

Fact Sheet

Latex Allergy



What is latex?

Latex is the milky sap of the tree *Hevea brasiliensis* from which natural rubber is manufactured. There is another type of rubber manufactured from petrochemicals called synthetic rubber. Items made from synthetic rubber do not pose a threat for latex-allergic individuals. Products containing synthetic rubber (like most latex paints) do not cause allergic reactions in latex sensitive children.

What is 'latex allergy'?

There are two types of allergy related to natural rubber latex, one caused by the natural proteins, the other by chemicals that are used to process the natural latex. They are called Type I and Type IV allergy.

Type IV allergy involves mild skin irritation (called contact dermatitis) and is a less serious delayed reaction to latex. This type of allergy is not discussed further in this Fact Sheet.

Type 1 allergy has a more rapid onset and can be potentially dangerous. This is the type of allergy that is discussed in this Fact Sheet.

Where is latex found?

Many products contain natural rubber latex including bandages, baby bottle teats, baby dummies, rubber bands, erasers, clothing elastic, rubber toys, balloons, rubber grips, swimming caps and goggles, stress balls, washing-up gloves and a wide range of medical equipment.

How common is latex allergy?

In the general population the rate of latex allergy in children is low. Approximately 4% of children attending hospital will have positive latex allergy tests but only about 10% of these have signs and symptoms on exposure to

latex. Children who undergo multiple operations and hospital procedures (spina bifida, chronic renal failure, multiple gastrointestinal operations) have an increased risk of latex allergy.

What are the symptoms of latex allergy?

Allergic reactions to latex often consist of hives where latex containing items have touched the skin. Swelling of the lips face and eyelids after blowing up latex balloons is another common symptom. Children may have itchy eyes, sneezing and a watery nose. Very sensitive children can develop coughing, wheezing, difficulty breathing or hoarseness of the voice due to an allergic reaction occurring in the airway. This can happen with powdered latex products such as rubber gloves because the powder can adsorb latex particles and then be inhaled into the breathing tubes. Some latex sensitive children will develop a rash (urticaria or hives) during or after medical procedures in which latex containing items are used.

How is latex allergy diagnosed?

A common clue is the occurrence of redness and hives soon after latex containing items touch the skin. There is currently no completely reliable test for latex allergy. The presence of allergy IgE antibodies to latex can be confirmed by an allergy skin prick test or a blood test (called a RAST test). It is important to realise that not every child with a positive allergy test will develop symptoms on exposure to latex and in some cases of true latex allergy the tests are negative. The results of your child's latex allergy test should be discussed with your doctor. As the allergy skin tests and blood tests are not 100% reliable some children may need a challenge test (such as a glove test where a latex glove is placed on the child's hand).

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These challenge tests should be done by an allergy specialist or in a hospital allergy clinic.

Is there cross reactivity between latex and other plant products?

In some but not all cases children with latex allergic reactions may also have allergic reactions to other plant products in particular banana and avocado and sometimes kiwi fruit, passionfruit, plums, strawberry, tomato or other fruits. These foods do not have to be avoided routinely in all latex allergic children but only in those who develop symptoms on exposure to the food. Children allergic to a fruit may describe an itching in the mouth when eating the fruit. These reactions occur because proteins in these plants are similar to latex allergens.

Can a latex allergy be life-threatening?

While it is uncommon, some latex allergic individuals can have a life threatening allergic reaction (called anaphylactic shock) when they come in to contact with natural rubber latex. Situations in which anaphylactic shock is more likely to occur include blowing up a balloon and during dental and surgical procedures where latex-containing items such as surgical gloves are used. Anaphylactic shock occurs within minutes of exposure, especially if there is direct tissue contact with natural rubber latex products. These children will generally have hives, breathing difficulties and low blood pressure.

What precautions should I take?

- Avoid contact with all latex containing products. The biggest risk comes from contact with rubber gloves and balloons.
- Avoid takeaway food which is prepared or served by food handlers wearing latex gloves.
- Tell your child's doctor or dentist about your 'latex allergic status' when asked about 'drug allergy'.
- Obtain a 'Medic Alert' bracelet for your child.

Will my child grow out of latex allergy?

What will happen over time with latex allergy is still not clear, however latex allergy frequently lessens in severity with time if natural rubber latex products are avoided. For some children, latex allergy may be long-lasting.

Where can I find more information on the Internet?

The Australian Society of Clinical Immunology and Allergy (ASCI) website contains useful information on latex allergy written by Australian specialists (www.allergy.org.au).

Written by the Department of Allergy, Immunology and Infectious diseases, The Children's Hospital at Westmead.

This fact sheet is for education purposes only.
Please consult with your doctor or other health professional to make sure this information is right for your child.

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