

Skin Prick Test or Allergy Testing

Allergy testing is a diagnostic test to identify different allergens, like moulds, bee stings, pet dander, and peanuts, which can cause allergies. During this test, allergens are injected into the skin, and then a response in the form of a wheal (raised mark), rash or other reactions is checked.

What is allergy testing?

Sometimes, we get symptoms like skin rashes, urticaria, wheezing, allergic rhinitis due to hypersensitivity of our immune system to certain substances capable of triggering such responses in our body, called as allergens.

One could have allergies to a variety of substances like moulds, grasses, pollen and pet dander. Some may have food allergies to substances like peanuts, milk, egg and other things.

Why do healthcare providers perform allergy tests?

In patients who have severe allergic symptoms, life threatening reactions like urticaria, when the allergic symptoms are frequent, or in cases of poorly controlled asthma, your pediatric pulmonologist may advise an allergy testing to identify the trigger or allergen. In case the allergen is identified, one could take the adequate precautions to avoid contact with it, and this will result in symptom control.

Anaphylaxis is a severe allergic reaction which is potentially life-threatening. Symptoms could be hives or swelling, breathing difficulty, fall in blood pressure resulting in shock. Allergy testing is used to identify the cause of severe reaction. In case of anaphylaxis, it is advisable to always carry an epinephrine or adrenaline auto injector or EpiPen for immediate relief of symptoms.

How do I know if I need an allergy test?

Allergy test is advised if you have any of the following symptoms:

- Itchy, watery eyes.
- Asthma

- Chronic or recurrent cough
- Breathing difficulty
- Wheezing
- Sneezing or nasal allergy
- Runny nose
- Sleep disturbance or snoring or mouth breathing
- In case these symptoms occur repeatedly at a particular time of day or night or associated with seasonal worsening

Food allergy is one which results within 30 minutes to 2 to 2 hours of eating food.

Symptoms typically include:

- Skin symptoms like hives, swelling of the lips, face, or tongue, generalized itching.
- Coughing, wheezing, shortness of breath, tightness of chest
- Nausea, vomiting, abdominal cramps, vomiting and diarrhoea.
- Weak pulse, dizziness or light-headedness.

Contact dermatitis may result from allergy to certain substances like latex and nickel.

Symptoms of this skin allergy are:

- Burning sensation on skin
- Itching
- Rash or blisters
- Urticarial rash, swelling

A patch test, is performed to diagnose these reactions.

What are the types of allergy tests?

There are different ways to test for allergies. These tests are:

✓ **Skin prick (scratch) test:**

Droplets of potential allergens are applied to the skin and with a device, these areas are lightly scratched and lightly punctured causing the liquid to enter the skin.

Reactions such as redness and wheal formation occur within 15 minutes of exposure.

Wheals are raised, round spots. Hence allergen is thus identified.

✓ **Intradermal skin test:**

In this test, small amounts of allergen are injected into the outer layer of the skin. This checks for allergies to airborne irritants, insect stings and medications.

✓ **Patch test:**

This test is used in cases of contact dermatitis. Drops of allergen are placed on the skin on the arm and is covered with a bandage. The bandage is applied for 48 to 96 hours, after which skin is checked for a rash or other reaction.

✓ **Blood (IgE) test:**

Levels of total IgE and allergen specific IgE can be measured from the serum sample. However, blood tests can give false-positive results.

✓ **Challenge tests:**

This test is done only under direct supervision. People with a suspected food or drug allergy swallow a small amount of an allergen. Medical supervision is mandatory, in case of anaphylaxis, epinephrine injection is administered immediately to stop the reaction.

How should I prepare for an allergy test?

Medications like steroids and antihistaminics have to be stopped for 3 to 7 days before an allergy test as they would interfere with the test results.

What do the results of an allergy test mean?

Allergy test results may be:

✓ **Negative:**

This usually indicates that you are not allergic to that particular allergen. False negative tests may occur.

✓ **Positive:**

This means that you are allergic to that particular allergen. A false positive test may also occur.

What happens if I have an allergy?

Depending on the allergen, severity and age of the child, following may be advised:

- Minimize exposure to allergens identified
- Take daily allergy medications as advised by the doctor.
- Immunotherapy
- Have a medical alert card to let others know about your child's severe allergy and what to do in case of an anaphylactic reaction
- Carry an epinephrine injection (EpiPen) - To always carry this medicine at all times if your child is at risk for an anaphylactic reaction.