an increased risk of invasive pneumococcal disease (Refer to the website Australian Immunisation Handbook, 10th Edn, updated 2015)

A second dose is no longer recommended for those without any of these predisposing conditions.

Recommendations for the use of Pneumovax 23® in those < 65 years, including for Aboriginal and Torres Strait Islander adolescents and adults are available on page 333 of the Australian Immunisation Handbook 10th edition, 2013.

The minimum interval between any 2 doses of Pneumovax 23® is 5 years.
Shingles vaccination
A single dose of herpes zoster vaccine is funded on the NIP for all adults at 70 years of age. A single catch-up dose will also be funded for adults aged 70–79 years for a five year period to 2021. Shingles vaccine (Zostavax) can be safely administered at the same time as influenza and pneumococcal vaccines.

Further information on Influenza vaccine

Refrigerator or power failure
All immunisation providers should have a back-up plan and an alternative option for vaccine storage in the event of a refrigerator or power failure. Please see the current ‘Strive for 5’ for information and advice on how to manage this situation or call 6205 2300. Remember that if you need to transport vaccines to another fridge pack the data logger with them.

Check the pack
There have been increasing instances of vaccine requiring reconstitution (e.g. Infanrix Hexa and Zostavax) not being reconstituted prior to administration. Please double check all vaccines prior to administration to ensure they are being given correctly.

ACIR to AIR
A reminder that the Australian Childhood Immunisation Register (ACIR) has become a whole of life register called the Australian Immunisation Register (AIR). The AIR has a record for all people registered with Medicare. It is important to ensure immunisations given to people of all ages are now entered into the AIR.

MMRV
When administering immunisations to four year olds please check that the 18 month MMRV was given. If it has been missed it can be given at 4 years.

4 Year Immunisations
Reports received from the AIR has seen a notable increase in the number of children recorded as receiving infanrix (DTPa only) at 4 years. The NIP recommendation for 4 year olds is Infanrix-IPV (DTPa and Polio).
Dear Immunisation Provider

Zostavax and individuals who are immunocompromised
(Please ensure this is distributed to all doctors and nurses in the practice)

KEY POINTS:
- Zostavax is contraindicated in patients who are immunocompromised
- Administration where contraindicated has resulted in a death in Australia
- Do not administer Zostavax to patients who are immunocompromised. If in doubt seek advice from a specialist or the Health Protection Service on 62052300.

Zostavax contains live attenuated varicella-zoster virus, containing 14 times more virus than childhood varicella vaccines. Administration to people who are immunocompromised is associated with risk of disseminated disease from the vaccine virus. In addition to being contraindicated for those with previous anaphylaxis to the vaccine or its components, it is vital all Immunisation Providers are aware of the following CONTRAINDICATIONS, which includes, but is not limited to;
- **Haematological or generalised malignancies** (including those not on treatment): e.g. lymphoma, acute or chronic leukaemia, Hodgkin’s disease
- **Solid organ or bone marrow transplant recipients** (with exceptions as advised by specialists)
- **HIV/AIDS** (with exceptions as advised by specialist) or other congenital/acquired immunodeficiencies
- **Current or recent high-dose systemic immunosuppressive therapy**: e.g. chemotherapy, radiation therapy, oral corticosteroids, disease modifying anti-rheumatic drugs. A guide to safe doses of immunosuppressive therapy for Zostavax administration is on the reverse page of this letter.

Inadvertent administration to an immunocompromised person:
- Urgently contact the treating specialist or infectious disease specialist for advice on use of antivirals.
- Alternately, call the ACT Health, Health Protection Service during business hours on 62052300.

Further Information
- ACT Health, Health Protection Service during business hours on 62052300

Dr Paul Kelly
Chief Health Officer
Population Health Protection and Prevention
3 March 2017
Guide to safe doses of immunosuppressive therapy for Zostavax administration

<table>
<thead>
<tr>
<th>Mechanism of Action</th>
<th>Examples</th>
<th>Safe Dose*</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-TNF</td>
<td>Etanercept, Infliximab, Adalimumab</td>
<td>NONE</td>
<td>Immunise 1 month prior to treatment initiation OR 12 months post treatment cessation</td>
</tr>
<tr>
<td>IL-1 inhibition</td>
<td>Anakinra</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>Costimulation blockade</td>
<td>Abatacept</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>B-cell Depletion/Inhibition</td>
<td>Rituximab</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>Immunomodulators (Antimetabolites)</td>
<td>Azathioprine</td>
<td>≤3.0 mg/kg/day</td>
<td>If on higher dose, immunise 1 month prior to treatment initiation OR 3 months post cessation</td>
</tr>
<tr>
<td></td>
<td>6-Mercaptopurine</td>
<td>≤1.5 mg/kg/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methotrexate</td>
<td>≤0.4 mg/kg/week</td>
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</tr>
<tr>
<td>Corticosteroids</td>
<td>Prednisone</td>
<td>Complex</td>
<td>Refer to Immunisation handbook and NCIRS factsheet</td>
</tr>
<tr>
<td>T-cell activation inhibition</td>
<td>Tacrolimus, Cyclosporine</td>
<td>NONE</td>
<td>Immunise 1 month prior to treatment initiation OR 3 months post cessation</td>
</tr>
<tr>
<td>Others</td>
<td>Cyclophosphamide, Mycophenolate, Sulfasalazine</td>
<td>NONE</td>
<td></td>
</tr>
</tbody>
</table>

*See Australian Immunisation Handbook, Chapters 3.3.3 and 4.24

CAUTION: this is not a complete list of all immunosuppressive medications. If someone is on a combination of medications or if there is any doubt whether Zostavax is safe for your patient, defer vaccination and seek specialist advice.