Occupational Health Services

Guidance on Latex

Introduction

It is the University’s responsibility to ensure staff and students are aware of and informed about latex sensitisation, to protect staff and students from unnecessary exposure to latex, and to adequately control any exposure. This document should be read in conjunction with the Guidance Note on “Personal Protective Equipment” “Disposable Glove Selection and Use”. Repeated exposure to latex products can produce a serious allergic response either to the naturally occurring proteins in latex or to chemicals used in the manufacturing process. Latex allergy in laboratory or clinical environments has particularly been associated with the use of powdered latex gloves. The powder assists the user to put on the gloves smoothly, but it readily becomes airborne and transports sensitising substances into the breathing zone of users. Powdered gloves therefore greatly increase exposure compared with non-powdered gloves and their use should be discontinued with immediate effect.

Responsibilities

Principal Investigators and Supervisors of employees/students who need to wear protective gloves must ensure that powdered latex gloves are not used. The choice of protective glove material for the task will be dictated by the risk assessment. Staff must be given information about the potential risk of latex allergy and appropriate health education information programmes should be undertaken (supported by Occupational Health Services and Safety Services) initially at induction and then on a regular basis and at least annually.

Employees/Students shall report promptly to their manager and to Occupational Health Services any skin conditions which may arise and adhere to the advice subsequently given to them regarding the management of their skin condition. Any employee/student exhibiting symptoms indicating possible allergic conditions should always be referred to Occupational Health. Actions that help to keep skin in good condition include regular use of moisturizers, covering cuts with waterproof plasters, and removing gloves and washing and drying the hands thoroughly at the earliest opportunity. However hand creams or lotions, especially if oil based, should not be used under latex gloves as they cause deterioration of the glove.

Occupational Health Staff Responsibilities:

- Medical assessment of glove users at pre-employment medicals and pre-course health interviews to identify possible “high risk of allergy” users. (However, it is never possible to predict accurately who will develop an adverse response.)
- On-going health surveillance of identified “high risk of allergy” employees/students as considered appropriate.
- Investigation of suspected skin reactions to glove use, both self-referred and management referrals, and referring on for further specialist investigation (usually via the patient’s General Practitioner) if considered appropriate.
- Adoption of latex allergy guidelines with suspected and/or confirmed cases of latex allergy.
• Reporting all confirmed cases of latex allergy to the HSE (under RIDDOR, 1995) and to the Medical Devices Agency.

• Advising persons who are allergic to latex (or to substances which cross-react with latex, e.g. kiwi fruit, bananas, avocados, chestnuts, mangos, tomatoes, potatoes, etc.) to avoid the use of any latex gloves or other latex based equipment.

• Discuss with the sensitised employee/student the advisability of informing their General Practitioner of their allergy and of purchasing a bracelet warning of the allergic condition as a forewarning to Accident and Emergency personnel

• Provision of skin awareness information/training together with guidelines on the selection of appropriate gloves for specific tasks – see Appendix.

• Reviewing University policy concerning the choice of gloves, which will be expanded to include selection of gloves for chemical resistance – see also “Guidance on Disposable Glove Selection & Use”.

Guidance

Persons at risk:

Includes all University staff and students who regularly wear gloves to undertake their work, e.g. laboratory staff (both teaching and research), cleaners, food handlers, etc.

NB: Some people are more at risk than others:

• Health care workers where frequent use of latex gloves occurs.

• Those who have a history of asthma, dermatitis, eczema or hay fever.

• Those who have other known allergies, especially to substances which are known to “cross react” with latex, e.g., to kiwi fruit, bananas, avocados, chestnuts etc.

• People who have been subject to a number of surgical operations and therefore have been frequently exposed to surgeons’ gloves and other latex-containing medical products.

A large number of medical products contain, or may contain, latex, e.g:

• Examination and Surgical gloves

• Oral and Nasal airways

• Endotracheal tubes

• Intravenous tubing

• Surgical masks

• Rubber aprons

• Catheters

• Injection ports

• Bungs and needle sheaths on medicines

• Wound drains
• Dental dams
• Anaesthesia masks
• Blood pressure cuffs
• Syringes
• Stethoscopes
• Tourniquets
• Electrode pads
• Surgical masks

**Consumer items containing latex**

• Erasers
• Rubber bands
• Balloons
• Condoms
• Contraceptive cap
• Baby teats
• Hot water bottles
• Stress balls
• Sports equipment (e.g. hand grips and gym mats)
• Swimming cap and goggles
• Washing-up gloves
• Carpets
• Adhesives
• Tyres
• Underwear elastic
• Shoe soles
• Calculator/remote control buttons

**NB.** This list is not exhaustive.
Symptoms of Allergy (including Latex Allergy) and Related Conditions:

Type 1 Allergy - Immediate Hypersensitivity Reaction

This occurs 5 – 30 minutes after exposure to a water soluble or airborne allergen. Symptoms include:

- Urticaria – an itchy rash, may be local or generalised
- Rhinitis (nasal irritation and/or runny nose), wheezing, coughing and asthma
- Conjunctivitis
- Angio-oedema
- Flushing
- Laryngeal oedema
- May feel faint, light headed and experience a feeling of “impending doom”
- Bronchospasm, syncope and rarely anaphylaxis (shock, with low blood pressure) which may lead to potentially fatal “collapse”.

Type IV Allergy –Hypersensitivity Reaction typically delayed for 6 – 48 hours post exposure

- Localized itchy rash
- Slight redness
- Contact dermatitis with erythema, pruritis, oedema and cracking of the skin
- Vesicle formation with exudating lesions in severe cases

Types I and IV sensitivity may develop following exposure over a long period, even years with no apparent symptoms, before the allergic response occurs. Persons developing dry, chapped skin or itchy rashes should seek advice from Occupational Health, as these changes may be allergy-related.

Irritant Contact Dermatitis

This is a reversible non-allergic condition where skin becomes dry, peeling and itchy; resolves spontaneously when irritant is removed.
Actions to be taken to control latex allergy

Natural Rubber Latex (NRL) must be treated as a potential respiratory sensitizer (COSHH Regulations, 2002; HSE guidance, 2003; PPE Regulations, 1992) and therefore pre-placement medical assessment for all staff/students at risk, followed by regular, appropriate health surveillance, will be arranged.

The following control measures will apply:

• **The use of powdered latex gloves shall cease and stocks of powdered gloves are to be destroyed with immediate effect.**

  Gloves made from non-latex materials will be used wherever possible and appropriate for the task – see guidelines for glove selection in the “Personal Protective Equipment” Guidance Note and Guidance on “Disposable Glove Selection and Use”.

  A small minority of persons will find that the use of non-latex gloves impedes their work by compromising touch and manual dexterity and may not be appropriate for the task, however alternative formulations are improving all the time in terms of sensitivity and microbiological protection and have now been used successfully even in surgery.

• Latex gloves used must be powder-free and should be sourced from a supplier who guarantees that they contain <50μg latex proteins per gram and <0.1%w/w residual accelerators.

• Any member of staff or student using latex gloves who experiences any relevant symptoms (as above) should report immediately to the Occupational Health Service. Meanwhile staff of Occupational Health Services and Safety Services will assist the users to find satisfactory non-latex alternatives.

• Many COSHH (Control of Substances Hazardous to Health) risk assessments currently refer to "latex gloves", often using the term in the generic sense to signify the need for protective gloves. All such risk assessments must therefore be re-examined and the intended meaning of the term “latex gloves” clarified in the light of current advice with the aim of identifying a suitable alternative to latex where necessary.
Alternatives to Latex

In the COSHH Regulations, there is an absolute duty to prevent exposure to substances which are hazardous to health. Where this cannot be achieved, exposure must be reduced as far as reasonably practicable. Ideally, and where appropriate, contact will be eliminated by substitution or the use of alternatives. There is an element of ritual in wearing gloves; hence where there is a minimal probability of contact with infectious agents, one should consider whether for some tasks (e.g. domestic staff making beds) it is necessary to wear gloves at all. Neoprene, nitrile, or Biogel, Skinsense N gloves can all be used as satisfactory alternatives to latex for many tasks and several other good choices probably exist. However, vinyl and polythene gloves may be more prone to leakage and are therefore unsuitable for contact with blood or body fluids. A small minority of tasks (where a patient, animal or experiment are to be protected from infection) require sterile gloves, which are much more expensive than non-sterile gloves, therefore do not use sterile gloves where non-sterile gloves will suffice.

(The flow chart in Appendix may be helpful.)

Control costs by consulting the Finance Directorate's Purchasing Office about bulk buying. All gloves purchased, whether made of latex or other materials, should comply with appropriate British or European Standards.

Training Requirements

As required in the University’s Guidance on Personal Protective Equipment

References

*Latex and you*, HSE Free leaflet INDG320


*COSHH a brief guide to the regulations* INDG136 (rev1) HSE Books, 2005 ISBN 0 7176 2982


Appendix

Guidelines for glove selection

Employers are required to perform a full risk assessment, considering the benefits of available glove materials. This chart is not intended for use by individuals at the point of glove use when time is unavailable for evidence based assessment of risk.

Is there a potential for contact with body fluids?  
No  
Is protection needed from any chemicals or physical contact?  
No  
Gloves are not necessary but clean hands are!  
Yes  
Contact manufacturers/suppliers for glove recommendations for handling chemicals.  
  Synthetic household gloves for domestic procedures.  
  Synthetic gloves for catering.

Yes  
Is there a sterile/aseptic procedure involved?  
No  
Based on risk assessment use synthetic gloves where appropriate.  
Where latex gloves are selected they must be low protein and powder free and users will require health surveillance **

Yes  
Is the employee or student sensitised or allergic to latex or in a high risk category?*

No  
Based on risk assessment use synthetic gloves where appropriate.

Yes  
Is the employee or student sensitised or allergic to latex or in a high risk category?*

No  
Based on risk assessment use synthetic gloves where appropriate.

Yes  
Is gowning required?  
No  
Based on risk assessment appropriate sterile synthetic gloves must be used. 
Where latex gloves are selected they must be low protein and powder free and users will require health surveillance **

Yes  
Is the employee or student sensitised or allergic to latex or in a high risk category?*

No  
Based on risk assessment appropriate sterile synthetic gloves must be used.

Based on risk assessment of the glove material for the procedure.

** For advice on health surveillance contact Occupational Health, Health & Safety Services. Tel 52858

NB All risk assessments must be documented and reviewed on a regular basis

* A high risk category is someone with diagnosed latex allergy; suspected latex allergy; multiple allergies to other materials or multiple surgeries

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Version 1.1  
Lead contact: Maureen Jenner
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