

5.12d GUIDELINES & POLICY ON THE USE OF LATEX GLOVES.

5.12d.1 Introduction

The number of allergic reactions to exposure to latex, either natural rubber latex (NRL) or synthetic latex, has increased significantly in the last 10 years, particularly in laboratory workers and those in healthcare occupations who wear latex gloves as a method of personal protection against biohazardous agents. Such reactions are triggered by either proteins present in NRL or the chemical agents used in the manufacture of natural or synthetic rubber gloves coming into direct contact with the skin, or by inhalation of powder contaminated with latex proteins, or other agents, from powdered latex gloves.

5.12d 1.1. Sources Of Latex

NRL is obtained from trees, which on processing forms a strong, flexible and durable material with excellent dexterity and protective features for use as protective gloves, amongst other applications. Synthetic rubber latex does not possess the natural proteins of NRL but may contain other allergy-inducing agents.

5.12d 1.2. Allergies To Latex

There are two types of allergy related to latex: Type I - caused by the natural proteins in NRL; and Type IV - caused by other chemicals used in the processing of NRL or the manufacture of synthetic latex. Once acquired, latex allergy is a lifelong condition; there is no cure but there are effective treatment strategies. Some people may experience an irritant reaction when using latex gloves, known as irritant contact dermatitis, but this is not a true allergy.

Type I allergy is an immediate allergic reaction and is potentially life threatening. Symptoms include urticaria (hives) and hay fever-type symptoms. More severe symptoms such as a drop in blood pressure, breathing difficulties or even loss of consciousness and death have occurred. Many years of exposure may precede the onset of a Type 1 latex allergy, and repeated exposure to latex may progress the condition causing sensitisation.

Type IV allergy usually has a delayed onset of symptoms, ranging from 6-48 hours post-exposure, but usually diminishes with time. A red, itchy, scaly skin rash usually localised to the area of exposure, and inflammation of the eyes and nose are the most common symptoms. Chemicals most likely to cause Type IV latex allergies include thiurams, dithiocarbamates and mercaptobenzothiazoles.

5.12d 1.3. Persons At Risk

- Healthcare workers
- Laboratory personnel
- Persons with a history of certain food allergies, such as banana, kiwi fruit, chestnut, avocado

- Persons with atopic allergic disease
- Persons working in workshops, catering and electronics
- Persons routinely using latex gloves
- Persons in the vicinity of users of powdered latex gloves

5.12d 1.4. Factors To Consider When Choosing Latex Gloves

Suppliers of latex gloves should be asked to identify potentially harmful agents found in the latex glove, including chemical process accelerators used in their manufacture. If gloves contain constituents, which have been assigned any of the following risk factors, it is imprudent to use them:

- R21: harmful in contact with skin
- R24: toxic in contact with skin
- R27: very toxic in contact with skin
- R38: irritating to skin
- R42: may cause sensitisation by inhalation
- R43: may cause sensitisation by skin contact
- It is likely that low risk, tested gloves will be slightly more expensive, but there is a higher risk that cheaper gloves may invoke an allergy due to inadequate process purification methods and lack of testing. Glove suppliers should be asked to give a written guarantee that the gloves they supply have not caused allergic reactions to their customers

5.12d.2 Policy Statement

NUI, Galway acknowledges its responsibility to reduce, so far as is reasonably practicable, the exposure of its employees to latex in the workplace. It recognises that whilst exposure to latex occurs through the use of many products used in normal daily life, those whose work activities repeatedly expose them to latex, such as users of latex gloves, require particular attention. The University undertakes to follow best practice in latex allergy management and is committed to providing information and education on latex allergy to its employees.

5.12d 2.1. Where gloves are used as a means of personal protective equipment their necessity of use must be the subject of a written risk assessment by the respective department, in accordance with Part V of the Safety, Health and Welfare at Work (General Applications) Regulations, 1993, (See section 5.6 Personal Protective Equipment, of the NUI, Galway Safety Statement). The risk assessment must also account for the wearer's pre-existing allergies or skin complaints.

5.12d 2.2. Latex gloves, NRL and synthetic, should not be used where there are acceptable non-latex alternatives.

5.12d 2.3. Where latex gloves are considered essential, glove wearers must be fully informed of the risks of latex allergy.

- 5.12d 2.4.** Gloves with as low a level of extractable protein as is reasonably practicable should be used (manufacturing standards of less than 50µg/g are reasonably achieved).
- 5.12d 2.5.** Powdered latex gloves should never be used.
- 5.12d 2.6.** Use of a non-latex (cotton) liner between skin and latex should be encouraged.
- 5.12d 2.7.** Users of latex gloves should avoid using oil-based creams or lotions which may cause deterioration of the glove, thus promoting enhanced latex exposure and exposure to the hazard being handled. On removal of latex gloves, users should inspect their hands for any irritation and wash them with a suitable agent and dry them thoroughly.
- 5.12d 2.8.** Any member of staff using latex gloves who subsequently develops any skin or respiratory problem must be immediately referred for medical advice.
- 5.12d 2.9** Where latex gloves are currently in use at the time of the introduction of this policy steps 2.1 to 2.8 above must be conducted without delay.

Persons responsible:

**Heads of Departments/Sections;
Supervisors.**