

Contents

1.	<u>The Hazard</u>	1
2.	<u>Types of reaction</u>	1
3.	<u>Gloves</u>	2
4.	<u>Summary</u>	2
4.1	<u>For patient safety</u>	2
4.2	<u>For staff safety</u>	2
5.	<u>Additional precautions for theatre managers</u>	3
6.	<u>Glove selection guidance for managers</u>	4
6.1	<u>Glove materials</u>	4
6.2	<u>Risk Assessment</u>	4
6.3	<u>Health Surveillance</u>	5
6.4	<u>Summary</u>	5

1. The Hazard

Exposure to the proteins in natural rubber latex has the potential to cause individuals to develop allergies through a process known as sensitisation. This can result in a range of effects including anaphylactic reactions, asthma, and skin problems. Increasing exposure to latex proteins increases the risk of sensitisation and triggering allergic symptoms. Once sensitisation has taken place, even exposure to small amounts of latex can cause a reaction.

Common latex products include gloves, catheters, stethoscopes, condoms, balloons, elasticated bandages, wound drains, and many non-clinical products. It is progressively being eliminated from clinical equipment, but this is incomplete. The accelerators used in the manufacture of latex products can also cause allergy.

2. Types of Reaction

There are two types of allergies associated with latex: Type I and Type IV.

A small proportion of people develop severe Type I allergic reactions which are immediate reactions following exposure to latex. This can cause clinical symptoms affecting the skin,

eyes, mucous membranes, and respiratory system A person who develops Type I hypersensitivity will have further reactions on subsequent exposure to latex.

Patients particularly at risk include those with spina bifida and anyone undergoing repeated treatment with latex equipment. Individuals with atopic disease and those with existing allergies to some foods such as kiwi, avocado and chestnuts are also more likely to develop Type I latex allergy.

Type IV allergy, or allergic contact dermatitis, usually produces skin reactions. This is an allergic response to the chemical additives, known as accelerators, used in the manufacture of latex gloves. The symptoms are often similar to irritant contact dermatitis, and it can take years of exposure before it appears. Once an individual has a Type IV allergy, subsequent reactions are often delayed by up to 24 hours after exposure.

If you suspect that patients are experiencing any symptoms in connection with exposure to latex, notify the department manager and submit an incident report through Datix.

If you experience any symptoms that you suspect are in connection with exposure to latex or accelerators, notify your line manager, arrange for a referral to the Occupational Health Service, and submit an incident report through Datix.

3. Gloves

In the past, most latex exposure resulted from the use of single-use gloves. Within NHS Lothian, the use of latex gloves should be eliminated so far as is reasonably practicable. All non-sterile gloves now used at NHS Lothian are non-latex (unless prescribed for an individual by Occupational Health).

Sterile gloves should be nitrile exam gloves unless prolonged use or the need for increased dexterity necessitates surgical gloves. The surgical gloves currently supplied are latex unless a sensitised staff member or patient necessitates the use of non-latex as described in the [NHS Lothian Policy for Protection Against Adverse Reactions to Latex](#).

4. Summary

4.1 For **patient** safety:

- Follow the procedures established for the care and treatment of latex sensitive patients.
- Be vigilant for the signs and symptoms of latex sensitivity in patients.
- Report immediately any signs of patient sensitivity to the department manager and through a Datix incident report.

4.2 For **staff** safety:

- Be vigilant for the signs and symptoms of latex sensitivity in yourself.
- Report any symptoms of possible latex sensitivity to the Occupational Health Service and through a Datix incident report.
- Follow Occupational Health advice to avoid future adverse reactions.
- Use gloves only when required and remove them when the task is finished.

- Wash hands after removing gloves to remove residues.

5. Additional Precautions for Theatre Managers

In addition to the points above for wards and departments, theatre managers must take account of the increased vulnerability of the unconscious patient whose internal tissues may be in contact with a range of equipment.

- Identify all equipment used in theatres which may come into contact with patients.
- Ensure this equipment is latex free unless suitable latex free substitutes are deemed not to be reasonably practicable.
- Ensure there is no latex-containing equipment in theatre which is inflated with air or has air or gases passing through it or over it.
- When a latex sensitive patient is next on the list:
 - remove from theatre all the residual equipment which still includes latex,
 - identify the surfaces this equipment touches which may subsequently be in contact with equipment (including protein-reduced latex gloves) which will touch the latex-sensitive patient,
 - ensure all such surfaces are wiped with a detergent wipe,
 - ensure that all glove changing before a latex sensitive patient is undertaken at least 10 minutes before the patient enters the room, where the gloves being removed contain latex.
- Ensure that theatres in which a latex sensitive patient may be treated have a ventilation rate of at least 20 ach.

The rationale for these actions is as follows:

- The degree of contact with latex which may provoke a severe reaction is unpredictable and varies between individuals. Therefore, the indirect surface-to-surface contact which this procedure addresses is deemed to be potentially significant.
- Some highly sensitive individuals react to tiny quantities of latex in the air. While the threshold for such effects is not known (and neither is it feasible to measure the concentration of the relevant proteins in the atmosphere) it is considered that the measures prescribed (the general removal of latex during the treatment of a sensitive patient, the complete elimination of latex from equipment which is inflated or has air or gases passing through or over it, and the 10 minutes allowed between the removal of a low protein latex glove and the entry of a sensitive patient into the room) will reduce the risk of a reaction by airborne contamination to an extremely low level.

6. Glove Selection Guidance for Managers

6.1 Glove Materials

Due to the risks of anaphylaxis, occupational asthma, and allergic contact dermatitis presented through the use of natural rubber latex gloves, NHS Lothian eliminates the use of latex gloves wherever reasonably practicable.

Where accelerators are used in the manufacture of some models of disposable gloves, a further risk of occupational dermatitis arises. Clinical departments will be provided with single-use nitrile examination gloves as standard, however in the event of a staff member displaying symptoms suspected to relate to exposure to accelerators, accelerator-free gloves must be provided.

Under certain circumstances, for work with specific hazards or to support the needs of staff members unable to wear standard glove materials, gloves manufactured using other materials such as vinyl or PVC may be required. These should be specified through the completion of COSHH and general risk assessments for work activities or on advice issued by the Occupational Health Service.

6.2 Risk Assessment

Gloves must only be worn where indicated through risk assessments as being necessary to protect the health and wellbeing of staff or patients. The use of gloves is an effective control measure to minimise the risk of infection or exposure to hazardous substances, and when working with specific mechanical, thermal, or radiation hazards. Gloves must be removed and appropriately disposed of immediately after completing tasks to minimise the time that skin is occluded and to prevent cross infection.

The requirement to wear gloves for infection control purposes when it is anticipated that there will be contact with or exposure to blood, bodily fluids, secretions, excretions, non-intact skin or mucous membranes or contaminated surfaces is documented through a general risk assessment in the [NHS Scotland National Infection Control Manual](#). This must be supplemented by local risk assessments as needed to reflect any circumstances not reflected. Where gloves are required due to work with hazardous substances or specific hazards, this should be documented through COSHH or general risk assessments specific to the work activity.

Risk assessments for tasks requiring the use of gloves must specify the type of glove to be used, providing alternative models where possible to accommodate user preference.

Where latex gloves are used, they must be low-protein and powder free. The risk assessment must include details of the arrangements implemented to protect sensitised staff and patients from the risks arising in connection with latex exposure.

Where the use of latex gloves is approved:

- Supplies must only be ordered and used for approved tasks,
- The risk must be captured on the service-level risk register, and
- Risk assessments must be reviewed on an annual basis, considering whether latex gloves could be substituted with alternative models of non-latex gloves.

6.3 Health Surveillance

To support the prompt identification of symptoms of adverse health arising in connection with glove use and implementation of effective control measures, departments must adopt a proactive approach through annual health surveillance programmes.

The [NHS Lothian Health Surveillance Policy](#) and [NHS Lothian Health Surveillance Procedure for Managers \(Skin Health\)](#) outlines where skin health surveillance is required, how it is achieved in practice, and the roles of staff and local line managers.

Staff experiencing persistent skin problems or symptoms suspected to be attributed to glove use must report concerns to their line manager who will support staff in arranging for staff to be referred to Occupational Health.

6.4 Summary

- Gloves must only be worn where identified through risk assessment as being necessary to manage the risk of infection or prevent occupational exposure to hazards.
- The use of latex gloves must be eliminated as much as reasonably practicable.