

Latex and you



This leaflet tells you about the health problems that may occur if you are exposed to natural latex rubber at work. Natural latex rubber is present in many medical and other products, including latex gloves.

The information in this leaflet is relevant to any health care worker who may be exposed to latex in the course of their work, but it does not cover risks to patients. If you have a patient with a known latex allergy, you should discuss any necessary precautions with your manager, except in general practice where you should draw the matter to their GP's attention.

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.

Where is it used?

As well as being used for gloves, latex is found in a variety of products and medical devices used in the health care sector. These include:

- airways;
- intravenous tubing;
- stethoscopes;
- catheters;
- dressings and bandages.

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; and
- increased use of other equipment containing latex, for example:
 - catheters;
 - barium enema tips; and
 - rubber bungs on medication vials.

Latex exposure can lead to a number of health problems, including the following.

- **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, eg 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.

Several types of synthetic rubber are incorrectly referred to as 'latex'. Equipment (eg gloves) which is manufactured from these synthetic rubbers may also cause an allergic response in someone sensitised to the chemicals used in the manufacturing process.

There are a number of different types of latex glove available. Due to prolonged and close contact, all latex gloves present a particular risk of skin sensitisation, but the risk is reduced in gloves with lower levels of latex protein and process chemicals. Powdered gloves pose an additional risk, not only to the user but also to sensitised people in the area. The proteins in the latex glove leach into the powder which becomes airborne when the gloves are removed. Inhaling the powder may lead to respiratory sensitisation.

What should your employer do to protect you?

Under the Control of Substances Hazardous to Health Regulations 2002 (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.

How do you know what to do?

Your employer should have a policy on glove use which will give you information, instruction and training on:

- the risks of exposure to latex;
- safe working methods;
- arrangements for health checks/surveillance;
- help in recognising the symptoms of sensitisation; and
- the action needed if you think you are affected by latex.

What should you do if you think you have a problem?

If your work exposes you to latex products and you:

- have had no information, instruction or training on the precautions you should take;
- have not been told whether you need health checks;
- feel that the information you have been given does not deal adequately with the matters raised in this leaflet, see your manager immediately and/or tell your trade union or employee health and safety representative.

You should also go to your occupational health department or your GP if you have any symptoms (for example: skin rash, hives, itching, nasal, eye or sinus problems, or asthma) which you think may have resulted from exposure to latex. Take this leaflet with you, and tell them that you work with latex products which are a known respiratory and skin sensitiser.

Under the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), your employer has to report incidents of occupational dermatitis and asthma attributable to latex, to the appropriate Enforcing Authority (ie the Health and Safety Executive or the local authority) and keep a record of any such incidents. There is also a voluntary scheme in place for reporting cases of latex sensitisation, both to staff and patients, to the Medical Devices Agency (MDA). The MDA is an Executive Agency of the Department of Health.

Remember that if you get help with early symptoms you may be able to prevent more serious effects.

Further reading

Latex sensitisation in the health care setting (use of latex gloves) MDA DB 9601
Department of Health 1996 Copies available from: Department of Health,
PO Box 410, Wetherby, LS23 7LN or text available on website:
www.medical-devices.gov.uk

Latex medical gloves (surgeons' and examination). Powdered latex medical gloves (surgeons' and examination) MDA SN 9825 Department of Health 1998

Medical aspects of occupational skin disease Medical Guidance Note MS24
(Second edition) HSE Books 1998 ISBN 0 7176 1545 6

Medical aspects of occupational asthma Medical Guidance Note MS25 (Second edition) HSE Books 1998 ISBN 0 7176 1547 2

Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma Available on HSE website at:
www.hse.gov.uk/asthma/asthmagen.pdf

Further information

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For information about health and safety ring HSE's Infoline Tel: 0845 345 0055 Fax: 0845 408 9566 Textphone: 0845 408 9577 e-mail: hse.infoline@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you may need to do.

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