

Latex Safe Checklist and Procedures

1.0 General Procedures

As this is an evolving field, the allergenic risks of individual medical products are still being identified. The exact latex-avoidance measures necessary to prevent IgE-dependent allergic-sensitization reactions are not clearly established.

1.1 Identification of a latex safe clinic exam room is required. Team Managers (or designate) to advise cleaners or clinic staff room should be prepared in advance with all horizontal surfaces damp dusted, wearing Nitrile gloves, to remove latex protein residue. Signs declaring latex sensitive patient should be placed on door of clinic exam room (with patients consent).

1.2 Every patient/client should be asked about allergies prior to their initial appointment, during initial and yearly should include all allergies including drug, latex and allergy to foods.

1.3 If a patient/client has possible latex allergy, the Latex Safe Checklist and Procedures should be used, and the clinical team informed. Consider use of flagging in the booking system.

1.4 Supply Ordering and Replacement:

1.4.1 Primary Care Assistants are responsible to order supplies on contract that **are not made with natural rubber latex. SAP identifies this as LF (=Latex free) within the requisition process of the system.**

1.4.2 Team Managers are responsible to decide when it is practical and fiscally feasible. In cases where supplies and equipment are not fiscally feasible, determine if a small amount of supplies that do not contain natural rubber latex can be kept on hand (An example, natural rubber condoms are very expensive to dispense). Also highlight to FMPC program Administrative Director when a latex free alternative should be explored.

If no other alternative to Natural Rubber Latex products consider the following:

- 1) At the site, reduce the maximum and reorder point
- 2) At the time of ordering, reduce the purchase unit quantity of requested stock where possible

1.4.2.2 Sites to develop a cart or bins that are labeled and only contains supplies that are **NOT** made of natural rubber latex. Store Latex free supplies separate from natural rubber latex supplies

1.4.2.3 In cases where natural rubber latex equipment is being used the latex equivalent should occur through either mechanical failure or repair costs exceeding the cost of new equipment. For example, older style Blood Pressure cuffs.

1.5. Identification of Risk Groups and Testing for Type I Allergy

American Latex Allergy Guidelines for the Management of Latex Allergies

<http://latexallergyresources.org/articles/guidelines-management-latex-allergies>

1.5.1 Identification Of Risk Groups (Dakin, Yentis, 1998). Assess for:

1.5.1.1 History of anaphylaxis to latex or a positive skin prick test to latex.

1.5.1.2 History of allergy / sensitivity to latex:

1.5.1.3 Itching, swelling or redness after contact with rubber products

1.5.1.4 Swelling of tongue or lips after dental examination or blowing up balloons

1.5.1.5 High risk groups without history of latex sensitivity:

1.5.1.6 Repeated catheterization e.g. Spina bifida, urogenital abnormalities (18-73%, Sussman et al 1995).

1.5.1.7 Health care workers / occupational exposure to latex (7-10%, Sussman et al 1995).
History of multiple surgical procedures (6.5%, Moneret-Vautrin et al 1993).
Atopic nature / multiple allergies, especially fruit allergies (e.g. banana, avocado, chestnut, nuts, potatoes and kiwi fruit) (6.5%, Kurup et al).

1.6. Testing For Type 1 Latex Allergy

Confirmation of latex allergy is based on:

1.6.2.1 History (previous exposure, risk groups, previous reaction)

1.6.2.2 Latex RAST test, which is a serum IgE antibody immunoassay. Note that this can result in false negatives. Therefore, if the result is negative but there is a strong history refer the individual for Skin prick testing.

1.6.2.3 **Note:** Skin prick testing can result in anaphylaxis and should only be done in a suitable environment (e.g. in an Allergist / Occupational Health Department where appropriate resuscitation equipment is available) by an experienced professional.

1.6.2.4 Ensure full awareness of all staff involved with patient. Flag in Electronic Medical Record Allergy Alert the patient is allergic to Natural Rubber Latex (avoid using latex gloves or other latex products).

1.6.2.5 Keep numbers of people involved to a minimum – restrict personnel to those involved with the patient (to avoid inadvertent exposure).

1.7 If patient is newly diagnosed:

- 1.7.1 They should be given information on latex allergy and told to inform their G.P., dentist and gynecologist before any examination/treatment as appropriate (MDA, 1996).
- 1.7.2 Their diagnosis of latex allergy should be included in their discharge letter.
- 1.7.3 If they have a Type I allergy they should be advised to wear a Medi Alert Bracelet.
- 1.7.4 Patients who are very sensitive and have had a previous anaphylactic reaction should be advised to carry an EpiPen and have their own supply of gloves that do not contain natural rubber latex for emergencies (The Latex Allergy Information Resource, 2001)

1.8 Keen eyes are necessary for the continuity of care, observing signs and symptoms of delayed Latex Sensitivity/Allergy, which may include skin reactions (dermatitis) respiratory problems, asthma attacks, and /or anaphylactic shock (Davis 2000).

1.9 Be prepared to treat serious reactions:

1.9.1 If an anaphylactic reaction occurs clinic teams are to respond as per [PCPG #4 Emergency Management of Anaphylaxis](#).

1.9.2 Consider the possibility of latex-induced anaphylaxis in any patient with a severe allergic-type reaction with respiratory difficulty and/or hypotension especially if skin changes present, and particularly in the following groups:

- History of anaphylaxis to latex, or other latex, rubber or food (especially fruit) allergy.
- Spina bifida, genitourinary abnormalities, multiple surgical procedures or reactions to Intravenous drugs

1.9.3 -If anaphylactic reaction to latex suspected:

- -Remove Allergen,
- -Obtain Latex-free Resuscitation Equipment,

- -If patient experiences anaphylactic shock arrange admission to Hospital for 24 hours of monitoring, since symptoms may re-occur following successful treatment (LAIR, 2001)

1.10 When patients are being examined, according Infection Prevention and Control gloves are not required for routine examination when contact is limited to intact skin. Infection Prevention and Control only recommends using gloves for contact with blood, body fluids, mucous membranes and non intact skin. Latex safe precautions should be used with the use of not made with natural rubber latex gloves (i.e., Nitrile gloves). Infection Prevention and Control recommendation also reduces the number of patient and staff exposures [WRHA Infection Prevention and Control Personal Protective Equipment](#).

1.11 Remove all latex products from room (including gloves) that may come into contact with the patient (Dakin, Yentis, 1998).

1.12 All procedures must be planned in advance where possible.

1.13 Vaccine Recommendations: Latest recommendations are that vials (for example some Vaccine vials) containing Dry Natural Rubber may be used once a “single stick” method of puncturing only once on a fresh vial is used (Heitz, Bader, 2009) change out the needle if possible and practical. To assess if the vial is latex free please follow the Canadian Immunization manual; Evergreen edition, then ensure it meets eligibility based on Manitoba Health’s eligibility criteria, and if concern is not addressed then we revert to the current manufacturers monograph. In consultation with WRHA Population Public Health, If there is a discrepancy between Canadian Immunization Guide and the product monograph, generally the Canadian Immunization Guide is what we would follow/recommend (See listing of potential allergens that include latex [Canadian Immunization Guide Contents of Immunizing agents available for use in Canada \(2013\)](#)).¹²

2.0 Common Procedures (Inpatient/Outpatient/Clinic/Community)

2.1 Blood Pressure - Use blood pressure cuffs that do not contain natural rubber latex where available, otherwise cover arm with sleeve or knitted cotton stockinette (not elastic type) before applying cuff. Stethoscopes may have latex in tubing, ear pieces or bell. If in doubt cover bell with transparent film IV dressing.

2.2 Taking Blood - Managers and Site Medical Leaders are to partner with Lab Managers to ensure a Latex Safe procedure is in place for taking blood . Tourniquets that are not made with natural rubber latex should be the only ones used in the clinic

2.3 See [Response from BD Diagnostics –re: Laboratory Supplies](#) on what is contained in BD lab tubes. If you do not carry BD lab collection tubes please ensure you confirm with the Manufacture.

2.4 Automated Electronic Device – check electrodes do not contain natural rubber latex.

2.5 X-ray - If patient needs an x-ray alert radiographer beforehand.

2.6 Inserting IV lines- Commonly used brands of cannulas, transparent film IV dressing, t-pieces, yellow hepbloks, 3-way stopcocks and extension sets do not contain natural rubber latex. Some IV sets may have latex in the side ports. Do not inject through these ports. What are the common brands of needles and syringes in use in the WRHA (for IM, SC, IV injections) confirm with Logistics which brands do not contain natural rubber latex.

2.7 Internal examinations - PV, PR, use gloves that do not contain natural rubber latex.

2.8 Catheterizing - avoid Foley latex or silastic catheters – only use 100% or ALL silicone catheter and nitrile gloves. Avoid leg bags as they may have latex in the elasticized straps (unless packaging states do not contain natural rubber latex). Avoid latex condom catheters, use 100% silicone alternatives.

2.9 Provide non- natural rubber latex condoms to latex allergy patients (Silicone). However, natural rubber membrane condoms may provide protection against pregnancy and many common sexually transmitted diseases (STD's). However, they may not provide as much protection against certain viral STD's including AIDS and hepatitis - as latex condoms.⁵

2.10 Dressings - avoid elastic adhesive type bandages, elastic net type tubular bandages and sticking plaster unless non-natural latex. Tape- check latex content. Some tape cloth/silk adhesive tapes do not contain latex but seem to cause localized reaction in most latex allergic/sensitive patients. **Use paper tape. There are non-natural rubber latex versions of waterproof plastic adhesive tape.**

2.11 Other procedures e.g. smears, insertion of IUDs, colposcopys, flexible cystoscopes, dialysis, -check all equipment is non- natural free before use.

2.12 Dental Clinics & Dental Surgery:

2.11.1 If treating a known latex sensitive patient be aware of signs and symptoms of adverse reaction and be prepared to treat same (see Section 1.9)

2.11.2 Caution should be used when intending to use gutta percha (material for filling root canals) as it is similar in chemical properties to latex rubber. Consultation with an allergist and allergy testing for gutta-percha is recommended before endodontic treatment of latex sensitive patients (Kean, McNally 2009)

2.11.3 The current manufacturing process of some plastic dental cartridges involves the presence of dry natural rubber as a component. Dry Natural Rubber has been shown to have extremely low risk of reactions. Latest recommendations are that vials containing Dry Natural Rubber may be used once a “single stick” method of puncturing only once, on a fresh vial is used (Heitz, Bader, 2009)

2.11.4 Surgical masks with looped elastic ear ties may contain latex.

2.11.5 Some dental dams also contain latex so check first with supplier.

2.11.6 Other common dental equipment which may contain latex include:

- Bite blocks
- Amalgam carriers
- Impression materials
- Orthodontic rubber bands and elastics
- Polishing discs
- Prophylaxis cups
- Alginate Mixing Bowls

2.13 Wound Care and Orthopedics

2.11.1 Check bandages for latex content.

- Bandages made from woven/knitted crepe/cotton that do not contain natural rubber latex.
- Cotton/synthetic wool bandages that do not contain natural rubber latex.
- Elastic compression bandages/tubular stocking bandage may contain latex (unless synthetic elastic used).

2.11.2 Plaster Room materials such as Plaster of Paris (gypsum) and fibreglass casting materials do not contain natural rubber latex.

- 2.11.3 Cotton /plastic cervical collars do not contain natural rubber latex. All other braces supports and crutches should be checked before use.
- 2.11.4 Other orthopedic products that may contain latex include skin traction sets.
- 2.14 For Patients who are attending as Outpatients
 - 2.12.1 If a patient has a possible latex allergy, the patient should be referred for testing to a dermatologist so allergy can be confirmed/ruled out before patient comes in for admission.
 - 2.12.2 If patient is due for surgery, alert surgical team as patient may need to be first on the list and ward/theatre will need prior notice of admission.
- 2.15 Some multi-dose vials have latex rubber bungs. Use “single stick” method
- 2.16 Anti-embolism stockings -some brands may contain latex –check before use.
- 2.17 If patient due for Surgery:
 - 2.17.1 Identify to Pre- Op to provide as much advance notice as possible.
- 2.18 Ostomy belts may contain latex.

3.0 Additional Precautions For Birthing Centre / Maternity Hospitals

- 3.1 If mother has a latex allergy the baby should also be cared for in a latex safe environment to reduce the mother’s risk of having an accidental exposure and possible reaction.
- 3.2 As there is a link between development of latex allergy and the number of operations in the first year of life (Degenhardt et al, 2001), all babies (under one) having operations should be treated in a latex safe environment.
- 3.3 Birthing Centre / maternity hospitals - CTG monitoring reusable brown elastic straps contain latex. Disposable do not contain natural rubber latex versions should be available.
- 3.4 Disposable plastic Amniotic Membrane Perforator (Amnio-hooks) for rupture of membranes-check packaging.
- 3.5 Silicone bottle teats and soothers should be used instead of latex.
- 3.6 ECG electrodes- commonly used brands that do not contain natural rubber latex before use.

4.0 Common Emergency and Oxygen Equipment

The contents of all emergency carts should be checked for latex content and alternatives should be procured for any products containing latex.

- 4.1 Disposable Adhesive Defibrillation pads may contain latex-check before use.
- 4.2 Disposable Re-breathing bags - most commonly used do not contain natural rubber latex, check packaging.
- 4.3 Most commonly used C-PAP, Bi-PAP systems do not contain natural rubber latex, check packaging.
- 4.4 Some disposable catheters do not contain natural rubber latex, check packaging.

4.5 Most commonly used Anaesthetic monitoring equipment (pulse oximeters, ECG leads) do not contain natural rubber latex (check packaging).

4.6 Nebulizers and attachments-most commonly used brands do not contain natural rubber latex (check packaging).

4.7 100% Silicone resuscitation bag mask valve sets and pocket masks.

4.8 Disposable plastic suction tubing, suction catheters and yankers – check packaging

4.9 Blue silicone nasal airways check packaging.

5.0 .Latest Latex List Directory of non-medical natural rubber latex and product alternatives from the Latex Allergy Support Group <http://www.lasg.org.uk/guidance/latest-latex-list>

Check packaging of the below household contents

5.1 Adhesives

5.2 Balloons

5.3 Carpet backing

5.4 Condoms

5.5 Contraceptive diaphragms

5.6 Elasticated fabrics

5.7 Feeding nipples

5.8 Household gloves

5.9 Diapers and incontinence pads

5.10 Infant pacifiers

5.11 Rubber bands

5.12 Erasers

5.13 Shoes

5.14 Bicycle helmets