Latex allergy

What is latex?
Latex is the milky sap of the tree *Hevea brasiliensis* from which natural rubber is made. There is another type of rubber made from chemicals called synthetic rubber. Items made from synthetic rubber (e.g. latex paints) do not cause allergic reactions in latex-allergic children.

What is 'latex allergy'?
There are two types of allergy related to natural rubber latex, one caused by the natural proteins in latex, the other by chemicals that are used to make the natural latex.

The chemical allergy involves mild skin irritation (called contact dermatitis) and is a less serious delayed (1-2 days) reaction to latex. This type is of allergy is not discussed further in this Fact Sheet.

Latex protein allergy has a more rapid onset (within 1 hour) and can be 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
- Balloons
- Clothing elastic
- Erasers
- Rubber toys
- Rubber grips

- Rubber bands
- Swimming caps and goggles
- Stress balls
- Washing-up gloves
- 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 will have positive latex allergy tests but only about 10% of these have signs and symptoms on exposure to latex. Children who have conditions needing many operations and hospital procedures (for example spina bifida or chronic renal failure) if latex products are frequently used have a higher 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 latex particles can stick to the powder and then be inhaled into the airways and lungs. 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 redness and hives appearing soon after latex containing items touch the skin. There is currently no 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. Sometimes, skin prick testing with fresh latex (e.g. powdered latex glove) may give more accurate results compared to the latex extract, so your doctor may recommend this. 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 your child’s hand). These challenge tests should be done by an allergy specialist or in a hospital allergy clinic.

**Will my child also react to other plant products?**

In some but not all cases, children with latex allergic reactions may also have allergic reactions to other plant products. The most common plants and foods are banana, avocado and kiwi fruit, and less common passionfruit, plums, strawberry, tomato and other fruits. These foods do not have to be avoided routinely in all latex allergic children, but only in those who develop symptoms on contact with 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 children can have a life threatening allergic reaction (called anaphylaxis) when they come in to contact with natural rubber latex. Situations in which anaphylaxis 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. Anaphylaxis in this setting usually occurs within minutes of exposure. 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 in children comes from contact with rubber gloves and balloons. Latex free substitutes (e.g. latex-free gloves) should be used.
- 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 (ASCIA) website contains useful information on latex allergy written by Australian specialists: www.allergy.org.au