



Latex Allergy and Sensitivity in the Child Care Setting

With more child care providers and health professionals following universal precautions to protect themselves from infections such as viral hepatitis and HIV, we are seeing an increase in latex allergies and sensitivities. Universal precautions require that child care providers wear protective gloves for any procedures that put them into contact with blood. The most effective, inexpensive and comfortable protective gloves are made from latex.

What is latex?

Latex is a milky liquid produced by rubber trees. It is used to make a wide variety of common household products such as protective gloves, balloons, disposable diapers, bandage tapes, pacifiers, rubber bands, bottle nipples, tires, toys and elastic in clothing, to name a few.

What is latex allergy?

Latex allergy or hypersensitivity is a reaction of the body's immune system to proteins found in natural rubber latex. Some people also react to chemicals in the gloves besides the latex itself. Sensitivity to latex can range from a mild skin irritation to a severe allergic reaction.

Reactions can occur from direct contact with products containing latex or from breathing latex particles in the air. Most latex gloves are treated with cornstarch powder to make them easier to put on and take off, and this powder binds with the latex proteins. When gloves are removed or snapped, they release the powder—along with the latex proteins—into the air.

What are the symptoms?

If someone becomes sensitive to latex, symptoms usually begin within minutes of exposure, but they can occur hours later and be quite varied.

- Mild reactions may cause skin redness, hives or itching.

- More severe reactions may cause respiratory symptoms such as itchy eyes, sneezing, coughing and asthma.
- Rarely, life-threatening shock may occur (but this seldom occurs as the first episode).

Who is at risk?

Anyone can develop a latex allergy, but the following groups of people are at increased risk:

- people who wear latex gloves regularly, such as child care providers and health care workers
- children with spina bifida (a birth defect involving the spinal cord or backbone)
- people with other allergies or asthma
- people who have had multiple surgical procedures
- people who have allergies to certain foods, especially avocado, potato, banana, tomato, chestnuts, kiwi and papaya.

Latex allergy should be suspected in anyone who develops symptoms after exposure, and he or she should be evaluated by a medical provider to determine if the reaction was caused by exposure to latex.

What should I do if I am allergic?

If diagnosed with a latex allergy by a medical provider, you should:

- Tell your employer, clients and all health care providers that you are allergic. Do not rely on doctors, nurses or dentists to know this from your chart.
- Wear a medical alert bracelet and carry non-latex gloves for convenience.
- Know which products might contain latex and avoid them.
- If you have staff or children in your program who are allergic, post a list of products containing latex and try to replace as many of them as possible with safer alternatives.

- Consult your child care health consultant or health provider regarding preparation for and responding to emergencies (e.g., having auto-injectable epinephrine such as EpiPen and EpiPen Jr.) ready and knowing how to use it.

How can you avoid latex allergy?

- Reduce your exposure to latex by only using latex gloves when you really need to. Protective gloves of any kind are only one part of universal precautions, and handwashing with soap is the most important infection control practice. Wear vinyl gloves instead of latex for routine diaper changes, food preparation and procedures that do not expose you to blood (such as applying cream to a rash or cleaning up vomit). Remember that vinyl gloves are a less effective barrier after about 15 minutes of wear. Medical-grade vinyl gloves are also available for procedures involving blood.
- Use latex gloves without powder. This will reduce the amount of airborne latex.
- Do not use oil-based hand lotions because they can break down and release the latex in gloves.
- Always wash your hands after removing gloves.
- When you use latex gloves, try a larger size than you would normally wear so that you perspire less and trap less moisture under the glove.

Choosing Gloves

There are several kinds of gloves for you to choose from, and each has advantages and disadvantages. You will need to choose the right glove for the right situation.

- Latex gloves provide the most protection at the lowest cost and are the most comfortable for the majority of people.
- Single-use vinyl and polyvinyl chloride gloves do not contain latex and are appropriate for use in the child care setting when blood is not involved.
- Medical grade non-latex gloves provide maximum protection but are generally more expensive. Consider a bulk purchasing arrangement through your Family Child Care Association.

Any disposable glove is acceptable for food preparation or routine diapering as long as you practice effective handwashing.

The most important point to consider is that not all disposable gloves will protect you from viruses like hepatitis B or C, or HIV. Be sure you are using a medical exam glove that meets EPA guidelines. Talk to a medical supply store or your pharmacist if you're not sure.

If you are searching for non-latex gloves, keep in mind that the term "hypoallergenic" is not regulated, and does not mean latex-free—it usually means there are fewer chemicals used to make them. Read the label or ask your pharmacist.

Also remember that gloves deteriorate over time, so no matter what kind of gloves you purchase, be sure to check the expiration date on the box and store extra boxes in a cool, dry, dark place.

Resources

American Academy of Allergy, Asthma & Immunology
800-222-2762 or www.aaaai.org

American Latex Allergy Association
888-97-ALERT or www.latexallergyresources.org

References

Latex Allergy: A Preventive Guide. DHHS (NIOSH) publication No. 98-113. (Feb. 1999)

Latex Sensitivity: A Compilation of Articles & Reference Material. Ammex Corp. Kent, WA. (Summer, 1997).

Guideline for Latex Glove Users. Occupational Health and Safety Branch, Ministry of Labour, Toronto, Canada. (September, 1994).

ALERT: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace. DHHS (NIOSH) Publication No. 97-135 (July 1998)

By A. Rahman Zamani, MPH and Lyn Dailey, PHN (3/8/01)