University Safety Policy Supplement

Disposable Gloves and Latex Allergies

Document History

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Disposable Gloves and Latex Allergies

Introduction

Following considerable information from the HSE and discussions with the Unions and at the University Safety Committee the following Safety Policy Supplement has been written in order to minimise the risks to staff, students and patients at the University from the use of disposable gloves manufactured from latex, or utilising known potentially allergenic agents.

Action to be Taken

All Schools who use disposable gloves are to include in their School Safety Policies measures to the following effect.

The use of Latex Gloves should be ceased in all cases unless there is no suitable alternative for the work in progress.

Single use, disposable natural rubber latex gloves may be used where a risk assessment has identified them as necessary. When they are used they must be low-protein and powder-free.

If latex gloves are to be used then a formal Risk Assessment and justification is required, explaining why the alternatives are not suitable. This needs to include :-

- the reason(s) why gloves are required (e.g. for infection control)
- the reason(s) why another type of glove cannot be used
- the method(s) to be used to limit exposure

Because of the allergy risks involved all persons who use latex gloves must be referred to the University Occupational Health Service for health surveillance.

Background

The Health and Safety Executive have issued guidance on latex allergies.
Because of the significant risk of allergy from the use of latex gloves and the possible seriousness of potential health consequences the use of latex should be limited to circumstances where suitable substitutes are not available.

The HSE have now specifically identified Latex as a ‘hazardous substance’ under the COSHH regulations.

Occupationally induced Latex Allergy has now been demonstrated to be entirely preventable, and in the NHS (previously a key user of latex gloves) has been responsible for many cases of severe latex allergy. There are several types of allergy, mostly caused by the latex component. However, there are also some chemicals that were previously added to gloves to soften the plastics that have also been associated with allergies. These are not normally used in the ‘low allergen’ types of gloves.

**Additional Notes**

For the vast majority of work there are suitable alternatives to latex gloves. In any case there are many operations where latex gloves are often used but do not provide the level of protection that is expected. This is because there are numerous chemicals which pass through latex and some of these (such as DMSO) may also then act as a carrier for other substances that would not normally be carried through a latex glove barrier. This means that many users may have been using latex gloves with a false sense of security.

COSHH has always required persons undertaking assessments to identify the correct form of Personal Protective Equipment (PPE) such as gloves for the tasks involved. There are many resources available to assist people in undertaking this evaluation, and OHSS specifically provides guidance on the selection of gloves in the Biological and Chemical Safety sections of the site. If people want a quick link to a good source of information on this issue then they can use http://www.chemrest.com/ site and the Chemical Resistance tool.

It is considered unlikely that there will be many Justifications for the continued use of latex gloves as there are many alternatives that offer the same basic characteristics and that are also acceptable under NHS rules for patient use. However, it is anticipated that there will be some people that are concerned about a reduced tactile sensation when using non-latex gloves. This has been found not to be an issue in many cases provided the correct size glove is used. Latex is more flexible than some of the alternatives and people tend not to be as careful in the selection of the size of glove. This may mean that some labs will need to make a wider selection of gloves available to users.

One of the primary causes of problems associated with the use of disposable gloves is the length of time that they are used without changing gloves and washing / drying hands. The use of gloves for prolonged periods without disposal of old gloves and washing then drying hands is to be discouraged.

**Health Surveillance**

Natural Rubber Latex produces a risk of asthma and dermatitis, and as such the HSE have classified Latex as a ‘hazardous substance’ for COSHH purposes. Health surveillance is therefore required for people in frequent direct contact with latex as a result of their work. The extent and detail of the health surveillance should be related to the degree of risk identified during the COSHH assessment and determined in consultation with the University Occupational Health Service.

The consequences of latex allergies can be very severe for the people involved, and because of the prevalence of latex as an additive in many commonly used items the effects of developing an
extreme allergy can be socially isolating as well as medical.

Further information

The following statements have been taken from the Health and Safety Executive Skin at Work microsite.

What is Latex?

Natural latex is produced by the Hevea brasiliensis tree. The cloudy liquid latex is collected by ‘tapping’ the tree. It then goes through a complex manufacturing process, involving the addition of sulphur and other chemicals. Rubber is composed of natural proteins and added chemicals, some of which will be removed during washing procedures in the later stages of production.

Why is it used

The final product is a durable, flexible material which gives a high degree of protection from many micro-organisms. Latex is often used in the manufacture of protective gloves. It currently provides the best protection against infection and gives the sensitivity and control needed in the health care field.

How can it harm your health?

There has been a steady increase in the number of reported cases of asthma and skin complaints attributed to latex during the 1990s. There are a number of possible reasons for this, including:

- increased awareness of the problem
- increased use of latex gloves, following the introduction of universal precautions

Latex exposure can lead to a number of health problems, including:

- Irritation - symptoms include redness, soreness, dryness or cracking of the skin in areas exposed to latex. This type of reaction is not an allergic reaction (see below). Once the irritant agent, e.g. latex has been identified and contact with it ceases, the symptoms will disappear and not recur.
- Type I allergic reaction - symptoms include:
  - localised or generalised rash (urticaria or hives);
  - inflammation of the mucous membranes in the nose (rhinitis);
  - red and swollen eyes with discharge (conjunctivitis); and
  - Asthma-like symptoms.

  This is an allergic response to the extractable latex proteins and occurs almost immediately on contact. In rare cases it may result in a very severe reaction known as anaphylactic shock.

- Type IV allergic reactions - symptoms include dermatitis and itching with oozing red blisters, which are usually localised to the hands and arms. These occur between 10-24 hours after exposure and can get worse over the next 72 hours. This is an allergic response to the chemical additives, known as accelerators, used in the manufacturing process.

The amount of latex exposure needed to produce sensitisation is unknown. A substance which causes sensitisation is one which is capable of causing an allergic reaction in certain people. Once sensitisation has taken place, further exposure to the substance, even to the tiniest trace, will cause the symptoms to recur. Increasing the exposure to latex proteins increases the risk of
developing allergic symptoms.

What should your employer do to protect you?

Under the Control of Substances Hazardous to Health Regulations 1999 (COSHH), your employer must assess all the circumstances in which you may be exposed to latex. They have to decide how to either prevent, or put any necessary precautions in place to adequately control, any risks there might be. In practice protective measures likely to be identified by a suitable and sufficient risk assessment may include one or more of the following:

- implementing a general policy on latex use;
- limiting exposure by, for example having a policy of not wearing gloves when there is no risk of infection, such as when making beds;
- ensuring that where gloves have to be worn as personal protective equipment non-latex gloves are available;
- implementing a purchasing policy which specifies gloves with a low level of extractable (or leachable) protein. Such information should be provided by the glove suppliers;
- ensuring that powdered gloves are not used when powder-free gloves can reasonably be used;
- following good hygiene practices, such as washing hands after removing gloves. Barrier creams should not be used in conjunction with latex gloves as they may increase the penetration of the allergens;
- implementing a health surveillance programme including pre-employment screening for employees exposed to latex;
- ensuring that the policy on latex covers the action needed to protect staff who are sensitised to latex. This may include providing them with gloves made of an alternative material to latex and reviewing the risks to their health from contact with other latex products. These employees should not be required to work in areas where powder particles from latex gloves are likely to be airborne;
- ensuring that the policy on latex is brought to the attention of employees.

Compliance with COSHH should restrict the use of both powdered latex gloves and other latex gloves with a high leachable protein content, so far as is reasonably practicable.