



South Eastman Health/Santé Sud-Est Inc.

	<b>No: SC-PRE006/AC-L001</b>
<b>Approved By:</b> Medical Advisory Committee	<b>Source: Regional Client Care Manual</b> <b>Category: Surgical Services/Acute Care</b>
<b>New/Replaces:</b> <b>Date Approved:</b> 02 June 04 <b>Reviewed:</b> <b>Revised:</b>	<b>Subject: Latex Allergy</b>

## POLICY

- 1) South Eastman Health/Santé Sud-Est will promote a safe health care environment for latex sensitive or latex allergic clients and health care workers.
- 2) Clients with positive latex allergy and without a history of anaphylaxis to latex exposure will be treated in our Region.
- 3) Elective procedures will not be performed on clients with a history of anaphylactic reactions related to latex.
- 4) Emergent high risk clients will be informed that the facility can be made latex safe but not latex free. The risk of reaction still exists and the appropriate use of prophylactic medication when indicated may be necessary.
- 5) A latex free kit will be available in the ER area each site. At Bethesda a second kit will be located in the NU2 medication room.

## PROCEDURE

1. Complete a client interview, history, and assessment.

Individuals who are at a high risk for latex allergy have:

- History of intra-operative anaphylactic reaction for unknown reasons
- Topical sensitivity to latex
- History of prolonged or frequent exposure to latex products especially
  - i) clients with neural tube defects (ie: myelomeningocele, spina bifida) and congenital urological abnormalities
  - ii) health care workers with increased exposure to latex especially gloves
- Hemodialysis
- Frequent urinary catheterizations
- Frequent surgical, dental, and radiologic procedures due to latex contact with mucous membranes

- History of allergy to coconuts, bananas, avocados, chestnuts, kiwi, celery, potatoes
  - History of eczema, asthma, hayfever
2. Clients with a latex allergy who require surgery should be scheduled as the first case of the day when possible. Latex is an aeroallergen and present in the OR air for at least an hour after the use of latex gloves.
  3. When caring for a client with a known latex allergy, ensure that all team members are aware.
  4. Clearly document latex allergy/sensitivity in red ink:
    - Allergy bracelet
    - Bed/stretchers – tape on identaband bracelet
    - Front of client's chart
    - Admission Nursing Assessment
    - Care Plan/Kardex
    - Door entrance to client room
    - Requisitions
    - If applicable, surgical Documents (ie anaesthetic record, pre-op checklist, OR intraoperative record)
  5. Notify:
    - Dietary services
    - Housekeeping Services
    - Pharmacy Services
    - Physicians
    - Unit staff
  6. Admit client to a private/single room. All latex products should be removed from the room and a damp dusting of furniture and equipment should occur at least 2 hours before the client is admitted.
  7. Obtain the Latex-free Allergy Kit from ER (second kit in NU2 medication room - Bethesda) and place in client room.
  8. Keep to a minimum the number of people involved in the care of the client.
  9. Wash your hands before coming in contact with the client.
  10. Wear sterile latex-free gloves for sterile procedures. Wear latex free non sterile gloves for non sterile procedures as appropriate.
  11. Contact with latex must be avoided during all aspects of care:
    - wrap all rubber/latex cords and tubing's (ie BP cuffs except Welch Alyn and Propaq, tourniquets, pulse oximeter, EKG cables, stethoscopes, etc) with Webril to prevent direct contact with skin or use Stockinette taped at both ends with one of the acceptable tapes ie micropore, transpore etc.

- for oximeter monitoring an opsite may be applied to the finger used. Stockinette to the arm may be used as the barrier for BP's or tourniquets.

**12. Medications**

- Use ampoules instead of vials wherever possible ie sterile water and saline.
- Do not puncture rubber stoppers with a needle.
- Use forceps to remove rubber stoppers from medication vials.

13. All products sterilized with ETO should be rinsed with sterile distilled water. ETO can bind to many products and act as a powerful antigen that may be involved in anaphylaxis. Products are Neonatal oxygen hood, OR lite handles (blue), Anaesthesia transducers, cautery cord and occasionally black garbage bags.

**14. REFER TO THE MASTER LIST LATEX SAFE AND UNSAFE PRODUCTS (Appendix "B").**

15. Client to bring to the hospital own undergarments, slippers/shoes, sanitary belts, nightwear, pillow, etc.
16. Use flat sheets on beds and stretchers. Fitted sheets contain elastic. Place sheet on wheelchairs and chairs prior to client use. Mattresses and pillows may contain latex products. Do not use soaker pads or Spenco mattresses (silicore).
17. Use latex-free incontinent pads.
18. Client to wear shoes/slippers when standing on the weigh scale.
19. Avoid direct contact with telephone cords, TV ear plugs, and electrical cords.
20. Leave IV basket, and other trays/kits that contain latex, outside the client's room or avoid direct contact with the client.
21. Cover call bell and cord with tubinet and tape end with Opsite or any safe tape.
22. Leave the client's health record, Kardex, carts with rubber wheels and other latex products outside the client's room.
23. Instruct the client to avoid touching any hoses in the bath or shower.
24. Remove rubber backed mats from the bathrooms/shower areas.
25. Inform the client that the baseboards, wall boards and stairwells may contain latex.
26. Remove balloon arrangements or other latex items from the client's room.
27. Remove rubber garbage cans from the client's room. Provide alternate latex-free receptacle. (Note Rubbermaid containers are latex free.)

28. Remove sterilizing tape prior to taking sterilized product into the room.
29. Client education should include:
- Recognizing signs and symptoms of latex allergy/sensitivity.
  - Treatment of minor and severe response to latex allergy.
  - Importance of wearing a Medical Alert Bracelet.
  - Identification and avoidance of latex products commonly found in the home and in the community.
  - Focus on reducing, controlling, and eliminating latex in the home and the workplace.
  - Information regarding latex products used in the dental practice.
30. **HOUSEKEEPING SERVICES SPECIFIC**
- The units caring for the client should notify Housekeeping as soon as they know what areas need their services ie. OR, client room etc.
  - No latex gloves to be worn when cleaning.
  - When notified laundry/housekeeping will bring extra flat cotton sheets to the ward as required.
31. **NUTRITION/FOOD SERVICES SPECIFIC**
- Ward will contact Dietary Department regarding allergy to latex.
  - All food preparation to be done with latex-free gloves.

## APPENDIX "A"

### LATEX ALLERGY/SENSITIVITY INFORMATION

#### General Information:

1. Latex allergy results from direct to indirect exposure to true/natural latex that is obtained from the rubber tree. The antigen that triggers an allergic response is a protein that occurs naturally in latex. There is evidence that the more one is exposed to latex, the more allergic one becomes. Man-made "latex" (butyl or petroleum source) does not cause an allergic response.
2. The degree of latex exposure rises if latex is pierced, broken, or deteriorated.
3. The allergen in latex does not permeate or cross barriers of cloth or paper if the latex surface is intact.
4. Latex allergy reactions range from contact dermatitis to anaphylaxis and death. Symptoms include itchy eyes, generalized pruritis, shortness of breath, faintness, feeling of impending doom, nausea, vomiting, cramping, diarrhea, wheezing, tachycardia, hypotension, bronchospasm, flushing, and/or edema.
5. Protecting the client from direct contact with latex is important. Wash hands immediately after handling latex products. Latex proteins can linger on surfaces and the allergens can be transmitted by hand to a latex sensitive/allergic person.
6. The highest risk is from serous or mucous membrane contact, i.e. IV injection, urinary catheter insertion.
7. No treatment is available to cure a latex allergy. The best treatment is to avoid exposure to latex. Medications are available to alleviate symptoms.
8. A latex allergy can be identified by the radioallergosorbent (RAST) test via Cadham Lab.; by the ELISA test; by the latex alaSTAT and/or by skin tests.
9. Routine diagnostic testing in the at-risk population is not currently recommended. It's done only for those with a positive history.
10. A positive history of latex allergy must be confirmed by allergy testing to establish the presence of latex. A positive result means measures must be taken to avoid latex exposure. The positive test will not predict the severity of the reaction. A negative test is only true at the time of testing.

#### Allergy/Sensitivity Symptoms:

- Contact dermatitis (skin irritation, redness, rash, or eczema) is the most frequent symptom.
- Respiratory tract symptoms include runny nose, itchy swollen eyes, sneezing, or hayfever.
- Systemic reaction presents as hives, conjunctivitis, chest tightness, wheezing, coughing, shortness of breath, asthma, tachycardia, facial edema, flushing, laryngeal edema, or low B/P leading to cardiac arrest.

## APPENDIX "B"

### LATEX ALLERGY KIT

2	Pairs non-latex sterile gloves size 7, 8 & 9
2	100% silicone foley catheter size 14, 16
1	roll of TRANSPORE or MICROPORE tape
1	Box of each – Op site IV 3000, Telfa, Gauze roll, 2x2 gauze, 4x4 gauze
2	Signs indicating LATEX ALLERGY/SENSITIVITY
2	rolls of Webril
1	Blood set
1	green oxygen tubing with connector
1	Suction catheter 12F
1	Green nasal prongs
6	MEDITRACE electrodes
1	medium green 3-in-1 oxygen mask
1	Non-rubber tip forceps
1	Box each of size 2 and 3 Tubinet
1	Stethoscope

### **LATEX PROTOCOL**

The Latex Allergy Kit is stored in the ER area. Bring the box to the Unit when the client is admitted; it should travel with the client. Return the restocked box to the place of origin (ER).

**APPENDIX “C”**

**LATEX SAFE AND UNSAFE PRODUCT LIST**

**UNSAFE PRODUCT**

**SAFE PRODUCT**

**CHEST DRAINAGE**

Argyle “Thora-Seal” III has latex tubing and latex port

Cover latex tubing with Webril

Chest catheter

Rubber tipped forceps for clamping tubing

Use regular non-rubber forceps

White Adhesive Tape

Use Micropore Tape

**DRESSING/SUTURE LINE CARE/TAPES**

Elastoplast Tape, Band Aids, White Adhesive Tape

Use Micropore Tape, Transpore Tape, Blenderm Tape, Paragon Tape

**Dressings:**

Use Hypafix Dressing, Mefix Dressing, Airstrip, Gauze Dressings, Poly Pads, Telfa, Adaptic non-adhering dressing, DuoDerm hydroactive dressing, Opsite Dressing, Primapore dressings

Use Proxi-Strip skin closures

**Bandages:**

Use Duflex conforming bandage, Kerlix, Kling, Webril, Gauze, Tubinet(may be used to cover cords and tubes), Surgiflex

Wound zippers

**Cast Supplies:**

Webril

**Wet Packs:**

Curity Wet Saline by Kendall

Webril (can be used to cover rubber tubes on B/P machines, stethoscopes, etc.

## UNSAFE PRODUCTS

### GLOVES

Sterile gloves all have latex  
(unless latex free indicated)

### INTRAVENOUS

Rubber Tourniquet

## SAFE PRODUCTS

Duraprene Latex free gloves

Use disposable unsterile Tru-Touch or SensiCare gloves when working with routine practices and additional precautions.

Use latex-free gloves when sterile gloves are required.

Gloves in the urinary catheter insertion trays are usually vinyl – check the insert.

Use vinyl gloves for Housekeeping and Dietary duties.

Use B/P cuff (wrap tubing in Webril) or place a regular tourniquet over client's gown. May also cover arm with casting Stockinette.

Jelco, Insyte, Butterfly, Straight Needle, CVP or Central Line Catheters, Spinal needles.

Intermittent Injection cap (Heparin/Saline Loc).

Interlink Needleless System.

All IV tubing.

IV solution bags.



**UNSAFE PRODUCTS**

**OPERATING ROOM SPECIFIC**

Furniture – mattress, stools, baseboards,  
Stretchers, wheelchairs

Tensors – Ace Bandages

Fogarty (balloon)

Penrose drains DAVOL

Cautery Cord (ETO sterilized)

Ulnar pads, donuts, foam and rubber positioning  
aids

**OBSTETRICS SPECIFIC**

**RESPIRATORY**

Yellow Suction Tubing

**SAFE PRODUCTS**

OR caps with boot covers

Cover furniture with sheets.

Disposable E-tube.

Antiembolism stockings KENDALL

Rinse with sterile distilled water

Use a new stapler

Cover with cloth fabric

Amnihook

Airways

Laryngeal masks

Mouth-to-mouth resuscitator

Laerdal bag and facemask

Scavenger mask with corrugated  
tubing

Use clear disposable tubing

## UNSAFE PRODUCTS

Suction bottle with rubber ring and ping pong ball

Pulse oximeter  
Peda Propaq

## URINARY

Urinary catheters all contain latex (including Silicone coated and coude tip foley catheters)

Urinary Leg Bags – strap is made of latex

## OTHER

Tape from sterilized bundles

## SAFE PRODUCTS

Disposable suction  
Suction catheter 8-14

Suction tubing with blue ends

BRAITHWAITE finger probes are latex-free. Welch Alyen, Nellcor

Incentive spirometer

ABG kits are latex-free.

Use 100% silicone catheters. Stocked in kit.

Reusable and disposable catheter tray. Check insert for type of glove. Vinyl gloves are latex-free.

Urinary Drainage Bags and catheter secure

Remove straps and attach with cloth ties.

Remove tape outside of client area and discard tape immediately.

Use fleet enema BAXTER

Use electrodes by MEDI-TRACE, 3M

## UNSAFE PRODUCTS

Stethoscope

## LAUNDRY

Fitted sheets with elastic

Soaker pads

Pillows – some have latex

PJ bottoms with elastic

Hospital slippers – elastic and bottom

## ROOMS/HALLWAYS/STAIRWELLS

Bathmats in shower and tub rooms – if mat has rubber backing  
Telephone cords

Electrical cords

TV ear plugs – may contain latex

Client call bell

Spray hoses

Rubber bands

Step-on weigh scale

Tread on stairs

## SAFE PRODUCTS

Crutches with hand grips (new)

Avoid skin contact, or cover with Tubinet or Webril.

Defibrillating pads 3M

Use flat sheets

Use incontinent pads

Ask client to bring their own pillow

Ask client to bring own underwear and pj's

Ask client to bring their own foot wear.

Remove mats from room.

Cover with Webril or Tubinet

Cover with Webril or Tubinet

Cover with Webril or Tubinet

Wash hands well after use

Ask client to wear footwear

Ensures that client wears footwear at all times

**UNSAFE PRODUCTS**

Garbage bags

Garbage cans

IV baskets

Mattresses, stools, spenco mattress, stretchers,  
wheelchairs

**SAFE PRODUCTS**

Do not take into client's room

Cover furniture with sheets

## APPENDIX “D”

### Implications for Latex allergy for Operating Room

**The most important precaution is non-latex gloves for surgical use.**

**If signs and symptoms of anaphylaxis occur, abort the procedure or treatment and remove the client from antigen.**

Scheduled Surgery:

1. **Operating Theatre:**
  - Remove all latex products from the theatre (extra padded stools, red rubber forceps, adhesive tape, tourniquet, “donuts”, ulnar pad, foam, roller, etc.
  - In theatre, dust all surfaces on which latex products have been stored.
  - Cover OR mattress, armboards, foot cushions, etc. with a double layer of flat cotton sheets. Do Not use the knit sheets or fitted sheets with elastic.
  - Provide adequate supply of elastic-free OR caps for all personnel in the OR.

2. **Anesthesia Equipment**
  - Use disposable ambu-bag.

3. **DO NOT DRAW UP DRUGS FROM VIALS WITH RUBBER STOPPERS**

**The rubber stoppers can be popped and drug drawn up in a glass syringe.**

4. Use Webril under the rubber tourniquet for IV placement.

5. **Surgical Equipment**  
These surgical items have latex:

- Urinary catheters
- Drains (e.g. Penrose)
- Instrument mats
- Rubber-shod clamps
- Bulb syringes for irrigation
- Yellow suction tubing
- Vascular tags
- Rubber bands

All sterilizing tape contains latex. Remove sterilizing tape prior to taking bundle into the theatre. Masking and adhesive tape also contain latex.

6. **Miscellaneous**
  - Provide Latex-Free gloves for the surgical team.
  - Circulating and Scrub nurse together assess the sterile field to ensure that it is a latex-free environment.

- Scrub nurse should have a sterile basin with sterile distilled water to rinse off in-house ETO sterilized equipment (cautery cords, light handles and transducer).
- **Circulating nurse and anesthetist to continuously assess the client for signs and symptoms of allergic reaction.**

## APPENDIX “E”

### Diagnosis of Latex Anaphylaxis

Anaphylaxis has been reported even in clients pre-treated with H1, H2 blockers and steroids and managed in a latex-free environment. Always be prepared to treat.

Onset is generally 20 – 60 minutes after exposure to the antigen.

Anaphylaxis presents with the clinical triad of:

1. Hypotension
2. Rash
3. Bronchospasm

**NOTE:** Hypotension is the most common sign. A rash is not always seen.

### Treatment of Latex Anaphylaxis

#### **Treatment:**

- Stop exposure of latex (usually gloves in contact with peritoneum)
- Maintain airway with 100% oxygen.
- Discontinue all anesthetic agents, if possible.
- Restore intravascular volume (2 – 4 litres). Establish second large bore IV.
- The pharmacological cornerstone of treatment is **EPINEPHRINE**
- Corticosteroids (0.25 – 1 g hydrocortisone or 1 – 2 g Methylprednisolone)
- Antihistamines (0.5 – 1 mg/kg Diphenhydramine(Benadryl))
- Catecholamine infusions (epinephrine 2 – 4 ug/min or more)
- Aminophylline (5 – 6 mg/kg over 20 minutes for persistent bronchospasm)
- Sodium bicarbonate (0.5 – 1 mEq/kg for persistent hypotension with acidosis)
- Airway evaluation (prior to extubation)

Be prepared to treat patient. Be prepared to stop treatment/procedure:

- Airway maintenance with 100% O<sub>2</sub>
- Intravenous Epinephrine – 0.5 – 1.0 UG/KG BOLUS. May need to repeat dose or give S.C. or by continuous infusion.
- Volume resuscitation – with Ringer Lactate or Normal Saline
- Withdraw antigen immediately – if known
- Secondary treatment:
  - Diphenhydramine: 1 mg/kg IV (max. dose 50 mg.)
  - Methylprednisolone: 2 mg/kg IV (max dose 125 mg.)
  - Ranitidine: 0.5 mg/kg IV every 6 hours for 2-4 doses (max. dose 50 mg.)