# Latex Allergy



### What are the reactions to latex?

Allergies to latex rubber have been identified as a serious concern for workers who become sensitized to latex gloves and other natural rubber-containing products such as medical supplies. Although the symptoms vary from case to case, the most common reaction to latex products is the development of dry, itchy, and irritated areas on the skin (irritant contact dermatitis), usually the hands.

Other reactions may include rashes and skin blisters which can spread away from the area of skin touched by the latex (allergic contact dermatitis). This reaction is similar to a poison ivy reaction.

A person may also be exposed by breathing in (inhaling) airborne latex particles (e.g., particles that are released when the gloves are removed). Because latex particles can become airborne, it may not be necessary for a person to have to touch a specific product that contains latex, as dusts containing the protein may settle on other surfaces.

More severe reactions may involve immediate hypersensitivity with respiratory symptoms such as runny nose, sneezing, itchy eyes, scratchy throat and asthmatic symptoms including coughing, wheezing, shortness of breath, chest tightness and more severe reactions such as swelling of the face, lips and airways.

Symptoms typically will quickly subside with avoidance; however, a person will remain sensitive.

Severe anaphylactic shock reactions may happen. However a life threatening reaction is rarely the first sign of a latex allergy. If a severe reaction occurs, get medical help immediately.

### What is latex?

Latex is a tacky, milky sap that is produced by some types of shrubs, plants and trees including the commercial rubber tree (Havea Braziliensis). The latex sap is made up of tiny droplets that contain water and hydrocarbon polymer and have a coating comprised of proteins. The sap is used to make latex rubber, also known as natural rubber.

Various chemicals must be added to latex to give the natural rubber product the desired strength, stretch and durability properties. Starch may be used to keep rubber products from sticking to each other. It also makes it easier to put on latex

gloves.

## What causes latex allergy?

Research has identified a protein substance in natural latex as a major source of the allergy. The protein can be absorbed through the skin or the powder containing the protein can be inhaled. However, chemicals such as zinc diethyldithiocarbamate (which is added to the latex) and starch powder (found in new gloves) have also caused allergic reactions in sensitive people.

## What occupations are at risk?

Latex allergy is an occupational health hazard for many people including:

- Health care workers (operating room workers, dental care workers, special procedure and general medical nurses, emergency response workers).
- Laboratory technicians.
- Greenhouse workers.
- Hair salon workers.
- Estheticians.
- Glove manufacturing workers.
- Food service workers:
    - Housekeepers.
    - Police and/or enforcement.
    - Other workers who use latex gloves for protection.

Latex is also found in other products, such as:

- Other gloves (dishwashing, etc.).
- Other medical devices (tubes, blood pressure cuffs, respirators, masks, pads, etc.).
- Carpeting.
- Elastic in clothing.
- Balloons.
- Handles on tools/bicycles/racquets, etc.
- Tires, tubes.
- Erasers, rubber bands.
- Rubber toys/parts.

This list is not inclusive.

## How common is it?

In the US, Regulators estimates that 8 to 12% of health care workers are latex sensitive. There is evidence that some people who are allergic to certain foods (banana, avocado, kiwi, passion fruit, chestnuts), some pollen and grasses may also develop an allergic reaction to latex.

## How can we prevent latex allergy?

Latex allergy can be prevented by protecting workers from latex exposure. Employers should:

- Use alternative non-latex products.
- Ensure that workers use good work and housekeeping practices to remove latex-containing dust from the workplace including avoiding contact with eyes and face, handwashing after glove removal, and using HEPA vacuums to clean up dust.

- Provide workers with education programs about latex allergy.
- Distribute periodic screening questionnaires for workplaces where latex gloves are used routinely.

Persons allergic to latex rubber products should consult an allergist to find out if they are actually allergic to latex (natural) rubber or to chemicals that are in synthetic rubbers. They should also advise their physicians and dentists so that alternate products can be used.

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