Latex Allergy

Background to Latex Allergy

What is latex?
Latex is a rubber compound found in many products that you use on your job. It is produced from rubber trees in the Tropics.

The most common medical use of latex is in disposable sterile and non-sterile exam gloves. However, the potential number of items in a medical setting that may contain latex is vast and includes other items such as masks and tubing.

Latex seems ideal for medical uses because it is impermeable, which means that no liquid or gas can pass through it. The problem with latex products is that increasing numbers of people are becoming allergic to it.

It is thought that some of the allergic reactions to latex might be due to the chemicals used on the rubber plant or in the processing, rather than to the latex itself.

Allergy or "hypersensitivity" to latex increased in the late 1980s when Universal Precautions for healthcare workers were adopted to control the spread of blood-borne pathogens. Universal Precautions, also known as Standard Precautions, mandate that healthcare workers wear latex gloves whenever contact with the secretions or excretions of any patient is likely. This dramatic increase in the use of latex gloves by all healthcare workers is believed to have caused the increase in latex allergy.

Products that contain latex
Many common products are made from latex because it is inexpensive and versatile.

Medical products:

- Endotracheal tubes
- Tourniquets
- Intravenous tubing
- Electrode pads
- Gloves
- Surgical masks
- Goggles
- Respirators
- Rubber aprons
- Anesthesia masks
- Catheters
- Wound drains
- Injection ports
- Rubber tops of multidose vials
- Dental dams

Consumer goods:

- Rubber bands
- Erasers
- Automobile tires
- Motorcycle and bicycle handgrips
Symptoms of latex allergy
People can have allergic reactions from latex that range from a mild rash to a full-blown allergic reaction.

Reactions include:

- Itching
- Burning sensations
- Hives
- Wheezing
- Shortness of breath
- Asthma
- Shock

Reactions may begin to occur even during seemingly trivial latex exposures and may progress rapidly. If exposure to latex continues, signs and symptoms of allergic reactions tend to become more severe.

The actual prevalence is not entirely clear. Some studies indicate between 8-12% of healthcare workers are affected by latex allergy. Patients also may have latex allergies. For example, it is estimated that up to 60% of all spina bifida patients have latex allergy.

People who are frequently exposed to latex are the most at risk. As with any allergy, the greater the exposure to the substance, the greater the chance of developing allergies.

If you or someone nearby begins to experience symptoms of latex allergy, get medical attention immediately.

Prevalence and Symptoms of Latex Allergy

What is latex allergy?
Allergic reactions to latex may include itching, burning sensations, hives, wheezing, asthma, and shock.

It is thought that some of the allergic reactions to latex might be due to the chemicals used on the rubber plant or in the processing, rather than to the latex itself.

The Universal Precautions for healthcare workers mandate that latex gloves be worn whenever contact with the secretions or excretions of any patient is likely. This dramatic increase in the use of latex gloves by all healthcare workers is believed to have caused the increase in latex allergy.
How prevalent is latex allergy?
The actual prevalence is not entirely clear, but some studies indicate between 8-12% of healthcare workers are affected by latex allergy.

The people most at risk are those who are frequently exposed to latex. As with any allergy, the more the exposure to the substance, the greater the chance of developing allergies.

Patients may also have latex allergies. For example, it is estimated that up to 60% of all spina bifida patients have latex allergy.

Latex allergy is more common in people who are allergic to the following foods:

- Avocados
- Potatoes
- Bananas
- Tomatoes
- Chestnuts
- Kiwi
- Melon
- Celery
- Papaya

People who have problems with eczema are also at risk for latex allergy.

Degrees of sensitivity to latex
There are several degrees of sensitivity to latex:

Contact dermatitis
This reaction appears shortly after exposure to latex. It involves itching, dry, red skin, sometimes with cracks in the skin. Once the latex is removed (for example, when the person removes exam gloves), the symptoms begin to go away. Other parts of the body are not affected. For this reason, it probably is not a true allergy. This reaction may be caused by several other things:

- Powder in the gloves
- Perspiration
- Not drying hands thoroughly before putting on gloves

Chemical sensitivity
This reaction may be due to contact with chemicals used in making the latex item, rather than the latex itself. A rash that resembles poison ivy with blisters appears 24-48 hours after exposure. The rash can also appear on other parts of the body.

Allergic reaction
This reaction may occur after being exposed numerous times to latex. It is a true allergic reaction with symptoms ranging from hives and itching to breathing problems and anaphylactic (allergic) shock.

Note: Anaphylactic shock is an acute emergency. If it is not treated immediately, it can be fatal.
If you or someone nearby begins to experience any of these symptoms of latex allergy, get medical attention immediately.

Prevention and Treatment of Latex Allergy

**Reducing reactions to latex**
Latex contains proteins that can cause mild to severe allergic reactions. Chemicals that are combined with the latex during processing, and powder that is added to the gloves to make them easier to put on may also cause allergic reactions.

People who are frequently exposed to latex are the most at risk for developing an allergy. As with any allergy, the more the exposure to the substance, the greater the chance of developing an allergy. If you show any signs of latex allergy, it is important to limit your exposure to latex and to other agents to which you may be allergic.

**Use the following methods if you need to limit your exposure to latex:**

**Use non-latex utility gloves for non-clinical work.**
When there is NO potential risk of contact with infectious material (when you are NOT working with patients or with clinical material), it is NOT necessary to wear latex gloves. For example, a housekeeper cleaning an oven does not need to wear latex gloves - non-latex utility gloves are adequate for these tasks.

**Use approved hypoallergenic gloves for ALL clinical work.**
When there is ANY potential risk of contact with infectious material (whenever you are working with patients or with clinical material such as blood or other body fluids), you MUST wear approved hypoallergenic gloves (which do not contain latex), to provide proper protection against infection. Your facility is required to supply you with hypoallergenic gloves, if you are allergic to latex.

**Learn to recognize the symptoms of latex allergy:**

- Skin rashes
- Hives
- Flushing
- Itching
- Nasal, eye, or sinus symptoms
- Asthma
- Shock

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

**Even if you are not allergic to latex, you should take the following precautions:**

When wearing latex gloves, do not use oil-based hand creams or lotions. Oil-based products can cause glove deterioration. Your hands should be clean and dry before wearing gloves.

Dry hands completely before putting on gloves. Moisture trapped in the gloves may result in dry, itchy, irritated areas on the skin.
After removing latex gloves, wash hands with a mild soap and dry thoroughly. Washing and drying your hands after wearing gloves removes any residue that may cause a reaction.

**How to protect people who are allergic to latex**
The number of people who experience sensitivity to latex products is increasing. Therefore, you should always protect yourself and others who may be allergic.

If you have latex allergy, use the following precautions: (Be sure to consult your physician first.)

- Avoid contact with latex gloves and other products. Your facility is required to supply non-latex gloves if you need them.
- Avoid areas where you might inhale the powder from the latex gloves worn by others.
- Tell your employers, physicians, nurses, and dentists that you have latex allergy.
- Wear a medical alert bracelet. A medical alert bracelet is a wrist band with written information about any medical conditions you have and what someone should do if you are experiencing a medical problem.
- Use latex-free "crash carts" and procedure trays.
- Carry an epinephrine injection kit (similar to the allergy kits carried by people who are allergic to bee stings) in case of a reaction to latex. Injection of epinephrine is an emergency treatment for an allergic reaction.

Also, protect other people who have a latex allergy. For example, screen patients for latex allergy. Clearly identify those patients with allergies to ensure that only latex-free equipment is used.

**What to do if someone has an allergic reaction to latex**
Reactions to latex can range from mild contact dermatitis to a severe allergic reaction.

If the reaction is mild (itching or redness):

1. Remove the latex product
2. Wash and thoroughly dry the skin area.

If someone is experiencing a severe allergic reaction (difficult breathing, coughing spells, or shock):

1. Remove any sources of latex
2. Get immediate emergency medical help.

Reactions usually begin within minutes of exposure to latex, but they can occur hours later and can produce various symptoms.

It is best for anyone who experiences symptoms to be evaluated by a physician, since further exposure could result in a serious allergic reaction. A diagnosis is made by using the results of a medical history, physical examination, and tests.

Report allergic events related to latex medical devices to the Food and Drug Administration MedWatch Program, 1-800-FDA-1088.

**End of Latex Allergy Lesson**