

NRL Allergy: The “Skinny” on Latex Allergies

Hardly a week goes by that someone doesn't write me about Latex Allergies. Every time I buy a product to take to the hospital or sell from the newsletter, I need to write the manufacturer and ask about latex contents.

Latex allergy is actually Natural Rubber Latex (NRL) Allergy

Natural rubber latex is manufactured from a milky protein fluid that is obtained from the rubber tree (*Hevea brasiliensis*). Some synthetic rubber materials may be referred to as "latex" but they do not contain the protein that produces latex allergies. For example, latex paint does not contain natural rubber - NRL. Here the term refers to a physical property of the paint. All the more to confuse us, but it may do us good to know what we are looking for and asking about.

NRL is found in a wide range of manufactured goods, including an estimated 40,000 common household items including: car tires, rubber bands, elastic, carpet backing, hospital and dental equipment. Dipped latex products are the biggest culprits in triggering allergic reactions, including exam gloves, kitchen gloves, and balloons. NRL is also found in many toys and children's items as pacifiers and balls, bubble blowers and puppets. Generally speaking, if it is pliable, it may contain NRL

Exposure to NRL worsens with each exposure - known as *allergic sensitization*. The allergic reactions can range from moderate skin irritations to life-threatening anaphylaxis shock.

Latex allergy was first recognized in the late 1970s. Prior to this, reactions to latex were virtually unknown in the United States. Now, according to OSHA, it is estimated that 8-12% of health care workers are latex sensitive. And it now affects an estimated 1% to 6% of the U.S. population, or up to 16 million people.

Why is this a new problem?

The introduction of *Universal Precautions* (UP) in health care settings gave rise to the widespread use of latex gloves to prevent the spread of AIDS and Hepatitis B. To meet the demand of the UP there were significant changes in the manufacturing of latex products, specifically latex gloves. To keep up with increased demand, manufacturers sped up their processes and resorted to lower quality latex, both of which have resulted in latex products with higher levels of the protein that can trigger allergic reactions.

In certain pediatric populations there may be an incidence as high as 73% of children with spina bifida and related pathologies are at high risk because of multiple surgical procedures and catheterizations with the opportunity of contact with rubber catheters and other NRL instruments. **This is the main reason balloons are not allowed in pediatric wards. Children can develop a sensitivity to NRL much quicker than an adult.** As NRL was not a problem in the active years of most seniors there is no report of incidents among seniors in nursing homes.

There have been extensive efforts to provide a latex safe environment for children at risk. Proper and understandable labeling has been an issue. In the future, skin tests may be commercially available and there may be treatment protocols also.

If you are working with children, check everything for NRL. With ICU and Recovery be equally alert. As older adults are less likely to become latex sensitive, nursing homes may allow balloons and latex puppets. However, it will only show you are a conscientious and aware member of the health care team if you ASK FIRST.