

Allergy Testing

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: What is allergy testing?

Allergy testing such as skin prick tests or blood tests for allergen specific IgE, helps your doctor to confirm which substances (allergens) trigger your allergy symptoms. Avoiding or minimising exposure to confirmed allergic triggers is an important part of allergy and asthma management. Allergy testing also helps your doctor decide on the best treatment options.

It is important to note that:

- To accurately diagnose allergy, both allergy test results and clinical history must be reviewed together.
- Medicare rebates are available for skin prick tests or blood tests for allergen specific IgE (formerly known as RAST) in Australia.
- In some cases, referral to a clinical immunology/allergy specialist may be required for further assessment.

Q 2: When is allergy testing usually needed?

People with suspected allergic rhinitis (hay fever), asthma or allergic reactions to insects or foods will usually have allergy testing. People with allergic rhinitis or asthma are tested for a few different allergens. These include house dust mite, cat, and dog dander (or other animals if contact occurs), mould spores, pollen from relevant grasses, weeds, or trees and in some cases, occupational allergens. Testing for other allergens may be suggested for other people with suspected allergies to foods, stinging insects, and some medicines.

Q 3: What is skin prick testing?

Skin prick testing is the most convenient method of allergy testing and clinical studies have shown it improves the accuracy of an allergy diagnosis. Results are available within 20 minutes, which allows you to discuss the outcome with your doctor at the time of testing.

Skin prick testing is usually performed on the forearm or the back. First, the skin is cleaned with alcohol, then marked with numbers that correspond to the allergens. A small, plastic device is then dipped into an allergen extract solution and the skin is 'pricked' allowing a small amount of the allergen to be introduced into the skin. A small itchy lump (wheal) surrounded by a red flare will appear within 15-20 minutes if you are allergic to a particular substance.

The tests are slightly uncomfortable but are usually well tolerated, even by small children. Local itch and swelling normally settle within one to two hours. Long-lasting or severe swelling may be treated with a non-sedating antihistamine, a painkiller tablet and/or a cool compress. Some people will feel dizzy or light-headed and need to lie down. Severe allergic reactions (anaphylaxis) from allergy testing for asthma or allergic rhinitis (hay fever) are very rare.

Skin prick testing should only be performed by a health professional who has been trained to perform the test, how to select allergens, interpret results, and manage any generalised allergic reaction that may occur.

Antihistamine tablets, syrups, or medications with antihistamine-like actions (such as some cold remedies, antidepressants, and nasal sprays) should not be taken for three to seven days before testing, as these will interfere with the results. You may also be advised to avoid creams and moisturisers on your forearms or back on the day of the test to reduce the chance that allergen extracts will run into each other.

Skin prick testing will not help diagnose allergies to aspirin, food additives, or respiratory irritants such as smoke or perfumes.

Q 4: What is patch testing?

Patch testing is a simple, non-invasive method of testing for allergic contact dermatitis:

- During a patch test, up to 30 extracts of substances that are known to cause allergic contact dermatitis may be tested on the skin (usually the back or arm).
- Patches with test substances in small chambers or discs are applied to the skin and secured with hypoallergenic tape.
- Test substances can include extracts from latex, cosmetic perfumes and preservatives, hair dyes, metals, plants, foods, or glues and resins.
- The patches are left in place on the skin and kept dry for 48 hours.
- The test site will then be checked at different time intervals.
- An eczema-like rash is often an indication that the person is sensitive to a particular allergen.

Q 5: What are other methods of skin testing?

Intradermal testing (also known as scratch testing) should not be used to test for allergy to inhalants or foods. Intradermal testing is less reliable than skin prick testing and can be uncomfortable. Intradermal skin testing may be used to test for allergies to some antibiotic drugs or stinging insect venoms.

Q 6: What is total IgE testing?

Total IgE tests measure the total level of immunoglobulin E (IgE) antibodies in the blood and is not routinely recommended in allergy testing as results can be inaccurate. Total IgE may be raised in people with parasitic infections, eczema, and some rare medical conditions. It may also be raised in people with allergies but does not provide any information about what is causing the person's allergies. Some people with allergies will have a normal total IgE level.

Q 7: Are there blood tests for allergen specific IgE?

Allergen specific IgE testing can provide information about which allergen is causing a reaction by measuring the levels of antibodies directed against specific allergens in the blood. These tests are often performed when skin testing is not easily available, when there is a skin condition such as severe eczema, or when a person is taking medication (such as antihistamines) that may affect skin test results.

Q 8: What is an eosinophil count?

Measuring eosinophil counts has a limited role to play in allergy testing. Eosinophils are specialised white blood cells that form part of the body's immune response. High levels (counts) of eosinophils are often seen in blood samples from people who have inflammation that could be due to a parasitic

infection, certain types of cancer, asthma, or allergic conditions. A high eosinophil count does not confirm that symptoms are due to allergy, and a normal eosinophil count does not exclude allergy.

Q 9: What is oral allergen challenge testing?

Oral allergen challenge testing may be required when the cause of a severe allergic reaction has not been confirmed. Oral allergen testing must always be performed under the supervision of a medical specialist using published, consistent protocols in a medical clinic where emergency equipment is available. Foods or drugs (medications) that are suspected to trigger allergy are carefully tested by giving gradually increasing amounts of the allergen to observe for a reaction.

Q 10: Are there 'allergy testing' methods which are unproven and not recommended?

Some methods that claim to test for allergy are unproven and not recommended by ASCIA. These include cytotoxic food testing, kinesiology, hair analysis, vega testing (electro-diagnostic), electrodermal testing, pulse testing, reflexology, Bryan's or Alcat tests, and Immunoglobulin G (IgG) to foods. These tests can result in misdiagnosis, ineffective treatments, costly and often dangerous dietary restrictions.

Many of these methods are available to people online, making them easy to access. Medicare rebates are not available in Australia for these tests.

© ASCIA 2024

Content updated March 2024

For more information go to www.allergy.org.au/patients/allergy-testing

To support allergy and immunology research go to www.allergyimmunology.org.au/donate