



CLINICAL GUIDELINES
OBSTETRICS AND GYNAECOLOGY

PATIENT ADMINISTRATION

LATEX SENSITIVITY

Keywords: Latex, sensitivity, latex allergy, latex-free products, red ID band

AIM

- To provide a latex safe environment¹ by using latex-free alternative products as available

BACKGROUND

Latex is the sap of the commercial rubber tree, *Hevea brasiliensis*. The proteins of latex can cause a range of mild to severe Type 1 or 4 allergic reactions.^{1,2} Latex allergen contact through the mucous membranes, vascular system, skin and inhalation can cause mild to life threatening reactions, including urticaria/hives, pruritis/itch, angio-oedema, rhinitis, conjunctivitis, asthma, and/or anaphylaxis.³ Additionally, 30-50% of people with latex allergies have plant derived food allergies.³

A large range of equipment and products used in health services contains latex. This includes health related equipment such as endotracheal tubes, catheters, dressings, surgical gloves and other items that are used extensively in the provision of treatment and care, to essentially domestic products that are also used widely in the community.

Those consumers most at risk are those with prolonged or frequent exposure to latex products,³ especially those with:

- Neural tube defects (meningomyelocele, spina bifida³)
- Congenital urogenital abnormalities
- Hand eczema or atopic reactions³
- Health consumers who have had multiple surgical procedures³
- Health care or other workers with increased exposure to latex³.

KEY POINTS

1. The management of patients with latex allergy is significantly less onerous where only powder free latex gloves are used.
2. Where a patient who presents for urgent or emergency treatment is in a high risk group, they shall be treated as if they are latex allergic.
3. Efforts shall be made to avoid latex exposure from birth in all neonates with spina bifida or other medical conditions that require early and repeated surgical intervention or instrumentation, particularly if this involved the genitourinary system.
4. Where possible, resuscitation equipment should be latex free.¹ Synthetic gloves, latex free circuit, masks, catheter mount and oral airways should be available in the area where the woman is.¹



5. Latex free equipment is available in all areas.
6. All hospitalised latex allergic women shall have appropriate identification of their latex allergy on armbands, hospital charts, beds and room entrances.¹
7. All hospital personnel entering a latex safe environment, whether or not they are in direct contact with the latex allergic woman shall only wear non latex gloves.
8. Latex sensitivity varies between individuals and although this guideline aims to guide a latex safe environment, this may not prevent serious reactions in all patients.¹

IDENTIFICATION METHODS

- The identification of 'at risk' groups for latex shall be a standard part of the admission process. Initially a detailed history shall be taken.^{1,2} Where indicated by the history, diagnostic testing for latex allergy should be undertaken by skin test (if available) or by RAST.
- Where these tests are not available or time is too short, health consumers from high risk groups shall be treated as if they are latex allergic.
- The patient history shall enquire about risk factors and allergic symptoms that occur after contact with latex containing items.² Ask specifically about:
 - A rash / reaction when using gloves or condoms¹
 - Spina bifida¹, surgery for urogenital malformations and other such conditions in early life, or multiple surgeries²
 - Severe allergy to certain foods¹, notably avocado, banana and chestnut²
 - History of unexplained anaphylaxis¹ / lip and facial swelling after blowing up balloons¹
 - Rhinitis, conjunctivitis and asthma² symptoms
 - Atopy (e.g. hay fever)^{1,2}
 - Occupational exposure to latex^{1,2}
- Women undergoing endocavity ultrasound where latex condoms are generally used shall be asked about latex sensitivity prior to the procedure and alternative latex free condoms used where appropriate.

DIAGNOSTIC TESTING

Diagnostic testing is only recommended for those with a suggestive history of reaction to latex or evidence of belonging to a high risk group. This would include:

- Unexplained allergic / anaphylactic reactions¹
- Intraoperative hypotension, bronchospasm or anaphylaxis
- A history of multiple surgical procedures
- Reactions to foods known to cross react with latex (e.g. severe fruit reactions)¹



- A history of atopy (i.e. asthma, hayfever or eczema) either personally or in first degree relatives.

Tests available are:

- Skin prick test
- *In vitro* testing for IgE antibodies.

MANAGEMENT OF PATIENTS WITH LATEX ALLERGY¹

1. Gloves are the most likely to cause serious reactions, especially if they contact mucous membranes. All latex gloves need to be removed from the immediate area of the patient. Synthetic gloves must be used for all procedures.¹
2. Check the following:
 - Surgical drains, urinary catheters, catheter leg bag straps, anti-embolic stockings, bougie dilators, condoms (e.g. transvaginal ultrasound), tourniquets, dental dams.
 - BP leads, oximeters, ECG dots, intravenous (IV) line and infusion bags
 - Latex stoppers in ampoules; Plungers in some syringes
 - Mattresses
 - Dressings, 'Elastic' bandages, skin adhesives
 - Feeding shields and tubes¹

WARD / LABOUR AND BIRTH SUITE PREPARATION

1. Synthetic gloves must be used.¹
2. All equipment to be used must be checked to ensure it is latex free.
3. The prepared room must have signs attached to all entrances to ensure a latex safe area.¹
4. All procedures must be planned where possible.¹
5. Be prepared to treat serious reactions.¹

OPERATING ROOM PREPARATION⁴

1. Synthetic gloves must be used.
2. The operating room must have signs attached to all entrances to ensure a latex safe area.
3. The operating table mattress & arm boards must be completely covered in linen.
4. The woman's limb must be covered prior to applying a tourniquet.⁴

Sterile Set Up

1. Synthetic gloves must be used.
2. All equipment to be used must be checked to ensure it is latex free.

Anaesthetic Equipment⁴

1. Synthetic gloves must be used.
2. Latex free anaesthetic circuit, masks, rebreathing bag, common gas outlet tubing, liquorice sticks (catheter mount), oral airways must be connected.

Transfer of the woman

1. Synthetic gloves must be used.
2. Only when the operating room is fully prepared and checked is the patient sent for.
3. The woman must wear a balaclava with ties, not elastic & no other disposable clothing with plastic.

Operative Period

1. Synthetic gloves must be used.

Recovery

1. Synthetic gloves must be used.
2. Facemask elastic shall be removed and replaced with cotton tape.
3. When the woman is returned to the ward, the recovery staff must ensure the ward staff are aware of the woman's latex allergy and that the woman is returning to an environment which has been prepared.⁴

GENERAL CONSIDERATIONS FOR ALL AREAS¹

1. The following procedures require planning:
 - Blood taking; synthetic gloves, tourniquet over clothing
 - Insertion of an IV cannula or giving IV, IM or SC medications – see below
 - Internal examinations: Synthetic gloves
 - Bladder catheterisation: synthetic gloves & non-latex catheter¹
2. Where possible perform the procedure within the prepared ward / theatre area.
3. Ensure other departments are aware of the woman's latex allergy if she has to go to another area for investigations during admission.¹



Monitoring¹

4. The oximeter probe may contain latex, but can be used over a vinyl glove or a clear dressing.
5. The arm used for blood pressure measurement must be covered to protect the skin from the BP leads.
6. ECG dots may contain latex in the adhesive.
7. Stethoscopes may contain latex in the tubing, ear pieces and bell.¹

IV lines and medications¹

8. Use an IV line without latex ports, or if using a line with latex ports they must be removed and replaced with anti-reflux valves **prior** to running through the IV fluid.
9. Infusions shall be made up by injection through the giving set port of the IV fluid bags rather than the rubber bung, which is not in contact with the fluid and can be removed.
10. Do not use colloids with latex bungs.
11. Latex free syringes shall be used.
12. Do not draw up medications through rubber bungs.
13. No drugs shall be given where there is a rubber stopper within the vial.
14. Use only latex free IV dressings and skin tapes.¹

Food services / Kitchen staff¹

15. Environmental and food services staff must be made aware of food allergies and the location of latex allergic women so that they do not use latex gloves when cleaning or preparing food.¹

Patient Education

16. Educate the woman that due to the increased risk for severe food allergies with latex-similar food proteins, that particular foods are recommended to be avoided (e.g. banana, avocado, chestnut, water chestnut, hazelnut, kiwi, tomato, guava, peach, grape, apricot, potato).²
17. If medically indicated, wearing a medical alert bracelet / necklace and carrying an adrenaline pen may be recommended for people with latex and food allergies.²

Note: For latex sensitive employees, see WNHS Policy [W075 Latex Minimisation](#) (2014).

REFERENCES / STANDARDS

1. Australasian Society of Clinical Immunology and Allergy. ASCIA guidelines for hospital management of latex allergic patients: **ASCIA**. 2010. Available from: <http://www.allergy.org.au/health-professionals/papers/management-of-latex-allergic-patients/hospital-management>
2. Lewis S, Alexander K. Altered immune responses and transplantation. In: Brown A, editor. **Lewis's medical-surgical nursing: Assessment and management of clinical problems**. Chatswood, NSW: Mosby; 2015. p. 177-99.
3. Makatsori M, Durham S, Calderon MA. Specific immunotherapy for latex allergy (Protocol). **Cochrane Database of Systematic Reviews**. 2011 (8). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009240/pdf>
4. Australasian Society of Clinical Immunology and Allergy. Operating suite guidelines for latex allergic patients: **ASCIA**. 2010. Available from: <http://www.allergy.org.au/health-professionals/papers/management-of-latex-allergic-patients/operating-suite>

National Standards – 1- Care provided by the clinical workforce is guided by current best practice
5- Patient Identification and Procedure Matching
6- Clinical Handover

Legislation - Nil

Related Policies –

- Department of Health WA: [OD 0486/14 WA Health Patient Identification Policy 2014](#); [OD0511/14 WA Clinical Alert \(Med Alert\) Policy](#)
- WNHS Policies: [W160 Patient Identification](#) (2014); [W073 Clinical Handover](#) (2014); [W075 Latex Minimisation](#) (2014)

Other related documents –

- KEMH Clinical Guidelines:
 - Obstetrics & Gynaecology, Patient Administration: [Food Allergies: Management of](#)
 - Obstetrics & Gynaecology, Emergency Procedures: [Basic Life Support: Adult](#); [Advanced Life Support: Adult](#)
 - Anaesthetics: [Anaphylaxis](#)
- [Australasian Society of Clinical Immunology and Allergy](#): Anaphylaxis [Resources](#) & Anaphylaxis [e-training](#)
- [Allergy & Anaphylaxis Australia](#)
- Department of Health WA: [Allergen Declarations](#) (links to allergen information sites / organisations)
- Department of Health WA: [Anaphylaxis](#) (fact sheets & information in several languages)
- Royal Children's Hospital: [Latex Allergy Alert Signs](#)

RESPONSIBILITY

Policy Sponsor	Nursing & Midwifery Director OGCCU
Initial Endorsement	September 2007
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