

Latex allergy guidelines

Assessment and management of patients and employees

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Latex Allergy Guidelines for Patients and Employees

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These guidelines are general suggestions that your institution should consider when developing its own latex allergy policies. They do not constitute a latex allergy policy in themselves, and you will need to expand on and, in some cases, alter these guidelines to create a policy that meets your own facility's unique needs. In particular, federal, state and local laws and requirements change, especially in the employment setting, so please consult with your facility's law, human resources and employee health departments to ensure that your latex allergy policy is appropriate, complete and up-to-date.

Latex Allergy Guidelines for Patients

PURPOSE: To standardize the identification and management of patients with natural rubber latex (NRL) allergy.

Policy

I. General Information

Reactions to natural rubber latex products can be classified as follows:

- A. Type I, or “immediate hypersensitivity,” reactions are IgE mediated and span a continuum of possible symptoms from contact urticaria (local hives at contact sites) to systemic allergic reactions (anaphylaxis). These reactions occur in certain genetically predisposed, sensitized persons who may manifest clinical symptoms upon exposure to certain proteins that are part of natural rubber latex. The majority of Type I reactions involve local urticaria (hives) where latex products come in direct contact with the skin. The second most common Type I reaction involves hay fever and allergic conjunctivitis symptoms (runny nose, itchy eyes). Even less common reactions include asthma and, on rare occasions, systemic reactions. Symptoms generally develop within 30 minutes of exposure. Of all the reactions related to natural rubber latex products, Type I reactions are the least common. Treatment for Type I reactions includes avoiding the allergen and seeking treatment appropriate to the type of symptom observed.
- B. Type IV, or “delayed hypersensitivity,” reactions involve a cell-mediated sensitivity to chemicals used in the manufacture of latex products. It is manifested on the skin as a contact dermatitis rash (poison-ivy-like rash). Symptoms may include redness, inflammation or blister formation on areas that come in contact with the material. Type IV reactions are the most common allergic reactions to NRL products. Treatment for Type IV reactivity includes avoiding allergen contact and seeking local comfort measures. Because this reaction is to chemicals used to manufac-

ture specific latex products and not to natural rubber latex itself, susceptible individuals often do not react to other latex products. Topical medications such as steroids may be employed and use of systemic medications such as antihistamines may be helpful.

- C. Irritant reactions of the skin related to latex products (particularly gloves) are not a true allergic reaction but may be confused with one. Irritant reactions may result from loss of skin integrity due to retained soaps, moisture, etc. Loss of skin integrity promotes irritation of the skin. Symptoms include local discomfort and skin rash. Such reactions are the most common reactions in health-care workers because of their use of occlusive gloves. Irritant reactions are not seen frequently in patients. Treatment for irritant reactions includes protection of skin integrity. Actions may include thorough rinsing of soap from hands and complete drying of hands before applying gloves.

II. Definition of Patients at Increased Risk for Latex Allergic Reactions

The following conditions may be associated with increased risk for Type I latex allergic reactions:

- A. Spina bifida, myelomeningocele/meningocele or congenital urogenital malformations that require repeated bladder catheterizations.
- B. A history of allergic (atopic) disorders such as hay fever, allergic asthma, atopic dermatitis and particularly allergic reactions to certain foods or grasses: avocado, banana, chestnut, kiwi, papaya, potato or ragweed.
- C. Multiple surgical procedures, especially multiple GU surgeries in children.

III. Prevention

- A. Avoidance of exposure is the best way to deal with latex allergy reactive patients.
- B. All natural rubber latex gloves and supplies used in the facility should comply with FDA guidelines for such materials.
- C. To avoid exposure of patients with Type IV sensitivity, materials that come in direct contact with the patient should be synthetic latex unless a particular product has been shown to be tolerated by the patient. Latex-free syringes are available, and the cumbersome use of glass syringes is generally not required.
- D. To avoid exposure of patients with Type I latex allergic reactivity to NRL allergens, latex supplies should not be employed in their care. Health-care workers should always use appropriate gloving techniques for donning and removing gloves. Hands should be washed after glove removal. Additionally, clothing worn frequently in the hospital should be washed regularly. Surfaces in areas where latex gloves are frequently used should be wiped down. The goal is to provide a latex-reduced experience for these patients.
- E. Synthetic latex gloves should be used in situations that do not require the specific barrier or tactile qualities of natural rubber latex gloves, e.g., food handling.
- F. Each outpatient area that has more than one examining room should designate at least one examining room as latex-reduced. There will be at least one latex-reduced examining room per 20 examining rooms in areas with more than 20 examining rooms. Latex-reduced examining rooms will be stocked with only synthetic latex supplies, including gloves, catheters, tourniquets, etc. For these purposes, the emergency room is defined as an outpatient area.
- G. Patients designated with Type IV allergy to latex may undergo phlebotomy in regular phlebotomy offices. However, synthetic latex gloves and synthetic latex tourniquets will be used during the procedure. For patients on Type I latex allergy precautions, the phlebotomist will come to the latex-reduced examining room to collect the patient's blood and use synthetic latex gloves and synthetic latex tourniquets.
- H. In specially designated areas, such as the clinic for children with spina bifida and congenital urinary tract abnormalities, the examining rooms and phlebotomy rooms should all be latex-reduced.
- I. Outpatient nursing areas will stock a latex-reduced medication supply kit, which includes latex-free syringes, IV tubing without latex ports and emergency medicine, such as epinephrine in either single-dose or multi-dose vials that do not have natural latex stoppers.
- J. All outpatient and inpatient hospital personnel who use NRL products are encouraged to have their hospital clothing (scrub suits, laboratory coats, etc.) laundered frequently. Laboratory coats should be laundered weekly.
- K. Exposed surfaces (e.g., floors, counters) of areas where natural rubber latex gloves or materials are frequently used (e.g., operating rooms, OB/GYN suites) should be wiped clean at least daily.

IV. Identification of Patients

- A. Screening for latex allergy should occur at the earliest point of contact with the patient. When a history suggestive of allergic reactions is obtained, the person should be questioned about past experience with hypersensitivity to medical equipment (e.g., Foley catheters, gloves) or nonmedical products (balloons,

condoms, rubber gloves) that contain natural rubber latex. The nurse or clerk will enter the allergy information into the patient information system (if applicable), place an allergy sticker on the medical record and inform the physician taking care of the patient so that he/she may follow up.

V. Latex Allergy Precautions

(It is possible here to have two levels of latex allergy precautions: "Latex Allergy Precautions" for Type I patients and "Latex Dermatitis Precautions" for Type IV patients. After initially drawing this up, we decided it would cause confusion, and because the situations are so rare, it is more efficient to put all persons on one "higher" level of precaution.)

- A. Patients with a known history of Type I or Type IV allergic reactions to natural rubber latex products will be placed on "Latex Allergy Precautions." DIRECT CONTACT with natural rubber latex products will be minimized and, if possible, avoided during all aspects of their hospitalization.
- B. The following procedures will contribute to minimizing exposure:
 - 1. When surgery or invasive procedures are anticipated on known latex allergic patients, the involved departments are notified and preparations are made for care of a patient with latex allergy. It is the responsibility of the admitting physician and the admitting nurse to initiate the communication process.
 - 2. Hospital services are notified at the time of admission so that the use of latex products is eliminated from the patient's hospital experience appropriate to Type I or Type IV precautions.

- 3. Room accommodations: Patients on "Latex Allergy Precautions" will be placed in private rooms when possible.
- 4. Medications: For patients on "Latex Allergy Precautions," the admitting nurse will notify the pharmacy. The pharmacy will send medications to the unit in containers free of natural rubber latex when possible.
- 5. Supplies
 - a) For patients on "Latex Allergy Precautions," a stocked latex-free cart will be kept at the bedside.
 - b) In the operating room, a special supply cart will remain on-site at all times, fully stocked with latex-free supplies. The cart should be covered when not in use.
 - c) Only synthetic latex gloves will be used as part of the "Latex Allergy Precautions." As in all patient care, staff will wash hands carefully between patients.
 - d) Synthetic latex tourniquets should be available for phlebotomy and IV starts.

VI. Latex Allergy Watch

- A. Patients with spina bifida, myelomeningocele/meningocele or congenital urogenital malformations who required repeated bladder catheterizations, who have not experienced symptoms of Type I or Type IV latex allergy, will be placed on "Latex Allergy Watch." For these patients, the staff will be vigilant for new signs and symptoms of Type I or Type IV hypersensitivity reactions to latex. Staff will minimize the use of latex products with this population when possible.

- B. Signs: "Latex allergy" signs will be posted at the bedside, on the patient's door, on monitors or IV devices and in the Kardex® holder for patients with hypersensitivity to latex.
- C. Latex balloons: Latex balloons for latex allergy patients will remain at the nurse's station until family or friends can remove them. Latex balloons are not permitted in any pediatric area. Mylar® balloons are safe for children and for people with latex allergies.

VII. Patient Education and Discharge Planning

Patients with proven Type I latex allergic reactions will be counseled to obtain MedicAlert® bracelets. Patients with proven or suspected Type I or Type IV latex allergic reactions will be encouraged to consult with a physician knowledgeable about latex allergy.

Forms

None

References

Young, M. A. and Meyers, M. "Latex Allergy: Considerations for the Care of Pediatric Patients and Employee Safety." *Nursing Clinics of North America*. March 1997: 169-82.

Approval

Varies with institution; consider Latex Allergy Management Committee, Employee Health, Infection Control, Patient Relations.

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Latex Allergy Guidelines for Employees

PURPOSE: To standardize the identification and management of employees with natural rubber latex (NRL) allergy.

Policy

I. General Information

(see Latex Allergy Guidelines for Patients)

- A. Most health-care workers who are latex allergic are working safely in a clinical setting.
- B. Some individuals have experienced job modification or transfer assignment as a result of physician recommendations.
- C. The overwhelming majority of health-care workers continue to use latex gloves and other latex products safely.

II. Definition of Persons at Risk

(for Latex Allergic Reactions)

The following conditions are associated with increased risk for Type I latex allergy reactions:

- A. Spina bifida, myelomeningocele/meningocele or congenital urogenital malformations that require repeated bladder catheterizations.
- B. A history of allergic (atopic) disorders such as hay fever, allergic asthma, atopic dermatitis and particularly allergic reactions to certain foods or grasses: avocado, banana, chestnut, kiwi, papaya, potato or ragweed.
- C. Multiple surgical procedures, especially multiple GU surgeries in children.

III. Prevention

- A. All natural rubber latex gloves and supplies should comply with FDA guidelines for such materials.
- B. Synthetic latex gloves and supplies are to be used where natural rubber latex is not required (e.g., food handling).
- C. Synthetic latex gloves and supplies are to be used in situations where they may come in contact with

individuals sensitive to natural rubber latex. Latex-free syringes are available, and the cumbersome use of glass syringes is generally not required.

IV. Identification of Subjects

After being hired, all new employees will be asked if they have symptoms related to exposure to natural rubber latex. Those who provide a positive answer will be referred for appropriate evaluation.

- A. New hires: medical history to be screened by the employee health nurse during the postoffer physical examination.
- B. Existing employees: to be referred by the individual's supervisor to the employee health nurse for screening when the suspicion of NRL sensitivity presents itself in the work setting.

V. Management

- A. Employee Health will use a Latex Allergy Questionnaire as a screening tool. This questionnaire will become a part of the employee's permanent health record.
- B. For individuals who appear (based on the established screening criteria) potentially latex sensitive, the employee health nurse will:
 - 1. Review the job description and consult with the employee's supervisor to evaluate the amount of latex exposure experienced when completing normal job duties.
 - 2. Counsel the employee on the potential for latex sensitivity, including the identification of latex items, so that the employee can, to the extent possible,

- avoid them when performing normal job duties.
3. Refer the new employee to his or her personal physician for advice with the suggestion that a statement of the physician's findings be provided to the health nurse.
 4. Have the employee health physician advisor evaluate and treat the employee with symptoms of latex sensitivity that appear to be caused by/related to the performance of his or her job duties. If the symptoms persist and/or it is deemed appropriate, refer the individual to an allergist/physician advisor for diagnosis.
- C. Individuals who develop symptoms of dermatitis, respiratory symptoms or generalized reactions thought to be linked to natural rubber latex will be referred to Employee Health.
 - D. Individuals who have been diagnosed with clinical symptoms attributed to natural rubber latex allergens (Type I natural rubber latex allergy) will be provided with an appropriate synthetic alternative for the task or tasks to be performed. Such individuals also will be counseled not to come in direct contact with natural rubber latex products, e.g., to use polyethylene or other types of barriers when handling natural rubber latex products.
 - E. In those situations where symptoms are not manageable by personal modification of use of natural rubber latex products or modification of the environment and appropriate medical intervention, the employee will be offered appropriate relocation/reassignment to an area where potential exposure to natural rubber latex allergens will be decreased.
 - F. The employer will follow the recommendations of its physician advisor regarding any work restrictions. If those recommendations involve a job modification, job transfer or job reassignment, the employer will make an effort to accommodate the employee to the extent such modification or alternative placement is reasonably practical and possible. Such alternative work assignments will be made in accordance with legal requirements as well as with consideration for the provisions of established policies, procedures and/or labor contracts at the affiliate where the individual is employed.
 - G. For those individuals who have allergic reactions initially felt to be related to the performance of his or her job duties, and the screening does NOT support a diagnosis of latex allergy, the employee health nurse will:
 1. Have the employee evaluated and treated by the employee health physician advisor as deemed appropriate based on the type of reaction.
 2. Work with the employee, his or her supervisor and the Materials Management staff to find alternative solutions/products that may eliminate the reaction.
 3. Whenever the reaction persists after the preventive measures and consultation with the employee health physician advisor, refer the employee to the appropriate physician advisor for diagnosis if deemed appropriate.

VI. Employee Responsibility

- A. Assess personal risk of sensitization.
- B. Practice meticulous hand care.
- C. Understand the implications of inappropriate glove usage.

D. Understand alternatives to the use of NRL gloves and other NRL products at work and at home.

VII. Education

- A. Teaching/awareness of NRL sensitivity is to be covered in safety classes presented during new employee orientation and annual safety review attended by all employees. The purpose is to make the employees aware of NRL sensitivity not only for their own health reasons but also for the interests of patients.
- B. NRL sensitivity education will be required as part of an annual educational format.

C. NRL sensitivity education will be designed to address employee health- and patient-care requirements.

Forms

Latex Allergy Screening Questionnaire. (Consider adapting from questionnaire in Jackson, D. "Latex Allergy and Anaphylaxis – What To Do?" *Journal of Intravenous Nursing*. 18(1995):33-52.)

Employee Training Documentation.

References

Jackson, D. "Latex Allergy and Anaphylaxis – What To Do?" *Journal of Intravenous Nursing*. 18(1995):33-52.

Sosovec, D., Bourne, G., and Davis, D. "Clinical Assessment and Effective Management of Latex Allergy." *Surgical Services Management*. 4, March 1998: 11-15.

Approval

Varies with each institution; consider Latex Allergy Management Committee, Employee Health, Infection Control.

Additional Resources

Cardinal Health

www.cardinal.com/gloves

American Academy of Allergy, Asthma and Immunology

1-414-272-6071

www.aaaai.org

MediAlert Foundation

1-800-432-5378

www.medicalert.org

Spina Bifida Association of America

1-800-621-3141

www.sbaa.org



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Lit. No. GLV00611 (1103/2.5M/MC1611)

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