Latex Allergy FactSheet

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Latex gloves have proven to be effective in preventing transmission of many infectious diseases to health care workers. But for some workers, exposures to latex may result in allergic reactions. Reports of such reactions have increased in recent years — among health care workers.

What is latex?

In this FactSheet, the term "latex" refers to natural rubber latex, the product manufactured from a milky fluid derived from the rubber tree, Hevea brasiliensis. Several types of synthetic rubber are also referred to as "latex," but these do not release the proteins that cause allergic reactions.

What is latex allergy?

Latex allergy is a reaction to certain proteins in latex rubber. The amount of latex exposure needed to produce sensitization or an allergic reaction is unknown. Increasing the exposure to latex proteins increases the risk of developing allergic symptoms. In sensitized persons, symptoms usually begin within minutes of exposure; but they can occur hours later and can be quite varied. Mild reactions to latex involve skin redness, rash, hives, or itching. More severe reactions may involve respiratory symptoms such as runny nose, sneezing, itchy eyes, scratchy throat, and asthma (difficult breathing, coughing spells, and wheezing). Rarely, shock may occur; however, a lifethreatening reaction is seldom the first sign of latex allergy.

Products Containing Latex

A wide variety of products contain latex: medical

supplies, personal protective equipment, and numerous household objects. Most people who encounter latex products only through their general use in society have no health problems from the use of these products. Workers who repeatedly use latex products are the focus of this FactSheet. The following are examples of products that may contain latex:

Emergency Equipment

Blood pressure cuffs Stethoscopes Disposable gloves Oral and nasal airways Endotracheal tubes Dental dams Tourniquets Intravenous tubing Syringes Electrode pads

Personal Protective Equipment

Gloves Surgical masks Goggles Respirators Rubber aprons

Office Supplies

Rubber bands Erasers

Hospital Supplies

Anesthesia masks Catheters Wound drains Injection ports Rubber tops of multidose vials

Household Objects

Automobile tires Motorcycle and bicycle handgrips Carpeting Swimming goggles Racquet handles Shoe soles Expandable fabric (waistbands) Dishwashing gloves Hot water bottles Condoms Diaphragms Balloons Pacifiers Baby bottle nipples



Individuals who already have latex allergy should be aware of latex-containing products that may trigger an allergic reaction. Some of the listed products are available in latex-free forms.

Latex in the Workplace

Who is at risk of developing latex allergy?

Health care workers are at risk of developing latex allergy because they use latex gloves frequently. Workers with less glove use (such as housekeepers, hairdressers, and workers in industries that manufacture latex products) are also at risk.

Is skin contact the only type of latex exposure?

No. Latex proteins become fastened to the lubricant powder used in some gloves. When workers change gloves, the protein/powder particles become airborne and can be inhaled.

How is latex allergy treated?

Detecting symptoms early, reducing exposure to latex, and obtaining medical advice are important to prevent long-term health effects. Once a worker becomes allergic to latex, special precautions are needed to prevent exposures. Certain medications may reduce the allergy symptoms; but complete latex avoidance, although quite difficult, is the most effective approach.

Are there other types of reactions to latex besides latex allergy?

Yes. The most common reaction to latex products is *irritant contact dermatitis* - the development of dry, itchy, irritated areas on the skin, usually the hands. This reaction is caused by irritation from wearing gloves and by exposure to the powders added to them. Irritant contact dermatitis is not a true allergy. *Allergic contact dermatitis* (sometimes called chemical sensitivity dermatitis) results from the chemicals added to latex during harvesting, processing, or manufacturing. These chemicals can cause a skin rash similar to that

How can I protect myself from latex allergy?

Take the following steps to protect yourself from latex exposure and allergy in the workplace:

- 1. Use non-latex gloves for activities that are not likely to involve contact with infectious materials (food preparation, routine housekeeping, general maintenance, etc.).
- 2. Appropriate barrier protection is necessary when handling infectious materials. If you choose latex gloves, use powder-free gloves with reduced protein content.
 - Such gloves reduce exposures to latex protein and thus reduce the risk of latex allergy.
 - So-called hypoallergenic latex gloves do not reduce the risk of latex allergy. However, they may reduce reactions to chemical additives in the latex (allergic contact dermatitis).
- 3. Use appropriate work practices to reduce the chance of reactions to latex.
 - When wearing latex gloves, do not use oil-based hand creams or lotions (which can cause glove deterioration).
 - After removing latex gloves, wash hands with a mild soap and dry thoroughly.
 - Practice good housekeeping: frequently clean areas and equipment contaminated with latex-containing dust.
- 4. Take advantage of all latex allergy education and training provided by your employer and become familiar with procedures for preventing latex allergy.
- 5. Learn to recognize the symptoms of latex allergy: skin rash, hives, flushing, itching, nasal, eye, or sinus symptoms, asthma, and (rarely) shock.

What if I think I have latex allergy?

If you develop symptoms of latex allergy, avoid direct contact with latex gloves and other latex-containing products until you can see a physician experienced in treating latex allergy.

If you have latex allergy, consult your physician regarding the following precautions:

- Avoid contact with latex gloves and products.
- Avoid areas where you might inhale the powder from latex gloves worn by other workers.
- Tell your employer and health care providers (physicians, nurses, dentists, etc.) that you have latex allergy.
- Wear a medical alert bracelet.

Employers

Latex allergy can be prevented only if employers adopt policies to protect workers from undue latex exposures. The National Institute for Occupational Safety and Health (NIOSH) recommends that employers take the following steps to protect workers from latex exposure and allergy in the workplace:

- 1. Provide workers with nonlatex gloves to use when there is little potential for contact with infectious materials (for example, in the food service industry).
- 2. Appropriate barrier protection is necessary when handling infectious materials. If latex gloves are chosen, provide reduced protein, powderfree gloves to protect workers from infectious materials.

- 3. Ensure that workers use good housekeeping practices to remove latex-containing dust from the workplace: Identify areas contaminated with latex dust for frequent cleaning (upholstery, carpets, and ventilation ducts). Make sure that workers change ventilation filters and vacuum bags frequently in latex-contaminated areas.
- 4. Provide workers with education programs and training materials about latex allergy.
- 5. Periodically screen high-risk workers for latex allergy symptoms. Detecting symptoms early and removing symptomatic workers from latex exposure are essential for preventing long-term health effects.
- 6. Evaluate current prevention strategies whenever a worker is diagnosed with latex allergy.

This FactSheet was published with information from the National Institute for Occupational Health and Safety, the Centers for Disease Control and the Texas Department of Insurance, Division of Workers' Compensation and is considered factual at development.

For additional information about latex allergy, or to request a copy of NIOSH Alert No. 97-135, *Preventing Allergic Reactions to Natural Rubber Latex in the Workplace, call 1-800-35-NIOSH (1-800-356-*4674.

You may also visit the NIOSH Homepage on the World Wide Web at <u>http://www.cdc.gov/niosh</u>

The Texas Department of Insurance, Division of Workers' Compensation (TDI/DWC) E-mail **resourcecenter@tdi.state.tx.us** or call 1-800-687-7080 for more information.

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