

LATEX ALLERGY/ SENSITIVITY

Latex, or natural rubber latex (NRL) is a milky fluid extracted from a rubber tree (*Hevea brasiliensis*) by tapping the tree's bark. This fluid contains 30-40% rubber particles, with the balance being water and other materials, including proteins. Following latex extraction, the material may undergo one of two main processes, depending upon its ultimate use.

What Are The Two Major Processes And Ultimate Uses?

Latex Concentrate:

Latex is collected in the field and concentrated to a dry material. It is preserved with ammonia to prevent bacterial growth. Latex is mixed with other compounds and formers or molds of desired shape are dipped into the mixture, forming "dipped" products such as gloves, balloons, medical supplies and elastic. Leaching is generally carried out at certain stages of the process to remove allergy latex proteins.

Dry Rubber:

Dry rubber is formed when latex is coagulated with acid, crumbled and washed extensively to remove surplus acid and other materials, and dried. This "dry rubber" is used in the production of tires, tubing, hoses, footwear, and automotive components by mixing it with various chemicals that provide the properties seeking to be achieved.

What Is Latex Allergy?

Latex allergy is a condition where an individual has a reaction upon contact with the proteins of latex. Reactions may include localized itching, discomfort, redness, or hives. More severe reactions may include runny nose, sneezing, itchy eyes, scratchy throat and asthma; and in rare cases anaphylactic shock. The amount of latex exposure needed to produce sensitization or an allergic reaction is unknown. However, increasing the exposure to latex proteins increases the risk of developing allergic symptoms. Currently, no FDA-approved skin prick test is available for screening susceptibility to latex allergies. However, a blood test can be conducted to detect any latex antibodies in blood, an indication the body is sensitive to latex proteins. Once someone becomes allergic to latex, precautions must be taken to prevent contact with latex proteins.

Who May Be At Risk Of A Latex Allergic Reaction?

Individuals who are latex sensitive may develop an allergic reaction when they have contact with products manufactured using the **dipped method**; for example latex gloves. Latex proteins also may become attached to the powder used as a glove lubricant, and become airborne and inhaled. In either exposure type, the latex proteins are released from the product, exposing the latex sensitive person. Therefore, anyone who must have contact with these type products during the course of their job or hobby, and is allergic to latex proteins, is at risk of the various reactions described above.

The population at greatest risk are health care providers because they use latex gloves frequently, followed by workers in industries that manufacture latex products. Other users of latex gloves include laboratory, food service, and janitorial personnel.

People with allergies to natural substances such as bananas, avocados and nuts tend to have a greater risk of developing latex allergy.

Who Is Not At Risk Of A Latex Allergic Reaction?

Dry rubber products, such as tires, tubes, airides, roofing materials and other rubber products are prepared and manufactured by very different processes than those of latex-dipped materials. Since the latex protein is not present, the allergic reaction is not produced from contact with the latex from these products.

Some types of synthetic rubber are referred to as “latex”, but this is not the same material, and does not present the potential allergic effects described above.

What Can Be Done To Protect Against Latex Allergy?

If non-latex gloves can be used without sacrificing protection or ability to perform the task, use them. Or, if latex gloves must be used, use powder-free with reduced latex protein whenever possible.

When wearing latex gloves, do not use oil-based hand creams or lotions which can cause glove deterioration and release latex proteins.

Remove latex gloves whenever not performing the task where they are necessary, and wash hands with soap and water upon removal.

What Should You Do If You Suspect You Have Latex Allergy And Your Job Requires The Use Of Latex Gloves?

A physician should be consulted to further evaluate your suspicions of latex allergy. Allergy tests may be performed to confirm the allergy.

Inform your supervisor so that alternative protection may be provided.

Recognize the symptoms associated with latex allergy and if experienced, remove the source immediately and contact the local health care provider.