PENNSTATE
Environmental Health and Safety

Latex Allergies

Allergy to latex, a product of the rubber tree, is becoming more common. As a society, we are exposed to many products that contain latex including gloves, children's toys, medical appliances, and condoms. Those who work in laboratory, health care, and food service settings add work exposure to the other everyday exposures. Studies have estimated that 8 to 17% of health care workers and 1 to 3% of the general population experience symptoms of latex allergy.

Gloves have been implicated as latex sensitizers because of their increased use in health care settings and other industries. They pose two potential routes of exposure: skin contact and inhalation of latex proteins that are bound to the cornstarch powder in some gloves.

Other laboratory products and health care products that contain latex include some tubing, syringes, electrode pads, masks, adhesive tape, and dental dams. Household items containing latex include some disposable diapers, bandages, shoes, sandals, upholstery, and balloons. More extensive lists of latex-containing products are available on the Internet.

Persons who are repeatedly exposed to latex-containing products are at increased risk of developing an allergy to latex. Those with allergies to foods that have proteins similar to latex such as bananas, avocados, nuts, papayas, or kiwi are also more likely to be allergic to latex. Other personal factors for increased risk are a history of asthma, allergic rhinitis, eczema, and dermatitis.

Latex allergy develops from repeated contact with products containing latex such as gloves. This process is called sensitization. A person may initially have no problem using latex-containing products but then develop symptoms over time.

The most common type of allergy creates a red, itchy, crusty rash. It develops at the site of latex contact one to two days after exposure and does not generalize to other parts of the body. For example, the typical latex glove rash appears on the hands and stops right at the wrists.

Another more rare type of latex allergy occurs within five minutes to one hour of exposure to latex and usually goes away within 24 hours. The rash consists of red itchy bumps or hives, sometimes surrounded by a lighter area. This type of allergy may also be associated with a runny nose, itchy red eyes, asthma, or life-threatening anaphylactic reactions. People who are allergic to latex may have either type of allergy described or a combination of both.

It is important to note that not all hand rash is due to latex allergy. Hand rash may also be caused by irritation from the powders in gloves or may not be related to glove use at all. Excessive hand-washing and exposure to chemicals and soaps can also cause rashes.

Any severe reaction—such as shortness of breath, wheezing, or swelling of the eyelids, tongue, or throat—requires immediate medical attention. People who experience itching, dryness, or rashes when using latex-containing products should consult with their health care providers. The diagnosis of latex allergy versus some other cause of the rash should be established.

People who know they are latex-sensitive must avoid all forms of exposure to latex and make sure that their supervisor, coworkers, family members, and health care providers know of their allergy. Treatments include changing products (switching to reduced-powder, high-grade, nitrile or vinyl gloves, for example) and using topical medicated ointments.

Some self-help measures include wearing cotton glove liners; wearing low-protein, powder-free gloves; washing hands with mild soap after removing latex gloves; applying hand cream liberally; understanding that the hypoallergenic label on gloves refers to chemical allergy, not latex allergy; and thoroughly drying hands after washing. Remember to choose the appropriate personal protective equipment for the job. Do not use latex gloves if another glove type is more appropriate.

Contact EH&S at 814/865-6391 for more information on selecting gloves and other personal protective equipment.