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# Latex Allergy

## Precautions during admission

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This blog describes the necessary precautions if a patient with latex allergy is admitted to clinic or hospital. In the past awareness for latex allergy increased because of the use of powdered gloves in hospitals. Nowadays, most hospitals are 'latex free'. However, hospitals still organise parties with latex balloons, and kitchens in hospital and in town are still using powdered gloves. Other causes of latex allergy have to be considered like hair extensions and apparel. This blog describes which protocols are available and should be considered in clinics. In addition, if your patient is known to have anaphylactoid latex allergy, pretreatment with antihistaminics should be considered.

Tools: [LatexAllergieNederland.nl](#) | [Images](#) | [Medewerkers info Leiden](#) | [Latex in tandheelkunde](#) | [Allergy during surgery](#) | [Latex en blaascatheter](#) | [Patient instructie latex allergie Amphia](#) | [NHS appendix flow-diagrams, questionnaires, checklists](#) | [RCH hospital protocol](#) | [Search Latex Allergy in Hospital](#) | [Discharge care](#)

## Introduction

Latex allergy is quite common. In hospitals all over the world powdered gloves have caused this to become an occupational condition. ([sources](#)) In most hospitals, powdered gloves have been banned. Powder has mediated latex allergy development and incidents. In food industry the awareness of this condition still is in its early phase, and it is likely to become a serious problem if no action is taken. ([sources](#))

In many patients with food allergies one can expect to have higher incidence of latex allergy. ([Link food-latex allergy](#)) Patients with atopic constitution may easier develop severe forms of latex allergy. ([Link atopia-latex allergy](#))



Figure 1: Latex contact allergy is shown here. The allergy can present as pulmonary problems, eye problems, and even collaps and shock with deadly outcome. 

## Protocols during admission

Hospitals should be and can be 'latex free'. ([source](#)) In the Netherlands many hospitals are latex free, however be aware that incidents may still occur. ([source](#)) If materials contain latex, they should be kept away from patients with latex allergy. Like cigarettes, party balloons should be banned from hospitals of course.

Protocols have been developed for treatment of patients with latex allergies. ([source eng](#)) ([source nl](#))

A very good protocol is from [HSE](#). It gives a long list of literature, is very thorough, and provides background information to understand the protocol. The RCH in Australia has the best protocol as far as I know, see [RCH](#).

Latex allergy is easily overlooked. Even doctors themselves miss easily the diagnosis. A pathologist discovered after many years that his eyes were 'clean' during holidays. He turned out to be allergic to the ocular rubber of his microscope.

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## Latex Allergy Precautions during admission

### Pre, intra and post operative periods

- Prior to the admission of a latex allergic and latex alert patient to the operating theatres, staff should implement [immediate latex prevention/management precautions](#). It is preferable for latex allergic patients to be **scheduled first on the operating list**. If not possible a clean operating theatre should be utilised with all latex products e.g. latex gloves removed from the area.

NB: Powdered latex gloves are not used at RCH. However it is recommended that if powdered latex gloves were used that the operating room is cleaned and **free of powdered latex gloves for at least 3 hours**.<sup>(1, 2)</sup>

- **Ensure the operating list states latex precautions/latex safe zone**.<sup>(1,2)</sup>
- Ensure the designated latex free theatre has [latex allergy/latex alert signs](#) displayed appropriately.
- Ensure anaesthetic circuits, masks, oxygen masks and re-breathing bags, oropharyngeal airways, endotracheal tubes and mounts are latex free products.<sup>(1,2)</sup>
- Ensure that all members of staff have changed into clean peri operative attire and have washed their hands prior to entering the designated latex free operating theatre.<sup>(1,2)</sup>
- It is ideal for the staff to remain in the designated latex precaution/latex safe zone for the duration of the surgical procedure and sufficient staff are available to collect and deliver any additional equipment to the theatre. Care must be taken not to wear the latex gloves or to come into contact with any latex products during collection and delivery.<sup>(1,2)</sup>
- Restrict traffic flow in the designated theatre before and during the procedure.<sup>(1,2)</sup>
- Latex allergic/latex alert patients should be recovered in a designated latex reduced area with [latex prevention/management precautions](#) in place.<sup>(1,2)</sup>
- Ensure ward nursing staff receiving the patient from recovery are informed of the patient's latex allergy and an [appropriate latex precaution/latex safe environment](#) has been prepared prior to transfer.<sup>(1,2)</sup>

**Figure 2:** This is a part of the Clinical Guideline Latex Allergy. Always, there has to be an anaphylaxia protocol at hand. Use f.e. the [AMC protocol](#) for that. [RCH](#)

<b>START</b>	<ol style="list-style-type: none"> <li>1. Wie is de <b>teamleider</b>?</li> <li>2. Start <b>timer</b></li> <li>3. <b>Benoem verdenking anafylaxie</b></li> <li>4. <b>Vraag hulp:</b> 59663, noodknop</li> <li>5. <b>Haal:</b> terlipressine, salbutamol 1 mg/ml → centrale medicatiekast</li> <li>6. <b>Intubeer</b>, geef <b>100% O<sub>2</sub></b> in <b>hoge flow</b></li> <li>7. <b>Pulsaties</b> aanwezig? Nee: start BLS: <a href="#">algoritme 1 of 2</a></li> </ol>
<b>DIRECTE ACTIES</b>	<ol style="list-style-type: none"> <li>1. <b>Stop toediening medicatie</b> waarop de verdenking allergische reactie berust</li> <li>2. Positioneer patiënt in <b>Trendelenburg</b></li> <li>3. <b>Geef vulling:</b> kristalloïden indien eerder colloïden toediening</li> <li>4. <b>Geef adrenaline:</b> 500 mcg IM of 10-20 mcg IV</li> <li>5. Onvoldoende effect? Ja: <b>titreer adrenaline</b> iedere 1-2 minuten in oplopende dosering</li> <li>6. Geef: <ul style="list-style-type: none"> <li>- <b>clemastine</b> (= Tavegil) 2 mg IV</li> <li>- <b>ranitidine</b> 50 mg IV</li> <li>- <b>dexamethason</b> 8 mg IV</li> </ul> </li> <li>7. Overweeg:</li> </ol>

**Figure 3:** This is a small part of the 'spoedbundel AMC'. [Spoedbundel AMC](#) For a protocol in English view [re-sus.org.uk](#).

### What are the symptoms of latex allergy?

- Itching
- Skin redness, hives or rash
- Sneezing
- Runny nose
- Itchy, watery eyes
- Scratchy, hoarse throat
- Cough
- Wheezing and shortness of breath (asthma)

The most serious allergic reaction to latex is anaphylaxis, a type of shock. An anaphylactic response to latex is a medical emergency.

### Other signs and symptoms include:

- Difficulty breathing caused by swelling of lips, tongue or windpipe
- Severe drop in blood pressure (hypotension)
- Dizziness
- Loss of consciousness
- Confusion
- Slurred speech
- Rapid or weak pulse
- Blue hue of the skin, including lips and nail beds
- Diarrhea
- Nausea and vomiting



**Figure 4:** List of symptoms in latex allergy'. [spinabifidaassociation.org](#)

## Use common sense

Latex allergy does not have to be scary. Important is to understand how allergies are developing, and what allergies in general are, and how it could lead to serious calamities. Prevention is best, and all protocols advice to eliminate materials which contain latex. Latex has been abandoned from anesthesia machines, powdered gloves have been eradicated in all hospitals (check your hospital!), healthcare workers should not use latex clothing or apparels. In case of a patient with anaphylactic response to latex contact one can take extra measures like those describes in the RCH protocol, and in addition the anesthesiologist may give a [pre-medication](#) with antihistamines and or corticosteroids. Make sure your patient is not allergic to those medications as well! As always good protocols for emergencies should be available and medications have to be available for immediate use. The availability of an [Epipen](#) should be considered.

Patients are best source of information, and should be informed about the measures you take. Do not forget

to ask your patient about allergies for the medications you plan to use, including the appropriate emergency medications!

Often forgotten, after an anaphylactic reaction patients should have proper [after-care and discharge medication](#).

[MPOSP](#) envisions a world where patients create and share their own professionalized Casebook. They become true healthcare-team members.

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