

LATEX ALLERGY MANAGEMENT IN THE WORKPLACE

PURPOSE

This policy aims to provide guidelines for panel members who have developed an allergy or become sensitised to latex products due to their working environment.

SCOPE

This policy applies to all MHR panel members and the MHR clients.

POLICY STATEMENT

All healthcare workers are potentially at risk when exposed to latex products. Therefore, preventative actions must be implemented.

DEFINITIONS

TERM, ACRONYM OR ABBREVIATION	DEFINITION
Allergen	A substance that triggers an immune response in the human body is known as an allergen. Allergens can enter the body in several ways, including: Inhaled (Breathed in) Swallowed Injected Direct contact with skin or mucous membranes
Allergy	The immune system responds to normally ignored substances as if they are harmful.
Latex	This is a natural product manufactured from a milky sap which is produced by the rubber tree, Hevea Brasiliensis. Synthetic rubber (made from petroleum, coal, oil, acetylene or gas) does not pose the same threat.
Latex Allergy	This is an allergic reaction to proteins contained within the latex rubber. Symptoms range from mild reactions, such as skin redness, hives, rash or itching, to more severe reactions involving itchy eyes, scratchy throat, and asthma or in rare instances, anaphylactic shock
Sensitisation	The immune system produces antibodies called immunoglobulin in response to an allergen. If exposed to the same allergen repeatedly, the antibodies may trigger a reaction. Sensitisation does not cause symptoms, but it may result in an allergic reaction that produces symptoms.

TERM, ACRONYM, OR ABBREVIATION	DEFINITION
Irritant Contact Dermatitis	Non-allergic skin reaction, characterised by redness, itchiness, dryness and cracking. Possible causes: gloves and exposure to other products and chemicals
Allergic Contact Dermatitis	Specific Immune Response characterised by redness and vesicle formation. Appears 24 – 96 hours after exposure. Subsequent exposure may result in the skin cracking, becoming dry and crusted
Natural Rubber Latex (NRL) Allergy	Reactions begin within minutes of exposure to NRL allergens. Symptoms include skin redness, hives or itching, runny nose, sneezing, itchy eyes, scratchy throat, bronchospasm, asthma, and diarrhoea. Anaphylaxis and death are rare.
NRL	Natural Rubber Latex
IgE	Immunoglobulin E
ОНР	Occupational Health Practitioner
OHNP	Occupational Health Nursing Practitioner
ОМР	Occupational Medical Practitioner
нсw	Healthcare Worker

LEGISLATIVE BACKGROUND

1. The Occupational Health and Safety Act no. 85 of 1993:

The Act imposes a duty on employers to conduct a risk assessment to inform employees of potential risks in the workplace and to maintain a healthy and safe working environment.

2. Regulation for Hazardous Chemical Agents regulations

The regulation stipulates that an employer shall ensure that an employee is under medical surveillance if there is exposure to any Hazardous Chemical Agent that may result in an identifiable disease or adverse event.

3. Compensation for Occupational Injuries and Diseases Act of 1993

- Circular instruction 176 regarding compensation for Occupational Asthma
- Circular instruction 181 regarding compensation for Occupational Contact Dermatitis

BACKGROUND

- **1.** Latex Sensitisation refers to no related symptoms, and in the presence of a positive skin test to latex allergens or demonstration of specific IgE antibodies.
- 2. Clinical latex allergy refers to the immediate development of allergic symptoms caused by contact with latex in a sensitised individual. At a pathological level, the clinical effects of NRL allergy are attributed to either Type 1 (immediate-type) or Type 4 (delayed-type) hypersensitivity.
- 3. <u>Type 1 reaction</u> is caused by IgE-associated reactions to latex proteins. The clinical effects can develop within minutes or hours of exposure to NRL proteins precipitated in individuals who have already developed latex-specific IgE antibodies from previous exposure and sensitisation. Clinical effects range from contact urticarial, itching of the skin and eyes, sneezing, bronchospasm and asthma to anaphylaxis (which may occur in people previously unknown to be sensitised).
- **Type 4 reaction** is more prevalent, and this is because of **cell-mediated reactions** to the **chemical additives** in rubber rather than the latex proteins. Onset is often delayed 6 48 hours after exposure. Clinical effects range from vesicular to eczematous, pruritic dermatitis, appearing hours to days after contact.

PREVENTATIVE ACTIONS BY CLIENT

- Assess risks
- Provide education and training for panel members regarding possible signs and symptoms of latex allergy and the preventative steps to adhere to
- Provide adequate control measures, including PPE, and ensure their use and maintenance
- Panel members should be provided with both latex-free and latex-glove options
- Provide health surveillance in appropriate cases

RECOMMENDED PREVENTATIVE ACTIONS BY PANEL MEMBER

To reduce the possibility of a reaction to latex, educate panel members to adhere to the following:

- Attend awareness sessions to become familiar with possible signs and symptoms of latex allergy.
- Not to use oil-based hand creams or lotions, as it degrades the gloves.
- When removing latex gloves, do so carefully so as not to release the small airborne latex particles
 of powder into the atmosphere, where they may be breathed in, transferred to the clothing of
 other personnel or circulated via the air ventilation systems.
- Wash hands with soap and water after removing gloves and dry hands well.
- Ensuring that equipment and surfaces are free of latex-containing dust.
- Reporting any potential signs and symptoms and seeking medical attention.

WHO IS MOST AT RISK?

Those most at risk from NRL are:

- HCW exposed to NRL on a regular basis in occupations where single-use gloves are frequently used.
- HCW who underwent multiple surgical procedures, particularly early in life and especially those
 with spina bifida or urogenital disorders, the prevalence of latex allergy may be greater than 60%.
- HCW with a history of certain food allergies, such as banana, avocado, kiwi and chestnut.
- \bullet HCW with atopic allergic disease (Around 3 6% of the general population is thought to be potentially atopic).

Version 1

MEDICAL SURVEILLANCE

Medical Surveillance is done to ensure that the individual's health status does not place the health of those panel members, or of any other HCW, at increased risk.

Person	Responsibilities		
New Panel members	 To inform MHR of the previous history of latex allergies during registration. Complete Latex Sensitivity Questionnaire (Annexure B). Pre-screen of new panel members depends on the outcome of the Latex Sensitivity Questionnaire. Refer to Occupational/Medical Practitioner or specialist if risk is identified. 		
Active Panel members	 Reports signs and symptoms of possible sensitivity to the client line manager and MHR Coordinator. Complete Latex Sensitivity Questionnaire (Annexure B). 		
Occupational Health Service Provider or EC Doctor	 Assess signs and symptoms Make a diagnosis according to circular instructions 176 and 181. Provide guidance to panel members. Complete associated WCL documents based on circular instructions 176 and 181 if the diagnosis is confirmed. 		

IMMEDIATE ACTIONS TO BE TAKEN BY THE OCCUPATIONAL HEALTH PRACTITIONER / EMERGENCY CENTRE DOCTOR ONCE A PRELIMINARY DIAGNOSIS OF A LATEX ALLERGY IS ASSUMED.

Step	Action
1.	Obtain a suggestive clinical history to ascertain whether 'at risk'.
2.	Conduct medical examination to confirm diagnosis (using diagnostic criteria or circular 176, 178 or 181).
3.	Treat as per the diagnosis made.
4.	Emergency Centre Doctor Report the incident to the MHR Occupational Health Service Provider (See Annexure A) INCON Report to the Compensation Commissioner
5.	Inform MHR management so that necessary precautions can be taken.

ASSOCIATED DOCUMENTS AND POLICIES

Title	Location/Number		
Employer's Report of an Occupational Disease [W.CL.1(E)]	Client/MHR		
Notice of Occupational Disease and Claim for Compensation W.CL.14	Client/MHR		
Recording and investigation of incidents (Annexure 1)	Client/MHR		
Employer's Report of an Accident (W.CL.2)	Client/MHR		
First Medical Report of an Occupational Disease (W.CL.22)	Client/MHR		
Progress / Final Medical Report of an Occupational Disease (W.CL.26)	Client/MHR		
MHR Event Reporting Policy	MHR Intranet/website		
MHR Payment of WCA Leave Policy	MHR Intranet/website		
MHR Sick Leave Policy	MHR Intranet/website		
Event Report	Client/MHR Intranet/website		
Regulations for Hazardous Biological Agents, No. 1390 of 2001	Internet		
The Occupational Health and Safety Act, No. 85 of 1993.	Internet		
Annexures			
Annexure A: MHR Occupational Health Service Provider contact details			
Annexure B: Questionnaire - Latex Sensitivity			

REFERENCES

- **1.** Gerwel, B., Blumenstock, J.S., Bresnitz, E. and O'Leary, K. 2002. Guidelines Management of Natural Rubber Latex Allergy
- 2. National Institute for Occupational Safety and Health. CDC. NIOSH Publication No. 98-113: Latex Allergy Prevention Guide. www.cdc.gov
- 3. Policy for the Prevention and Management of Natural Rubber Latex Sensitivity / Allergy in Health Care Workers and Patients
- **4.** Latex Allergy, Occupational Health Aspects of Management. A National Guideline, NHS Plus (2008)
- 5. ER24 Latex Allergy Policy

ANNEXURE A:

MHR OCCUPATIONAL HEALTH SERVICE PROVIDER (INCON) HEAD OFFICE CONTACT DETAILS

Contact person: Christine Swanepoel

E-mail address: christine@incon.co.za

Phone number: 021 975 2694 (Ext. 2016)

ANNEXURE B: QUESTIONNAIRE - LATEX SENSITIVITY

Name	me				
ID/Passport Number					
MEDICAL HISTORY				YES	NO
Have you ever been told by a physician that you have an allergy to latex products? If yes, to what specifically did the physician say you were allergic to?					
Are you allergic to any medications or foods? If yes, explain.					
Do you have any congenital abnormalities? (Spina Bifida)					
Have you ever suffered	from any of the followi	ng:			
Allergic rhinitis (runny nose)? If yes, explain.					
2. Allergic conjunctivitis (red, watery eyes)? If yes, explain.					
3. Asthma? If yes, explain.					
Difficulty breathing (wheezing)? If yes, explain.					
5. Eczema? If yes, expl	ain.				
6. Hay fever or seasona	ıl allergies? If yes, exp	plain.			
7. Hives? If yes, explain.					
8. Sinus problems? If yes, explain					
Do you use/ take any allergy medications, including inhalers? If yes, explain.					
Have you ever had any skin rashes or breathing problems during /after procedures/visits to: Dentist, Surgery, Gynaecology					
Have you ever had any skin rashes or breathing problems after handling or being exposed to any of the following? Circle if appropriate:					he
Gloves (latex/Vinyl)	Balloons	Band-Aid Plasters	Condoms	_	er rubber oducts
<u> </u>		l l		ı	
Have you ever had any standard following food products?			ng or being exposed to	o any of th	ne
Bananas	Chestnuts	Potatoes	Kiwis	Av	ocado
Tomatoes	Papaya	Passion Fruit	Peaches	(Other

OCCUPATIONAL HISTORY	YES	NO
Does your occupation involve exposure to latex?		
2. Do you wear gloves for long periods?		
3. Do you change your gloves frequently?		
The following questions specifically relate to hand dermatitis		
Is hand hygiene performed immediately before glove use?		
 Is hand hygiene performed using plain soap and water/ antimicrobial soap and water, or alcohol-based hand rub or alcohol based handrub (or a combination of both actions, which is not recommended)? 		
If hands are washed, are they gently dried on a paper towel until moisture is absorbed?		
If alcohol-based hand rub is used, are hands completely dry before donning gloves?		
Is hand hygiene performed immediately after glove use?		
Are hand lotions/ moisturising products used on hands on breaks / after work hours?		
SKIN CONDITION	YES	NO
1. Is there any rash visible?		
2. If yes, when did it appear?		
3. What were you busy with at the time that the rash appeared?		
4. On what part of your body is the rash?		
4.1 Fingers		
4.2 Hands		
4.3 Wrists		
4.4 Arms		
4.5 Trunk		
4.6 Legs		
4.7 Feet		
5. Does the rash irritate you?		
6. Is the rash aggravated by anything, e.g. heat, water, etc.?		
7. Do the symptoms improve on days off or when on holiday?		
I, the undersigned, declare that the above information given is correct		
Panel member Signature:		
Date:		