



LATEX ALLERGY

What are the aims of this leaflet?

This leaflet has been written to help you understand more about allergy to natural rubber latex - usually referred to simply as 'latex allergy.'

What is latex?

Latex is a milky sap from plants like the tropical rubber tree. It contains a mixture of water, sugar and proteins. The sap is collected by drilling into the tree and used to make rubber items such as household gloves and medical gloves, shoes, tyres, balloons and condoms. During the manufacturing process chemicals such as accelerators are added to harden it and the rubber item is heated then finally rinsed. The finished item, in addition to latex, may contain residual added (non-latex) proteins and chemicals and these can also cause allergic reactions.

What is latex allergy?

We are all exposed to natural rubber latex items in day to day life, and for most people these cause no problems. A small number of people can become allergic to the latex proteins which can trigger allergic reactions. This happens because the immune system reacts to the latex proteins as if they were harmful. This over reaction is called 'allergic hypersensitivity' and latex is the 'allergen' (substance that causes the allergy).

What are the symptoms?

Latex proteins cause immediate allergy reactions that develop within minutes to an hour of contact with the rubber item. The precise symptoms depend on how allergic somebody is, how much latex protein they have been exposed to and whether contact is with the skin or internally.

The commonest problem is '[contact urticaria](#)' which means itch, redness and swelling (hives) of the skin that is in contact with the rubber item. This typically affects the hands when wearing rubber gloves or the lips after blowing up a balloon. Sometimes a widespread reaction can develop at other body sites with swelling of the face, especially around the eyelids and lips.

Other symptoms include sneezing and irritation of the nose and eyes like hay fever and wheezing or breathing difficulty.

Rarely, a severe allergic reaction called anaphylaxis can occur, with dizziness, low blood pressure, feeling faint, breathing difficulty, swelling of the throat and collapse.

Who is at risk?

People who wear rubber latex gloves frequently, and for long periods such as healthcare workers, hairdressers (when working with chemicals) and cleaners are at increased risk, especially if they have a tendency to allergic conditions (hay fever, food allergy and asthma) or have atopic eczema.

Hand eczema increases the risk of latex allergy as the proteins can get through the broken eczema skin more easily. (Cross-reference PIL on [hand eczema](#))

People with spina bifida and people who have had repeated operations on the bladder are at increased risk of latex allergy. It is thought that this is because they have a lot of exposure to latex in urinary catheters.

How is it diagnosed?

Firstly, the doctor will take a history about the symptoms. Antibodies (also called Immunoglobulin type E or IgE) against latex are found in the blood of people with latex allergy. These can be measured in a blood sample by a test called a specific IgE. This test is organised by the doctor.

Skin prick testing is another way to confirm the diagnosis of latex allergy. This test is done by a dermatologist or an allergy specialist. It involves puncturing the skin with a small needle (the 'skin prick') through a drop of latex solution. If an itchy swelling or 'wheal' develops, this usually indicates allergy. The test takes 15-20 minutes. There is a very small chance of triggering a serious allergic reaction with skin prick testing,

so it should only be done by a fully trained practitioner who has resuscitation equipment. The test is not reliable if antihistamines have been taken.

If someone has symptoms which are very suggestive of latex allergy, but they have a negative skin prick test and antibody test, they may need further tests such as a latex challenge. Here a latex product is used (such as putting on a glove) and assessing the response. Due to the fact the prior tests are negative, the chance of a severe reaction here is very low.

What products contain latex?

If you have been diagnosed with a latex allergy, you must inform any medical practitioners (such as doctors, dentists and healthcare workers) as well as other workers (carers, hairdressers, nail technicians and beauticians) that you have a rubber latex allergy. It is best to avoid any rubbery items unless confirmed to be latex free.

Household items:

Many household items can contain natural rubber latex. Most allergies happen after contact with thin rubber items made from dipped rubber especially household 'Marigold' washing up gloves, disposable rubber gloves, balloons and condoms. There is a long list of other household items that may contain latex for example bath mats, bath toys, baby dummies, bicycles, elastic bands, envelope seals, footwear and hot water bottles.

Hospital items:

Medical examination gloves can be made from natural rubber latex, but increasingly non-latex alternatives are being used such as PVC or nitrile. Powdered natural rubber latex gloves were banned from use in UK hospitals in the 1990s as the powder caused a lot of allergic reactions.

Other items which may contain latex include adhesive plasters and tape, blood pressure cuffs, dental dams (used in dental surgery), catheters, drainage tubes, face masks, intravenous injection equipment and tourniquets. **Latex-free alternatives are available and many UK hospitals now use these routinely.**

Office items:

Computer mouse mats, computer mouse roller ball, envelope adhesive, elastic bands and rubber pencil tops.

Is there a cure for latex allergy?

Successful cases of latex desensitisation have been reported recently but this is an experimental process and not routinely available.

What can I do to manage latex allergy?

The most important aspect of managing latex allergy is to avoid direct contact with latex items.

Carry a latex allergy card (these are available in many languages) or wear a medical ID item such as MedicAlert jewellery (bracelet, necklace, watch). These give essential information to those caring for you in an emergency when you may be unable to communicate.

Inform all medical, nursing and dental staff and your employer or your school that you have latex allergy so this can be clearly documented in your records.

If you are at risk of a severe allergic reaction and have been prescribed an adrenaline (epinephrine) auto-injector (adrenaline pen) it is important to carry this at all times. Make sure you know how to use it. Tell others how to use it (friends, family, teachers and work colleagues) and where to find it in an emergency. Store correctly and check the expiry date.

If you have asthma, keep this under good control by using inhalers as prescribed and carry your inhalers when you go out for use in an emergency. Keeping your asthma under good control may lessen the impact of an allergic reaction.

Mild allergic reactions such as localised irritation of the skin under gloves should be managed by removing the glove / latex item, rinsing in cool water and taking an antihistamine tablet.

In the event of a severe allergic reaction (throat swelling, difficulty breathing with a hoarse voice), use the adrenaline auto-injector and call the emergency services.

Do people with latex allergy get other allergies?

People with latex allergy can also be allergic to tropical fruit, especially banana. Likewise, people with banana allergy may be allergic to latex. This is because the fruit contains very similar proteins to the tropical rubber tree. Other fruit and

vegetables that can provoke the same reaction to latex include avocado, celery, fig, chestnut, papaya and passion fruit.

Fruit allergy usually causes itch and swelling of the lips, tongue and throat within a few minutes of eating fruit or drinking its juice. In people with severe allergy, this can be followed by nausea, vomiting, widespread hives, wheezing and anaphylaxis (see page 1).

What will happen if I need an operation including dental surgery?

It is very important that you advise your nurse, doctor, dentist or any other therapist who may examine or treat you when wearing gloves about your allergy so they can avoid using latex items.

Surgical procedures must be done in a latex-free operating theatre.

Are there other kinds of rubber allergy?

Residual natural proteins in rubber latex cause immediate allergy symptoms as described above. Chemicals added during rubber manufacture (e.g. carbamates, thiurams and mercaptos) can cause also cause allergic reactions, but these happen more slowly over hours or days and cause an itchy, red rash called [allergic contact dermatitis](#).

It is important to understand if you have an immediate allergy to latex or a delayed allergy to chemicals. Rubber chemical allergy is diagnosed by patch tests ([see British Association of Dermatologists information leaflet](#)). People with hand eczema are at increased risk of getting both immediate allergy to latex proteins and delayed allergy to the rubber chemicals.

What gloves can be used?

Synthetic rubber or vinyl (PVC) gloves are safe alternatives for people with natural rubber latex allergy. If you also have a rubber chemical allergy your dermatologist will provide additional advice on suitable gloves.

Where can I find out more about latex allergy?

Allergies – NHS choices

Allergy UK

<http://www.allergyuk.org/>

The Anaphylaxis campaign:
www.anaphylaxis.org.uk/latex-allergy-forum

London Allergy Support Group:
www.lasg.co.uk

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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