

13 July 2021



Email: ailsac@adhb.govt.nz



Re: Official Information Act request – ADHB policy / information on managing patients with latex allergies

I refer to your Official Information Act request dated 15 June 2021 requesting the following information:

I would like a copy of any ADHB policy / information on managing patients with latex allergies which would include different departments and facilities such as Greenlane and Auckland City Hospital.

Please find attached Auckland DHB's clinical guidelines on Latex Safety.

You are entitled to seek a review of the response by the Ombudsman under section 28(3) of the Official Information Act. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Auckland DHB website.

Yours faithfully

Ailsa Claire, OBE

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Chief Executive of Te Toka Tumai (Auckland District Health Board)



Latex Safety

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1. Purpose of guideline

1.1 Objective

To ensure the safe and effective management of patients with a diagnosed latex allergy and those patient groups at high risk for developing latex allergy (eg spina bifida patients).

1.2 Frequency

When treating a patient with diagnosed latex allergy or a patient at high risk of developing latex allergy.

2. Types of reactions

2.1 Introduction

Latex allergy is an allergic reaction to the natural proteins in latex rubber, symptoms range from dermatitis to the moderately severe symptoms of urticaria, rhinitis, conjunctivitis and bronchospasm, to severe life threatening anaphylaxis.

Latex is most often associated with disposable gloves, however, other items that may contain latex include catheters, dressings, intravenous tubing, bungs (injection ports) and multidose vials, syringes, stethoscopes and airways.

The most important aim is to attempt to provide a latex free environment for at risk patients. This environment is defined as one in which no latex gloves are used by any staff and in addition, there is no patient contact with latex containing devices.

Some proteins in latex are present in certain foods as well, and some people with latex allergy find that certain foods cause an itchy mouth or throat swelling. The most common foods described are banana, avocado, kiwi fruit, passionfruit, plums, strawberry and tomato.

2.2 Irritant reactions

Irritant reactions are the most common adverse reactions to latex exposure and are caused by the chemicals added to latex during manufacture process. They are generally a mild dermatitis and prevalent amongst people who wear latex gloves continually at work.

Irritant reactions do not involve the immune system but they may be important cofactors in the development of immunologic reactions.

2.3 Type IV allergic reactions

This is a delayed <u>local allergic reaction</u>, although it is caused by the same chemicals as the irritant reaction, it is a true *allergic* reaction involving the immune system but is localised to the skin or mucous membranes.

2.4 Type I allergic reactions

These are antigen antibody reactions mediated by the IgE-mast cell system. They are <u>immediate</u> reactions that can occur within minutes or 1 to 2 hours after exposure.

There are four degrees of severity:

1. Localised urticaria in the area of contact



- 2. Generalised urticaria with angioedema
- 3. Urticaria with asthma, rhinoconjunctivitis and orolaryngeal and gastrointestinal symptoms.
- 4. Urticaria with anaphylaxis

2.5 Identifying a latex allergy

2.5.1 History

- A positive skin test to latex
- Hereditary tendency to develop immediate allergic reactions (especially towards latex)
- Contact dermatitis when in contact with latex products (eg gloves, balloons, condoms, tampons)
- A history of a documented reaction during previous medical/surgical/dental treatment or unexplained anaphylaxis
- A history of frequent surgical operations
- Conditions which require frequent invasive interventions with products containing latex (eg patients with spina bifida or congenital genitourinary abnormalities)
- Healthcare workers and other workers who regularly wear latex gloves for long periods during their working day.
- Some of the proteins in latex are also present in certain foods, and may cause reactions in some people with a latex allergy. The most common foods described are banana, avocado, kiwi fruit, passionfruit, plums, strawberry and tomato. These foods do not need to be avoided routinely, unless they cause problems

2.5.2 Formal testing

Note: There may or may not be time for testing to take place.

Skin prick testing

Involves a skin prick test with a slurry of saline which has been premised in a latex sterile glove. This is described as a "crude" test but has also described as having specificity if 100% (Laney, 1998).

Radioallergosorbent testing (RAST)

2.6 Treatment of latex reactions

Heightened awareness for development of allergic reactions when in contact with patients who have been identified with a latex allergy.

Ensure for at risk patients emergency medications and equipment is available.

In the event of an emergency anaphylaxis situation, follow emergency processes for Auckland District Health Board.

3. Latex safety in the outpatient/ambulatory care environment RBP

3.1 Objective

To ensure the safe and effective management of patients with a diagnosed latex allergy in the ambulatory care environment.



3.2 Recommended best practice

Follow the recommendations below to ensure the safe and effective management in the outpatient/ambulatory care setting.

3.3 Issues	Action	
1	In the event of an emergency situation arising in addition to usual procedures, the Emergency team should be immediately informed, that the patient has a latex allergy or is at high risk.	
!	At all times be prepared to treat a serious reaction.	
Outpatient appointment appointment of the day and the room prepared at the end of day's clinics.		
 Environmental management All equipment and furniture to be damp dusted to rempowder (staff to wear synthetic gloves only during clean to the room have a latex free sign attached. 		
Procedures	All procedures should be planned and the latex free product list consult to ensure all equipment is latex free or a barrier used between the patie and the latex product.	
Physical examination	 Also be aware when completing patient observations/investigations: Stethoscopes may contain latex in the tubing, ear piece and bell suggest use over top of a vinyl glove or clear dressing. Arm should be covered to protect skin from B/P cuff and leads when taking a blood pressure. Check that the Oximeter probe is latex free if unsure use on top of a vinyl glove or transparent dressing. (Note: disposable probes are latex free). 	
	 Some ECG dots contain latex (refer to <u>product list</u>). 	

4. Latex safety in the ward environment RBP

4.1 Objective

To ensure safe and effective management of patients with diagnosed latex allergy.

4.2 Recommended best practice

Follow the recommendations below to ensure the safe and effective management of patients with a known latex allergy or at high risk for developing a latex allergy in a ward environment.

Issue	Action
1	 In the event of an emergency situation arising in addition to usual procedures : Inform the Emergency team that the patient has a latex allergy or is at high risk.



Issue	Action
1	At all times be prepared to treat a serious reaction.
Environment Provide a single room (as possible) and this should be damp dusted (synthetic gloves) and all equipment that contains latex removed and stating "LATEX FREE AREA" placed on all entrances to the room.	
Environment management	For the duration of the patient's admission, the entire ward must use only powderless latex gloves to avoid contaminating the patient area with latex powder.
	Note: Synthetic non-latex gloves are the only gloves that should be used in the "latex free area".
	Ensure that the cleaning staff are informed so that they do not use latex gloves to clean the room.
Food Service	Medirest kitchen and food service is a latex free environment
Nutrition	All enteral feeding equipment is latex free.
	Plastic bottles with plastic caps are used to send liquid formulas decanted/made from powder in the Fluids Room.
	For those latex allergic individuals with a food allergy nursing staff are to order the appropriate diet on TrendCare.
	To order a diet on TrendCare- select the food allergy available from the Modification list. For any additional food allergy go to the Show Food Allergy section, select "Other" (detail in diet notes), and enter the food in the Notes tab eg no banana
Procedures	All procedures should be planned and the latex free product list consulted to ensure all equipment is latex free or a barrier is used between the patient and the latex product.
Physical examination	 Also be aware: Stethoscopes may contain latex in the tubing, ear piece and bell suggest use over top of a vinyl glove or clear dressing. Arm should be covered to protect skin from B/P cuff and leads when taking a blood pressure. Check that the oximeter probe is latex free. If unsure use on top of a vinyl glove or transparent dressing. Some ECG dots contain latex (refer to product list).

5. Latex safety in medication administration

5.1 Objective

To ensure that medications are administrated safely to patients with known latex allergy or those identified as high risk of developing a latex allergy.



5.2 Frequency

When administering medications to patients who have a latex allergy or are at high risk of an allergy to latex.

5.3 Procedure

Follow the recommendations below to ensure the safe administration of medication to patients with a known latex allergy or at high risk for developing a latex allergy.

Issue	Action	
Equipment	Use synthetic gloves only	
	Use latex free syringes	
	Use latex free tourniquet or cover arm with a barrier (eg softban).	
Infusions	Do not use injection ports on IV giving sets or bungs on fluid bags. Replace all rubber ports with reflux valves.	
	Infusions to be made up by injecting through giving set port of IV fluid bags rather than through the rubber bung, which is not in contact with the fluid and can be removed and replaced with a reflux valve.	
	Do not use colloids with latex bungs.	
	Ensure IV dressings and/or skin tapes are latex free (refer product list).	
	No drugs to be drawn up through rubber bungs.	

6. Latex safety in the perioperative environment

6.1 Objective

To ensure safe and effective management of patients either diagnosed with latex allergies or at risk from a latex allergy.

6.2 Perioperative risks

There are several routes of exposure to natural rubber latex, including:

- Direct external contact (eg gloves, natural rubber latex face masks, blood pressure cuff tubing);
- Airborne sources that can affect the mucous membranes of the eyes, nose, trachea, bronchi and bronchioles, and oropharynx;
- Particles that are swallowed after entering the nasopharynx or oropharynx;
- Direct contact of the mucous membranes with indwelling natural rubber latex devices such as catheters;
- Internal patient exposure from health care provider use of natural rubber latex gloves during surgical procedures; and
- Internally placed natural rubber latex devices, such as wound drains



6.3 Recommended best practice

Follow the recommendations below to ensure the safe and effective management of patients with a known latex allergy or at high risk from developing a latex allergy in the perioperative environment.

Issue	Action
i	In the event of an emergency anaphylaxis situation, follow emergency processes for the perioperative area and access the anaphylaxis crisis checklist for guidance. Ensure for at risk patients emergency medications and equipment is available.
Surgical Booking	 Where possible, patients should be booked first on the morning list. In an emergency situation the room should have latex removed. Any room that latex items have been removed from should not be used for 30 minutes prior to patient arrival in the room. All information regarding allergies (including degree of severity of allergy) should be on the PIMs booking (i.e. available the night before for removal of latex).
Environment Management	 Latex allergic patients awaiting for surgery in pre-op or ORDA should be identified and have signs placed on their beds. Patients should be sent for once the theatre preparations are completed. All latex items should be removed from the Operating Room (OR) or made inaccessible for use and equipment in the room minimised. Replace all latex items with non-latex items available. Place latex free signs on OR doors. Patient should go as directly as possible to the prepared latex free operating room. Allergies and risk factors should be discussed in team handovers and again in each part of the surgical safety checklist. Staff traffic in the OR should be minimized. Ensure hands are washed prior to entry to OR. The patient should be recovered in a prepared latex free area within the perioperative area and remain for an hour to assess for delayed reaction. Should or when the patient is moved to another area of the hospital i.e. ward, DCCM, radiology), clear communication with the receiving team in advance to transporting and preparation of the area should occur prior to patient movement.
Medications	 Refer to <u>section 5 latex safety in medication administration</u> Refer to <u>section 9.2 latex free equipment</u> Rubber bungs should not be punctured for accessed but removed instead
Procedures	 Consult latex items list or check product labels for disposable surgical items Ensure where using a latex piece of equipment is unavoidable precautions are taken to create a barrier between item and patient eg completely cover item with non-latex product.



7. Education and planning

7.1 Objective

To ensure safe preparation for discharge of patients with latex allergies.

7.2 Responsibility

- Nursing Staff
- Midwifery Staff
- Medical Staff

7.3 Frequency

Whenever a patient is admitted with a latex allergy or is diagnosed with a latex allergy during their admission.

7.4 Procedure

Follow the steps below for patients who have a latex allergy:

Issue	Action	
Latex Free	Free Educate patient and family/whanau about latex free safety for the family (see section 8 household childcare products).	
Education Educate/review latex allergy information with patient and famusing the ASCIA Latex Allergy Patient Education resource. Advise that only the foods known to cause a reaction need to for that individual.		
Future health carers	Explain the need to always inform all health professionals (including their Dentist) in the future.	
Medic Alert	Provide a medic alert application.	
Emergency	Ensure that an emergency kit is obtained if necessary.	
Information	See latex allergy information on the ASCIA website (Australasian Society Clinical immunology and Allergy) www.allergy.org.au	
	Patients: https://www.allergy.org.au/patients/product-allergy/latex-allergy	
	Health professionals: https://www.allergy.org.au/hp/papers/management-of-latex-allergic-patients	
	Health professionals: https://www.allergy.org.au/hp/papers/management-of-latex-allergic-patients/about-guidelines	
	Give information about latex free contraception as necessary. For children, there is a Starship written information sheet (classification number SSH/W1351/010) which is available on the network: L:\groups\everyone\starship\written information\latexallergy.doc	

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	Further information is available via the internet for children and families at the Family Information Service on level 3 (Starship Hospital).	
Latex free products	Encourage patient to read packaging to ensure they only use latex free products.	

8. Household and childcare products

8.1 Introduction

Many household and childcare products contain latex and alternatives may need to be found or their use modified for the patient with a latex allergy and their family/whanau.

8.2 Latex safe alternatives

Unfortunately there is not always an alternative to products containing latex and they may need to be avoided (if it is uncertain if a product contains latex, it is preferable to consider that the product does contain latex and seek a known latex free alternative).

8.3 Barrier

Acrylic, leather or cotton gloves may be worn when there is no latex safe alternative. This is necessary in certain situations eg when undertaking therapeutic play with clinical equipment.

8.4 Product examples and suggested action

The following table lists common household and play equipment and suggests alternatives or barriers:

Product which may contain latex	Alternative/Barrier
Clothing	
Elastic bands around waists, wrists eg socks, underclothes	Ensure covered with cloth
Clothing with rubber appliqués	Avoid
Clothing with spandex stretch fabrics	Do not wear. Use alternatives that are cotton, linen or wool.
Rubber footwear eg jandals, gumboots	Avoid (including rubber soles)
Raincoats	PVC, vinyl
Hair ties eg rubber bands	Ribbons, velvet
Rubber swimming caps, goggles, togs	Use plastic or PVC
Toys/sports	
Rubber balls eg koosh, tennis	PVC, leather
Barbie Dolls (older than 1993), stretchy rubber dolls	Replace with non- rubber eg New Barbie Doll, Cabbage patch Kids®, Troll™
Gym mats/foam rubber wedges	Cover
Rubber handgrips on racquets	Leather or vinyl or cover with tape or cloth
Toy/doll clothes with elastic/spandex	Replace with cotton, linen, wool etc.
Other toys with rubber parts, eg rubber wheels, balloons, stamp sets	Use non rubber toys, foil balloons
School Equipment	



Product which may contain latex	Alternative/Barrier
Clothing	
Adhesives such as glue, art supplies, envelopes, stamps and stickers	PVA glue, crayola products, flour and water pastes Note: sticker, stamps and envelopes should not be licked
Rubbers/erasers	Use whiteout
Paints containing latex	Non-latex paint
Pens with rubber grips or rubber coating	Pencils, felt tips, crayons
Some makes of play dough	Homemade play dough
Electronic equipment	
Phones can contain rubber mouthpieces, buttons, antennae and cords	Avoid direct contact
Remote controls for eg TV, VCR etc. can contain rubber grips, also calculators	Check and avoid contact
Mouse pads and keyboards	3M products are latex free
Household	
Carpet, floor rugs, bath mats with rubber backing	Replace or provide cloth barrier
Cooking utensils with rubber handles eg spatulas	Use wooden or plastic
Foam pillows	Poly-fill, Dacron, feather or down
Newsprint (newspapers mix ink with latex)	Avoid contact – wear gloves
Rubber bed protectors/baby changing pads	Cover with cloth
Rubber hoses, vacuum, hoses and attachments	Avoid contact
Rubber kitchen gloves	Vinyl or wear cotton liners
Rubber sink plugs	Plastic
Wheelchair cushions and tyres	Cover seats, use leather gloves
Zippered plastic storage bags or rubber zips	Waxed paper, plain plastic bags, metal or plastic zips
Hygiene/Cosmetics	
Tampons	Use latex free
Toothbrush	Remove rubber grips or cover
Teething rings	Plastic, vinyl or cloth
Contraceptives	
Condoms	Low protein (Avanti) Natural Skin over/under latex Plastic
Diaphragms	Do not use



9. Equipment

9.1 Latex free

Equipment This list of Latex-free equipment is constantly being updated. Enquiries should be directed to the Clinical Product Coordinator at Materials Management on extension 4051.

9.2 List of latex free equipment

The following list of latex free equipment therefore is a guide only:

Product/Equipment	Latex-Free
Gloves:	
• Sterile	Baxter Duraprene
 Examination 	Fabricell Vinyl
Syringes	Terumo
	REM Systems
	Codan (latex-free)
	Glass Syringes
	BD (latex-free)
ECG's dots	3M
	Clear Trace
Blood Giving Sets	REM Systems
	- High Flow (Eccles)
Air Vent Needles	REM Systems
CVP Manometers	REM Systems
Central Lines	Arrow kits (remove bungs and syringes)
Pulmonary artery catheter Swann/Ganz	No replacement do not use
Arterial Lines	Arrow
	Insyte cannula
Epidural Tubing	REM PCAM
PCA	Braun
Tapes	3M
	Micropore
	Transpore
	Duropore
	Medipore
	Microfoam
	Steristrip
	Tegaderm
	Smith & Nephew
	Hypafix
	Airstrips
	Opsite
	• V3000
	BSN medical S.A.S
	Leukoplast Sleek LF



Product/Equipment	Latex-Free
	Note: avoid latex containing
	 Sleek
	 Elastoplast
Oxygen Mask	Ebos
	Hudson (remove elastic band)
Ostomy	Convatec
	 Wafers
	 Sur-Fit Plus Flange System and Pouches
	(Note: Sur-Fit appliance belt contains latex)
Urinary Catheters	Silicone only
Ambu bag	Laerdal bag
Re-breathing bag	Kings synthetic (green)
Face Mask	Kings
ET tubes	Portex
Laryngoscopes	Remove rubberseal from bulb
Oral airway	Guedal (Pennine)
Tourniquet	Jetpull (or cover arm)
IV Cannula	Venflons
	Insyte
	Arrow
IV Lines	Baxter Fenwall
	Braun IV sets-remove - cover
	- bungs
	Tuta pump set-remove - cover
	- bungs
	Baxter buretol-remove - cover
	- bungs
	(Bungs can be replaces with 3-waytap
	Codan combi-lock connectors)
IV Fluids	All Baxter IV Fluids only have latex in the
	additives port, the giving set port is safe
Nasogastric Tubes	Nutrition feeding tubes and givign sets from
	Novartis Nutrition Corp
	NB exception is the 28 FR surgical
	gastrotomy/jejunostomy feeding tube kit
	(item #088000) the stylet in this set is made
	of latex
Suction Catheters	Uno
Gastric Tubes	Pennine Ryles Tube
Woundcare	All Convatec products



10. Supporting evidence

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- Laney, G. Latex draft 1.2, GEL.11.98. Consultant Anaesthetist. Dunedin Hospital. Dunedin
- ASCIA website https://www.allergy.org.au/patients/product-allergy/latex-allergy

11. Associated documents

 Medications – Allergies and Adverse Drug Reactions (ADRs) identification, Documents and Reporting

12. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this Auckland DHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.



13. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed **before** the scheduled date, they should contact the owner or <u>Document Control</u> without delay.