

Latex allergy

Latex is derived from the sap of the rubber tree, *Hevea brasiliensis*. The substance is then processed to increase elasticity, durability and strength. Many products are made from latex, including dummies for babies, rubber bands, balloons, shoe soles, condoms, gloves, catheters and stethoscopes.

Estimates vary, but between one and six per cent of people are allergic to latex. They are allergic either to the proteins found naturally in the substance, or to the industrial chemicals (such as mercaptobenzothiazole) added during manufacturing.

Latex allergy is much more prevalent in the health care industry, with around 10 per cent of health professionals affected. Synthetic rubber products made from petrochemicals usually don't provoke allergic reactions in people who are allergic to latex.

Symptoms of latex allergy

The symptoms range in severity depending on the individual, but can include:

- Dermatitis
- Itchy skin
- Crusty skin lesions
- Lesions that are irritated by sweat and friction
- Hay fever symptoms, such as running nose and itchy eyes
- Sneezing
- Coughing
- Wheezing and breathing difficulties
- Drop in blood pressure
- Anaphylaxis or anaphylactic shock – severe symptoms include airways swelling to the point of suffocation. Anaphylaxis is an emergency and can be fatal.

Different kinds of latex allergy

There are three different kinds of adverse reactions to latex, although they do overlap to a certain degree. These include:

- **Irritant dermatitis** – characterised by crusty skin lesions. Irritant dermatitis isn't the same as latex allergy, because it can be caused by a wide range of other factors, including washing with harsh soap or the action of sweat inside rubber gloves. However, irritant dermatitis is often a starting point for the development of latex allergy. Broken skin allows the absorption of latex. Without intervention, people with genetic susceptibility will progress from irritant dermatitis to latex allergy.
- **Allergic contact dermatitis** – this skin problem is caused by a reaction to the chemicals added to latex during processing, not to the latex proteins themselves. Typically, symptoms (including rough skin patches and a weeping rash) tend to develop a few days after exposure. Once again, this is not true latex allergy. However, the absorption of latex through broken skin can increase the risk of latex allergy in susceptible people.
- **Immediate-type latex allergy** – in genetically susceptible people, initial exposure to latex prompts the immune system to create antibodies. On subsequent exposure to latex, the body mounts an immune system response, which includes the release of histamine. This can cause a wide range of sudden reactions including hives, swollen lips and, in severe cases, anaphylaxis. Anaphylaxis, or anaphylactic shock, is an emergency and can be fatal.

People at increased risk

Certain people are at increased risk of developing latex allergy including:

- Health care workers (such as doctors, nurses and dentists) who are frequently exposed to latex through medical equipment like gloves
- People who have had many operations, particularly from a young age, such as those with spina bifida
- People who work in latex manufacture
- People with pre-existing allergies, such as hay fever, asthma and eczema
- People with allergies to particular foods, including avocado and banana.

Latex allergy and food

Around half of all people with latex allergy have allergic reactions when eating particular foods, including avocado, banana, chestnut, kiwifruit, passionfruit, plum, strawberry and tomato. This is because some of the proteins in latex that cause latex allergy are also present in these fruits. Common symptoms include tingling in the mouth, stuffy nose, itchy eyes and wheezing.

A person who is allergic to the manufacturing chemicals in latex will not have allergic reactions to these foods.

Diagnosis methods

Latex allergy is diagnosed using a number of tests including:

- Medical history
- Physical examination
- Allergy testing, including skin prick tests and blood tests.

Treatment options

There is no cure for latex allergy. Repeated exposure to latex can escalate the immune system response, so avoidance is the best way to manage the condition. Suggestions include:

- Choose synthetic rubber products.
- You may have to change career if your profession involves unavoidable exposure to latex.
- Consider alternative forms of contraception to condoms or diaphragms. However, remember that condoms are essential as barriers against sexually transmitted infections. Non-latex condoms are available from pharmacists and other retailers.
- Always tell your health care professionals (such as doctors and dentists) that you are allergic to latex before undergoing any procedure, so they can make sure to have non-latex equipment on hand.
- Be on the lookout for situations that may expose you to latex – for example, your hairdresser or take-away food handler may wear latex gloves.
- Avoid foods (such as banana or avocado) that trigger symptoms.
- Wear a specially designed medical alert bracelet or pendant to provide information about your allergy in case of emergencies.
- Always carry a self-injectable syringe of adrenaline (available only on script) in case you experience anaphylaxis, if you are at risk.
- Make sure that family, friends and co-workers know how to use the syringe (in case you need help).

Managing irritant dermatitis

If you have irritant dermatitis, you can reduce your risk of developing latex allergy in a number of ways including:

- Choose synthetic rubber products if possible.
- If you have to wear latex gloves, ask for the non-powdered variety (the cornstarch in powdered gloves may become airborne and be inhaled, along with particles of latex).
- Request that your co-workers also wear non-powdered gloves.
- Wash hands thoroughly after wearing latex gloves.
- Take care of your hands to ensure an unbroken skin surface.

- Always have skin rashes medically investigated.
- Consider alternative forms of contraception to condoms or diaphragms. Non-latex condoms can be used for barrier protection from sexually transmitted infections.

Condoms and diaphragms

Some condoms and diaphragms used for contraception contain latex and should be avoided. A female condom that is latex free is now available.

You can buy latex-free condoms and diaphragms at the following outlets:

- Family planning clinics
- Supermarkets and retail stores
- Pharmacist
- Online.

Where to get help

- In an emergency, call triple zero (000)
- Your doctor
- Dermatologist
- Anaphylaxis Australia Tel. 1300 728 000

Things to remember

- Many products are made from latex, including dummies for babies, rubber bands, balloons, shoe soles, condoms, gloves, catheters and stethoscopes.
- Between one and six per cent of people are allergic to latex.
- Repeated exposure to latex can escalate the immune system response, so avoidance is the best way to manage the condition.

This page has been produced in consultation with, and approved by:

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