Egg Allergy and Influenza Vaccination
Frequently Asked Questions

This document has been developed by ASCIA, the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand. ASCIA information is based on published literature and expert review, is not influenced by commercial organisations and is not intended to replace medical advice.
For patient or carer support contact Allergy & Anaphylaxis Australia or Allergy New Zealand.

Q 1: Why is vaccination important?

Vaccination is the act of introducing a vaccine into the body to produce protection from a specific disease. It is an important method to reduce the risk of developing infectious diseases, including influenza, which is a major cause of illness and deaths worldwide.

Immunisation is a process by which a person becomes protected against a disease through vaccination.

Notification and hospitalisation rates for influenza infections are highest in children up to five years of age, which is also the age group most affected by egg allergy.

Q 2: Is the influenza vaccine safe for a person with egg?

Yes. People with egg allergy may be safely vaccinated with the influenza (flu) vaccine.

The current influenza vaccines distributed in Australia and New Zealand are inactive and derived from influenza virus, grown in hen's egg. Once purified, the amount of residual egg protein (ovalbumin) in each vaccine dose is usually less than 1 microgram. This is much less than the amount of egg protein likely to trigger reactions in people with egg allergy which is estimated at 130 micrograms when eaten.

Q 3: What is the evidence for this?

Several published reviews, guidelines and reports suggest no increased risk of severe allergic reactions (anaphylaxis) associated with influenza vaccination of people with egg allergy. A 2012 review of published studies included 4172 egg allergic patients (513 with a history of a severe egg allergy) with no cases of anaphylaxis occurring after receiving an inactivated influenza vaccine. Further studies have confirmed these results.

Q 4: Is anaphylaxis to the influenza vaccination rare?

Yes. The risk of anaphylaxis to inactivated influenza vaccine is similar to other vaccines and estimated at 1.35 per million doses. If anaphylaxis is suspected, a review by an allergy or vaccine specialist is recommended to confirm the diagnosis and provide advice on vaccination.

Q 5: What are the short term side effects after vaccination?

Injection site reactions (such as local pain, redness and swelling), fever, muscle aches within a day after vaccination are common short term side effects. They indicate the start of an immune response to the vaccine, not vaccine allergy.

Q 6: Where should people with egg allergy receive their influenza vaccination?

People with egg allergy can receive an influenza vaccine in a primary care facility, such as a GP clinic. Staff should be trained to recognise and treat suspected anaphylaxis, which includes administration of adrenaline (epinephrine). Observations should occur for 15-20 minutes after vaccination.

Q 7: Where can more advice and product information be found?

This advice is consistent with Australian and New Zealand immunisation guidelines and has been adapted from ASCIA Guidelines for vaccination of the egg-allergic individual available on the ASCIA website www.allergy.org.au/hp/papers/vaccination-of-the-egg-allergic-individual

This advice varies to the vaccine product information, which indicates that egg allergy is a contraindication to influenza vaccination and lists egg allergy as a special warning or precaution.

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Content updated April 2024

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