

CAERPHILLY COUNTY  
BOROUGH COUNCIL

CORPORATE MANAGEMENT  
ARRANGEMENTS ON THE  
EXPOSURE TO LATEX AT WORK

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**Issue 3**

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Mae'r cyhoeddiad hwn ar gael yn Gymraeg ac mewn ieithiodd neu fformatau eriall ar gais.

### **NOTE**

Wherever the designation Manager is used throughout this policy, it is taken to mean Head of Service, Head Teacher, Line Manager, Supervisor, and Officer in Charge or anyone who has a responsibility for employees through their work.

## 1. ARRANGEMENTS

### 1.1 Natural rubber latex (NRL):

1.1.1 Natural rubber latex is a natural product that is widely used as a component in many medical and consumer items. Gloves are the single most widely used product containing natural rubber latex, and often used in catering, engineering, domestic services, and care/nursing home environments. However, it may also be found in many other products widely used within the Authority, including, balloons, pencil erasers, rubber bands, and sports equipment.

1.1.2 As with many other natural products, natural rubber latex contains proteins to which some individuals may develop an allergy. Around 1-6 % of the general population is thought to be potentially sensitised to NRL, although not all sensitised individuals develop symptoms. There are two types of allergy related to natural rubber latex, one caused by the natural proteins, the other by chemicals that are used to convert the NRL to a usable item. They are respectively called Type I and Type IV allergy. Further information regarding these allergy types, including details of the signs and symptoms, is contained in Appendix 3.

1.1.3 In addition, some people may experience an irritant reaction when using products made from natural rubber latex, which is known as irritant contact dermatitis. This is not, however, a true allergy.

1.1.4 There are two types of natural rubber products. Dipped or stretchy NRL products (eg gloves, balloons, condoms, and rubber bands) are a more frequent cause of allergic reactions to latex proteins than dry rubber products (eg tyres and tubing). Reactions to dry rubber products are less common and only experienced by severely sensitised individuals

### 1.2 Risk Assessment and Written Justification

1.2.1 Natural rubber latex (NRL) is a widely used and cost-effective material, which for the majority of the population is not a clinical risk. However, a suitable and sufficient risk assessment must be carried out to consider the risks created by exposure of employees and others (e.g. service users) to products containing NRL. This is a legal requirement under the Control of Substances Hazardous to Health (COSHH) Regulations 2002, and the Management of Health and Safety at Work Regulations 1999.

- 1.2.2 The risk assessment should be task based, taking into account all activities where NRL might be used, and should consider service users and employees with known latex allergies. Where employees and/or service users are known to be allergic to NRL, safe systems of work must be documented and implemented to ensure they work or are treated in a latex-free environment.
- 1.2.3 The importance of the risk-assessment is also to make an informed decision as to whether an alternative is effective for the task to reduce the risk of persons becoming sensitised. In line with the requirements of the COSHH Regulations, the exposure of employees to any substance hazardous to health (such as natural rubber latex) must be either prevented or, where this is not reasonably practicable, adequately controlled.
- 1.2.4 Due to the risks of an employee or service user becoming sensitised to NRL, or having an allergic reaction due to further exposure, the Authority has a policy to use NRL-free products unless written justification is provided by a manager that products containing NRL are needed, based on a risk assessment.
- 1.2.5 Where the written justification based on the risk assessment shows that non-latex alternatives are unsuitable, the Occupational Health Department and Directorate Health and Safety Officer must be contacted.
- 1.2.6 The Occupational Health Department and Directorate Health and Safety Officer will assist the Manager to consider the risks and will authorise the written justification where appropriate.
- 1.2.7 Products containing NRL, including disposable gloves, must not be used unless a written justification based on the risk assessment has been produced and shows that latex-free alternatives are not suitable, and this has been authorised by the Occupational Health Department and Directorate Health and Safety Officer. Where latex gloves are issued they must only be issued to individuals identified as needing them following the risk assessment, and must be low protein (<50mcg/g) and powder free.

### **1.3 Provision of Information:**

- 1.3.1 Where employees are required to use products containing NRL they must be provided with appropriate information, instruction and training regarding the associated risks, appropriate control measures, and common early symptoms of allergic reaction associated with natural rubber latex exposure.

## **1.4 Pre-Employment Health Screening:**

- 1.4.1 Where an employee will be using latex gloves an assessment of the worker's respiratory health & skin condition must be carried out before they start a relevant job to provide a baseline record.

## **1.5 Health Surveillance:**

- 1.5.1 For employees using latex gloves a regular (at least annual) enquiry for dermatitis and asthma will be carried out. The enquiry will be carried out by written questionnaire, and positive results will be referred to the Occupational Health Nurse for assessment.
- 1.5.2 Where employees are known to be sensitised to latex and for those employees considered to be at a high risk of developing sensitisation i.e. atopic individuals, a periodic clinical assessment will be carried out by the Occupational Health Nurse.
- 1.5.3 A record will be kept of all health surveillance undertaken.
- 1.5.4 For each group of employees using latex gloves a responsible person will be identified and made known to employees as a contact point for the reporting of any symptoms associated with sensitisation. This person will ensure referral to the Occupational Health Nurse for a clinical assessment where appropriate.

## **1.6 SUPPORTING DOCUMENTS**

- 1.6.1 This document must be cross-referenced with the Corporate Policy on the Use of Latex at Work, and the Corporate Control of Substances Hazardous to Health (COSHH) Policy.

## **1.7 Guidance**

- 1.7.1 Guidance from the Health and Safety Executive (HSE) regarding the use and risks associated with natural rubber latex products is available from the HSE website: [www.hse.gov.uk/latex](http://www.hse.gov.uk/latex)

## **Appendix 1 - Questionnaire to identify NRL sensitivity**



QUESTIONNAIRE TO IDENTIFY NRL SENSITIVITY

MEDICAL IN CONFIDENCE

SECTION A – PERSONAL DETAILS

Surname: Forename:  
 Date of Birth: National Insurance Number:  
 Home Address:  
 Postcode: Telephone Number:

Job Applied for/currently held: Location:  
 Directorate:

SECTION B - PAST MEDICAL HISTORY

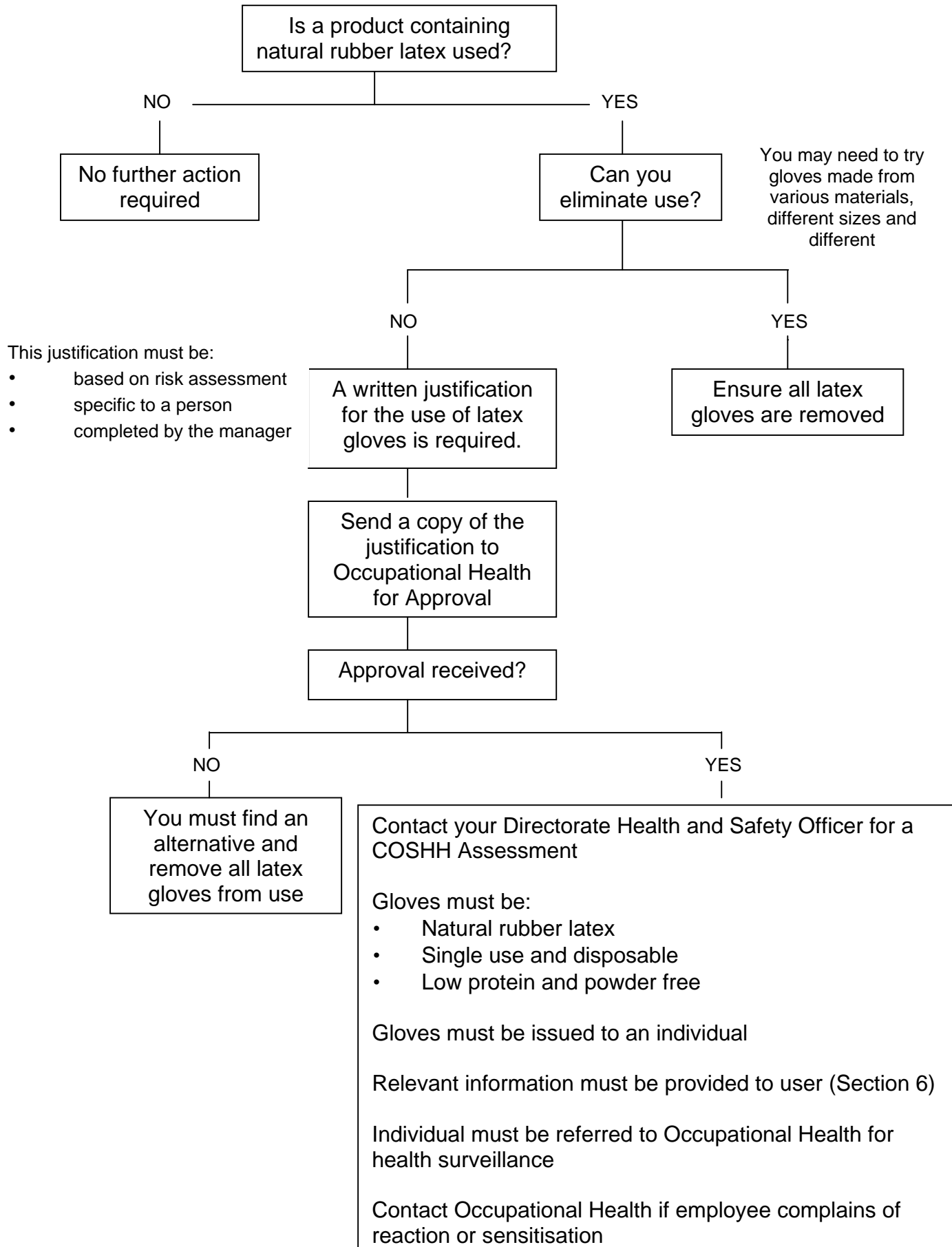
1. Do you have a history of any of the following?	YES	NO	Details
Asthma			
Hay Fever			
Hand eczema			
Eczema elsewhere on the body			
2. Have you had any surgery?			<i>Please give details of the procedure, your age at the time</i>
3. Have you had any extensive dental work?			
4. Do you have any congenital abnormalities (e.g. spina bifida)			<b>Type</b>
5. Do you have any food allergies?			
If Yes, are you allergic to any of the following?			<b>Please briefly describe the symptoms</b>
Banana			
Peach			
Pineapple			
Potato			
Avocado			
Kiwi Fruit			
Papaya			
Egg			
Tomato			
Peanut			
Other			

Does your occupation involve frequent contact with items containing natural rubber latex?	YES	NO
Have you had a reaction to any of the following products made from natural rubber latex? <i>Please tick any that apply</i>		
Balloons		
Rubber gloves		
Condoms		
Hot water bottles		
Rubber balls		
Rubber bands		
Elastoplast		
Elastic bandages		
Erasers		
Garden hoses		
Other		
If you have answered yes to the last question, please give details of how long after contact and what reaction would you expect to occur?  <i>Please state time against an that apply.</i>		
Rash on hands		
Itching		
Urticaria (Hives)		
Runny nose		
Sneezing		
Itchy/watery eyes		
Shortness of breath		
Facial swelling		
Dizziness		
Other		
Have you ever suffered from anaphylactic shock? If so, under what circumstances and how many times?	YES	NO
Employee Signature:	Date:	
SUMMARY OF RESULTS   Checked by: _____ Date: _____		



## **Appendix 2 – Latex use flowchart**

**APPENDIX 2**



## **Appendix 3 – Latex Allergies**

## **Latex Allergies**

There are two types of allergy related to natural rubber latex, one caused by the natural proteins, the other by chemicals that are used to convert the NRL to a usable item. They are respectively called Type I and Type IV allergy.

In addition, some people may experience an irritant reaction when using products made from natural rubber latex, which is known as irritant contact dermatitis. This is not, however, a true allergy.

### **Type 1 allergy**

Type I natural rubber latex allergy is an immediate allergic reaction to NRL proteins and is potentially life threatening. Deaths have occasionally been reported due to latex allergy.

#### **Symptoms of Type I allergy**

Urticaria (hives) and hayfever type symptoms, asthma.

Though rare, more severe symptoms such as anaphylaxis (a condition where there is a severe drop in blood pressure leading to possible loss of consciousness or severe breathing difficulty)

Months or even years of exposure without symptoms may precede onset of clinical symptoms of Type 1 NRL allergy. In many cases symptoms become progressively more severe on repeated exposure to NRL allergens, so it is important for sensitised individuals to avoid further contact with NRL proteins.

NRL allergens attach to cornstarch used in powdered gloves. This powder acts as a vehicle making the NRL proteins airborne when these gloves are used, enabling the allergens to be inhaled. This means that NRL allergic individuals may experience symptoms of an allergic reaction, by being in a room where powdered NRL gloves are used even though they are not in contact with these gloves directly.

The amount of latex exposure needed to produce sensitisation is unknown. A substance that causes sensitisation is one which is capable of causing an allergic reaction in certain people. Once sensitisation has taken place, further exposure to the substance, even to the tiniest trace, will cause the symptoms to recur. Increasing the exposure to latex proteins increases the risk of developing allergic symptoms.

Several types of synthetic rubber are incorrectly referred to as 'latex'. Equipment (eg gloves) that is manufactured from these synthetic rubbers may also cause an allergic response in someone sensitized to the chemicals used in the manufacturing process.

There are a number of different types of latex glove available. Due to prolonged and close contact, all latex gloves present a particular risk of skin sensitisation, but the risk is reduced in gloves with lower levels of latex protein and process chemicals. Powdered gloves pose an additional risk, not only to the user but also to sensitized people in the area. The proteins in the latex glove leach into the powder that becomes airborne when the gloves are removed. Inhaling the powder may lead to respiratory sensitisation.

Compliance with the Control of Substances Hazardous to Health (COSHH) Regulations should restrict the use of both powdered latex gloves and other latex gloves with a high leachable protein content, so far as is reasonably practicable.

#### Management of Type 1 allergy

Avoidance of the allergen is the best treatment option. There is no cure for NRL allergy but medications are available to treat symptoms of NRL allergy once it develops.

#### **Type IV allergy**

Some people react to the chemicals used in the manufacturing process, mostly accelerators. The chemicals most likely to cause a reaction are thiurams, dithiocarbamates and mercaptobenzothiazoles (MBT). This is a delayed hypersensitivity reaction which occurs 6 - 48 hours post-exposure.

#### Symptoms of Type IV allergy

Red itchy scaly rash, often localised to the area of use, i.e. wrists and forearms with glove use, but which may spread to other areas

#### Management of Type IV allergy

Occupational Health or medical advice should be sought and avoidance of the specific chemicals in future use.