

Latex allergy – Patient Information

Latex allergy occurs when a person who has been sensitised to latex allergens develops immediate-type allergic symptoms on contact with products that are derived from natural rubber latex (NRL). An allergy or allergic reaction occurs when the immune system reacts to a substance it would normally just ignore. It does this because it mistakenly believes that this substance is harmful to your body. The substances are called allergens.

What are latex and rubber?

Latex is a milky liquid or ‘sap’ that is produced by many plants. It helps to seal and protect plants that have been damaged. **Natural rubber latex (NRL)** is the name given to the ‘sap’ that comes from the Brazilian rubber tree *Hevea brasiliensis*, which is now grown commercially mainly in South-East Asia. The NRL that is tapped from these trees is processed into **natural rubber**.

Synthetic rubber is different, being made from petroleum, coal, oil and natural gas.

Both natural and synthetic rubber are used to make a wide range of household and medical products.

Allergy to chemicals that are used in the manufacture of **both** natural and synthetic rubber is known as **rubber chemical allergy**.

Allergy to proteins that are present in natural rubber is known as **latex allergy**.

What are the differences between latex allergy and rubber chemical allergy?

The main differences between these two types of allergy are described below:

Latex allergy	Rubber chemical allergy
The allergic reaction happens soon after coming into contact with NRL, generally within minutes – this is called an ‘immediate’ or ‘Type I’ allergy	The allergic reaction is much slower to appear after coming into contact with rubber, at least several hours – this is called a ‘delayed’ or ‘Type IV’ allergy
Other common examples of Type I reactions are peanut allergy and hay fever (grass pollen allergy)	Other common examples of Type IV reaction are nickel allergy and perfume allergy
The allergens are proteins that are present	The allergens are chemicals that may be

in products that are made from natural rubber	used in the production of both synthetic and natural rubber
An allergic antibody called IgE reacts against the allergen	Sensitised cells called lymphocytes react against the allergen
Symptoms can affect the skin, mucous membranes, airways and occasionally the whole body	Symptoms only appear on the skin and rubber chemical allergy is also called allergic contact dermatitis
It is diagnosed by skin prick testing or a blood test to look for IgE antibodies to latex.	It is diagnosed by patch testing (this test is only available through referral to the Dermatology department)

Latex-fruit allergy

Some people with latex allergy also react to certain fruits and vegetables (eg banana, kiwi and avocado). This is because these foods and latex contain similar proteins which can cross-react. You do not need to avoid fruits and vegetables unless you have had an allergic reaction to them.

Reactions may also be caused by any food which has been handled by people wearing latex gloves (eg restaurants, canteens and packing facilities).

Avoiding latex

It is difficult to totally avoid all latex rubber in day-to-day life. Some products are more likely to cause symptoms than others (eg balloons, rubber gloves, condoms). For most people who experience allergic reactions to latex, occasional contact with some rubber products may cause only slight symptoms or even no symptoms at all.

People with latex allergy should be assessed from time to time to monitor the level of risk they face with minimum exposure to everyday latex products. Depending on the outcome of these regular assessments, some people will have to aim at completely avoiding latex rubber while others may afford to be a little less vigilant. **Whatever the outcome, the worry of trying to avoid latex rubber should not become worse than the actual allergy itself.**

In general, ‘stretchy’ rubber products (eg gloves, condoms, diaphragms and balloons as well as liquid latex) are much more likely to be a problem than ‘hard’ ones (eg hot water bottles and tyres) which may not cause symptoms.

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It is possible to reduce exposure to latex by using clothing and home products which are latex free. You can help by ensuring people around you know about your allergy.

A Medic-Alert emblem to identify that you have latex allergy is also recommended.

Avoiding latex in healthcare settings

You are highly likely to encounter latex in healthcare settings (eg GP surgery, dentist, hospital) particularly for certain medical procedures (eg operation, internal examination, catheterisation, X-ray).

You should inform the healthcare staff that you have a latex allergy. Most healthcare settings now use non-latex gloves (eg nitrile, vinyl) but you should still insist that you are not examined by anyone with latex gloves.

Although most injection vials (eg local anaesthetic, vaccine) now have bungs or stoppers that are made from 'synthetic rubber' (made from petroleum-based precursors and which do not contain natural rubber latex) you may need to remind the doctor, nurse or dentists to check that these do not contain latex.

Other places where you may encounter latex

You should also inform people when visiting the following places: garage (servicing), hairdresser, beautician, pharmacist, school, workplace, relatives and friends.

Treatment of reactions

This will depend on the severity, which varies widely.

The majority of patients only suffer from a mild allergy and treatment with an oral antihistamine is usually sufficient for most allergic reactions.

Patients with very severe reactions are usually given an adrenaline (epinephrine) pen – you will be given more details about this if this is appropriate for you.

Adapted from:

British Association of Dermatologists. Latex Allergy Patient Information

Kirkwood EM. NHS Greater Glasgow and Clyde Latex Allergy Patient Information Leaflet

Latex Allergy Support Group (LASG) Latex Allergy Patient Information Leaflet

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Everyday products which may contain latex

<ul style="list-style-type: none"> • Adhesives (tape, glue, paste, art supplies, glue pens, envelopes, stamps) 	<ul style="list-style-type: none"> • Finger cots
<ul style="list-style-type: none"> • Balloons 	<ul style="list-style-type: none"> • Fish tank seals and decoration
<ul style="list-style-type: none"> • Bathing caps, elastic in bathing suits 	<ul style="list-style-type: none"> • Foam pillows
<ul style="list-style-type: none"> • Bathmats with rubber backing 	<ul style="list-style-type: none"> • Garden tools (rubber handles)
<ul style="list-style-type: none"> • Bath toys 	<ul style="list-style-type: none"> • Grocery store checkout belts
<ul style="list-style-type: none"> • Broom handles and grips 	<ul style="list-style-type: none"> • Gym mats/floors
<ul style="list-style-type: none"> • Calculators 	<ul style="list-style-type: none"> • Helmets
<ul style="list-style-type: none"> • Camera eyepiece, telescopes 	<ul style="list-style-type: none"> • Hoses
<ul style="list-style-type: none"> • Carpet backing 	<ul style="list-style-type: none"> • Household working gloves
<ul style="list-style-type: none"> • Chewing gum 	<ul style="list-style-type: none"> • Lottery tickets (Instant Scratch cards)
<ul style="list-style-type: none"> • Clothing (avoid clothing appliqués that contain rubber) 	<ul style="list-style-type: none"> • Motor racing, garages (rubber tyre particles in the air)
<ul style="list-style-type: none"> • Computers (keyboards, mouse) 	<ul style="list-style-type: none"> • Newsprint (newspaper mix ink with latex)
<ul style="list-style-type: none"> • Condoms 	<ul style="list-style-type: none"> • Paint
<ul style="list-style-type: none"> • Cosmetics (waterproof mascara) 	<ul style="list-style-type: none"> • Pool toys
<ul style="list-style-type: none"> • Cosmetic sponges 	<ul style="list-style-type: none"> • Racquet handles (ping pong, golf clubs, bats, ski poles)
<ul style="list-style-type: none"> • Crutches (hand pads) 	<ul style="list-style-type: none"> • Raincoats
<ul style="list-style-type: none"> • Desk top and chair pads 	<ul style="list-style-type: none"> • Remote controls for televisions
<ul style="list-style-type: none"> • Diaphragm contraception 	<ul style="list-style-type: none"> • Restaurants
<ul style="list-style-type: none"> • Disposable nappies, rubber pants, incontinence pads 	<ul style="list-style-type: none"> • Paint
<ul style="list-style-type: none"> • Dummies for babies 	<ul style="list-style-type: none"> • Pool toys
<ul style="list-style-type: none"> • Electric cords 	<ul style="list-style-type: none"> • Racquet handles (ping pong, golf clubs, bats, ski poles)
<ul style="list-style-type: none"> • Erasers 	<ul style="list-style-type: none"> • Raincoats

IMPORTANT: THE WORRY OF TRYING TO AVOID LATEX RUBBER SHOULD NOT BECOME WORSE THAN THE ACTUAL ALLERGY ITSELF

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<ul style="list-style-type: none"> • Remote controls for televisions and videos 	<ul style="list-style-type: none"> • Synthetic flowers (latex covered stems)
<ul style="list-style-type: none"> • Restaurants (watch out for food preparation with latex gloves) 	<ul style="list-style-type: none"> • Telephones
<ul style="list-style-type: none"> • Rubber bands 	<ul style="list-style-type: none"> • Toothbrushes with rubber grips and handles
<ul style="list-style-type: none"> • Rubber boots 	<ul style="list-style-type: none"> • Toys (rubber wheeled toys, balls, rubber stamps sets, some dolls)
<ul style="list-style-type: none"> • Sailing equipment 	<ul style="list-style-type: none"> • Underwear (socks and other clothes – elasticated waists, ankles, wrists)
<ul style="list-style-type: none"> • Sanitary towels 	<ul style="list-style-type: none"> • Utensils (some have rubber grip)
<ul style="list-style-type: none"> • Shoes (particularly trainers and slippers – avoid rubber soles) 	<ul style="list-style-type: none"> • Vacuum cleaners (hoses and attachments)
<ul style="list-style-type: none"> • Sink mats 	<ul style="list-style-type: none"> • Weather proofing (car seats, door seals, gaskets)
<ul style="list-style-type: none"> • Sink stoppers 	<ul style="list-style-type: none"> • Wheel chair cushions
<ul style="list-style-type: none"> • Shower caps 	<ul style="list-style-type: none"> • Zippered storage bags
<ul style="list-style-type: none"> • Swimming equipment 	

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The above list is not exhaustive and should be used for guidance only – be aware that there are many items which may contain latex that are not listed here. Remember, manufacturers change their products frequently so if you are in any doubt, you should check with the manufacturer directly.

Source: Kirkwood EM. NHS Greater Glasgow and Clyde Latex Allergy Patient Information Leaflet