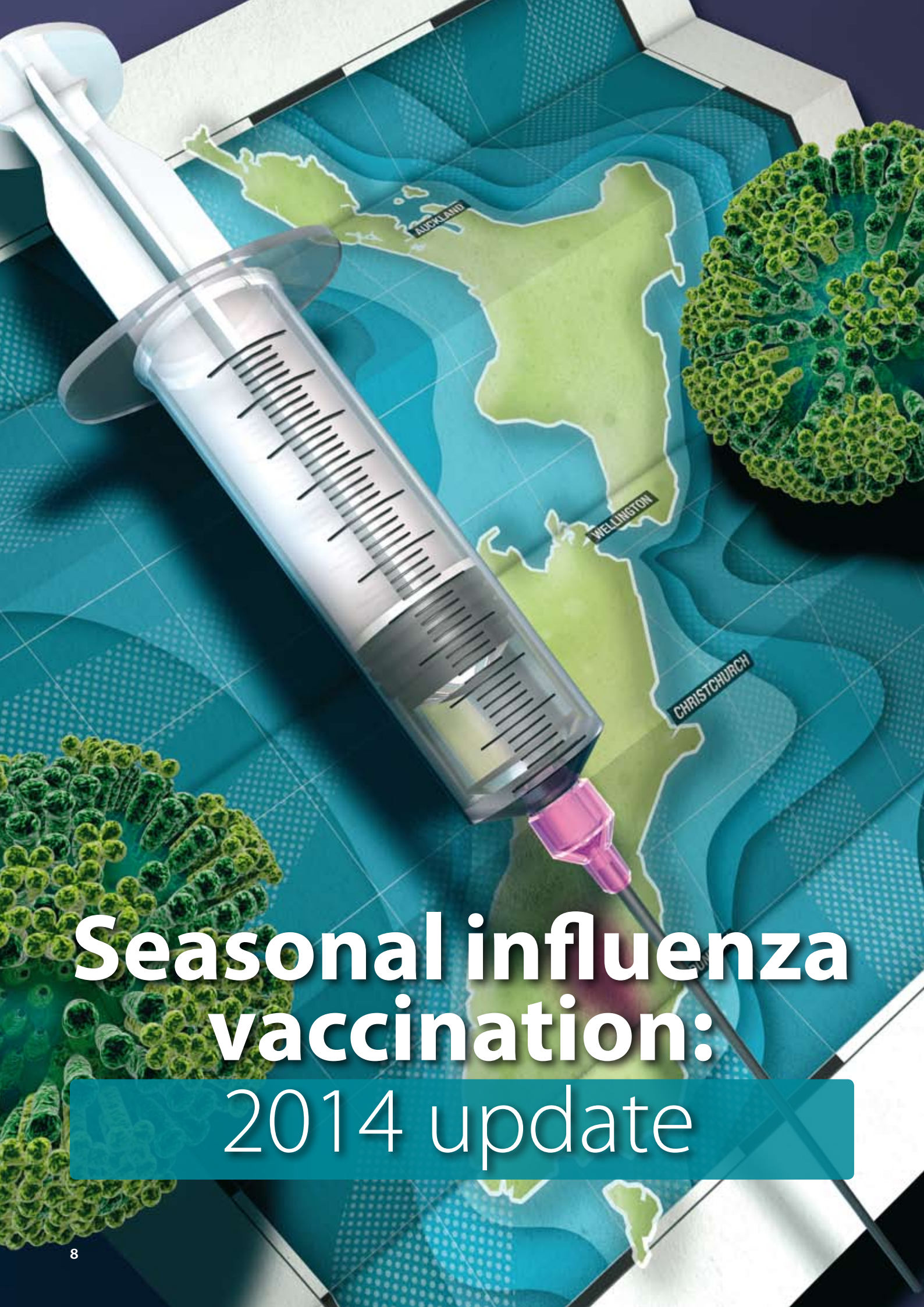


Seasonal influenza vaccination:

2014 update

The vaccine for the 2014 influenza season is now available. This year, the vaccine has been updated with two new strains, as well as the previously included A(H1N1)-like virus. The three strains will provide cover for the variants of influenza currently circulating globally and likely to affect New Zealand in winter 2014. The group of people eligible for a subsidised vaccine is unchanged from 2013. All patients can be encouraged to receive the vaccine, but older people, immunocompromised people, women who are pregnant and young children will benefit the most from vaccination. In addition, it is strongly recommended that healthcare workers receive the vaccine in order to protect themselves and their patients.

New influenza vaccines for a new year

Vaccination is the most effective means of protecting against influenza. Receiving an influenza vaccine annually is important, as different strains are generally in circulation each year (which is reflected in the strains selected for the vaccine) and because the immunity provided by influenza vaccination is only expected to last one to two years.[1] This loss of immunity is more rapid in older and immunocompromised people, and annual vaccination is therefore particularly important in these groups, as well as in younger children (aged six months to five years) who are particularly vulnerable to the complications of influenza.[2] People at increased risk of being exposed to and spreading the infection, such as healthcare workers and childcare providers, should also ideally be vaccinated.

There are two funded influenza vaccines in 2014: Influvac and Fluarix. Both are indicated for adults and children aged six months and older. The vaccines should ideally be administered intramuscularly, although both can be used subcutaneously if there is a contraindication to intramuscular administration, such as a bleeding disorder.

Administration to patients can begin as soon as the vaccine is available at the general practice. Subsidy for eligible groups is available up until 31 July, 2014 (see: "The subsidised group has not changed from 2013"). Funded vaccine claims need to be submitted within eight months from the date of administration (see over page). Vaccination is also available from selected accredited Pharmacists, however, this is not subsidised.

New strains are included in the 2014 vaccine

This year the vaccine includes two new strains, plus one strain from previous years. The vaccine components for the 2014 influenza season in New Zealand and Australia are:[3, 4]

- A/California/7/2009 (H1N1)-like virus
- A/Texas/50/2012 (H3N2)-like virus
- B/Massachusetts/2/2012-like virus

The A/California/7/2009 (H1N1)-like virus component of the influenza vaccine has been unchanged since 2010. It should provide good protection against this strain of influenza which has been prevalent in some Northern hemisphere countries during the 2013/14 winter.[3] Similarly, the A/Texas/50/2012(H3N2)-like virus component should provide good protection against the H3N2 strains also circulating and which were the predominant virus during the Christchurch severe influenza outbreak in 2012. B/Massachusetts/2/2012, which belong to the Yamagata lineage of B viruses, are now the dominant influenza B virus circulating.

These strains were recommended by the World Health Organisation and accepted by the Australian Influenza Vaccine committee as appropriate for New Zealand and Australia in 2014.[3, 4]

How many doses are required?

Adults and children aged over nine years require one dose of the vaccine to achieve immunity for the season.

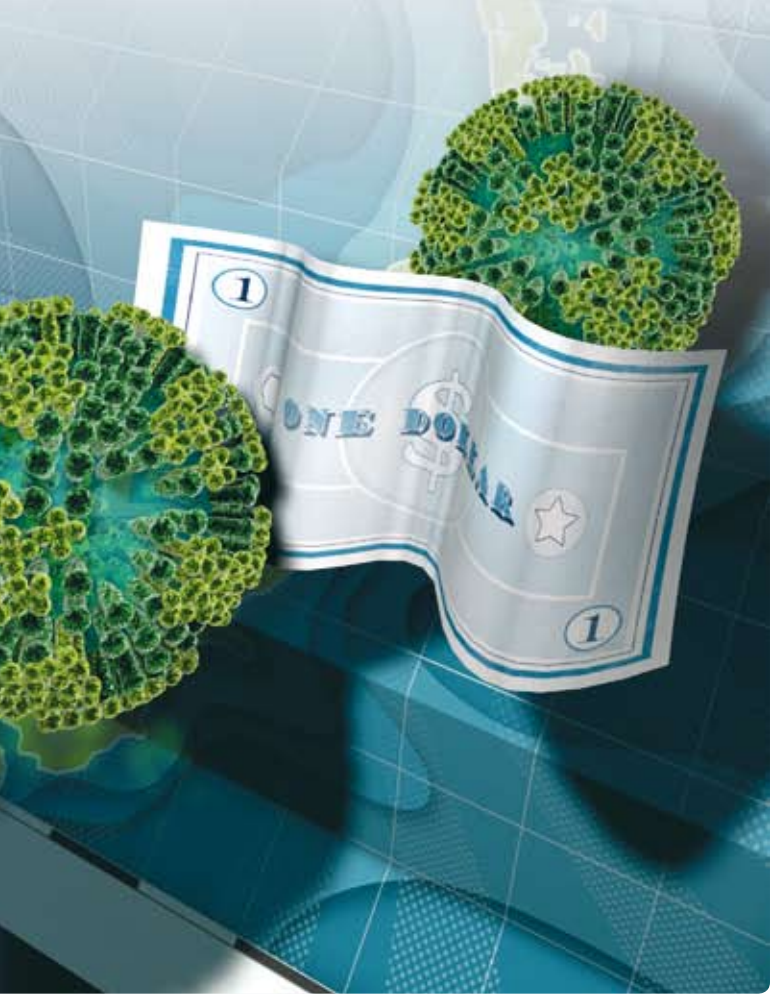
Claiming funding for the vaccine

The vaccine costs $9.00 (excluding GST) per dose. The cost of vaccines administered to patients who are eligible for subsidy can be claimed in full by the practice. The cost of administration of the vaccine to the eligible group can also be claimed, and the administration subsidy is set at $19.59 (excluding GST) per person.

The vaccine has been available for order since February. Orders are subject to a minimum order size, starting at a minimum of 50 doses in February, and reducing to a minimum of ten doses over the course of the season.

A limited refund of unused vaccines is available up until 31 August, 2014. Only 10 stock units can be refunded from any one account.

For further information on receiving the vaccine, submitting claims and returning unused vaccines, see: **http://influenza.org.nz/?t=888**



Children aged between six months and nine years who have not previously received an influenza vaccine should be given two doses, with the second dose given at least four weeks after the first. Children in this age group who have received an influenza vaccine at any time in the past require only one dose.

Who should not receive an influenza vaccine

At present there is no influenza vaccine available for **infants aged under six months**. Protection of young infants can be partially achieved through vaccinating the mother during pregnancy, and via "cocooning", i.e. immunising adults (e.g. parents and grandparents) and older children who will have contact with the infant in order to reduce the likelihood of exposure to the viruses. For most people, these vaccinations will not be subsidised.

People with an **acute illness or fever** over 38°C should delay having the vaccine until they are well.

Fluarix pre-filled syringes have a needle shield that contains latex.[1] As such, Fluarix is considered inappropriate for **people with a latex allergy**; Influvac can be used.

The influenza vaccines used in New Zealand are produced using hens' eggs and contain trace amounts of egg protein. People who have a **confirmed anaphylactic reaction to egg protein may still be given the vaccine**, however, this should be done under the supervision of an Allergy specialist or Paediatrician.[5] This is generally only recommended if the benefits of vaccination outweigh the increased risk of an adverse reaction.[5] People who have had mild reactions or hypersensitivity to egg protein may receive the vaccine with additional safety precautions, such as a 30 minute observation period following administration (the normal recommended observation period is 20 minutes).[5]

The subsidy group has not changed from 2013

The groups of people that are eligible for subsidy for influenza vaccination are unchanged from 2013. Most people at increased risk from the complications associated with influenza are able to receive a funded vaccine. The eligible groups in 2014 are:

- People aged 65 years and over
- Women who are pregnant
- Children aged under five years with a previous history of hospitalisation or significant respiratory illness

- People aged under 65 years with long-term health conditions, such as:
  - Coronary heart disease
  - Chronic kidney disease
  - Chronic respiratory conditions
  - Diabetes, types 1 and 2
  - Immune suppression
  - Cancer
  - Epilepsy
  - Rheumatoid arthritis

Practices can provide subsidised doses of the influenza vaccination until July 31, 2014, after which time, patients will have to pay the full cost of the vaccine and administration.

The full list of conditions that qualify a patient for subsidised vaccination is available from: **http://influenza.org.nz/site_resources/Influenza/Influenza 2013/Eligibility_Criteria_(2).pdf**

Healthcare providers should receive the influenza vaccine

It is recommended that all healthcare providers and non-clinical practice staff be immunised annually against influenza. Influenza vaccination among healthcare providers improves patient safety,[6, 7] and is consistent with professional ethics. Vaccination should form part of an overall practice effort to reduce influenza transmission, which includes hand washing and exclusion of all staff with influenza-like illness.

All District Health Boards in New Zealand offer free influenza vaccination to healthcare staff. Since 2010, data has been available on the uptake of this free immunisation. In 2013, approximately 58% of all employees received an influenza vaccination.[8] This rate was a significant improvement from 2012 (48%), 2011 (46%) and 2010 (45%).[8] Rates were highest among doctors (64%) and lowest among midwives (46%).[8] Nurses (55%), allied staff (56%) and other employees (60%) all had similar rates of influenza vaccination.[8] Immunisation rates also differed among DHBs, with the highest rates achieved in 2013 in Tairawhiti and Canterbury DHBs (77% and 76% respectively) and the lowest rates in West Coast DHB (36%).[8]

Healthcare workers have one of the highest exposure rates for influenza in the community, and a substantial proportion become infected with the influenza virus each season.[7] Once infected, the virus is shed before the onset of symptoms, during subclinical or clinical illness and once symptoms have resolved, meaning that healthcare workers, even when they appear well, can spread the influenza virus to patients.[7]

There is moderately strong evidence that immunisation in healthcare workers reduces patient mortality from influenza.[7] Healthcare worker immunisations are also likely to reduce the number of influenza cases in patients.[7] Overall, the benefits of healthcare worker influenza vaccination, which include reductions in morbidity and mortality among patients and reduction in illness among the workers themselves, outweigh any potential harms.[7]

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