

Managing COVID-19 in the workplace

Protecting your skin

Introduction

In order to prevent Covid-19 infection, workers are washing and sanitizing their hands more frequently than usual and may be wearing gloves, masks and other personal protective equipment (PPE) for prolonged periods of time.

These measures are vital for worker safety but they can cause several different skin conditions or worsen existing skin conditions such as eczema:

- » Frequent hand washing and prolonged use of occlusive gloves (such as latex or nitrile gloves) can cause irritation of the skin on the hands which leads to dryness, flakiness and cracking
- » Prolonged use of N95 or surgical masks can cause irritation which presents as itch and a rash on the face
- » Prolonged use of N95 masks in particular can cause acne under the mask
- » Less frequently, masks, gloves, gowns or soaps can cause allergic dermatitis (a type of eczema caused by allergy to one of the ingredients)

PPE	SKIN EFFECTS	POSSIBLE SOLUTIONS
 Gloves	Irritant contact dermatitis Allergic contact dermatitis Urticaria (hives)	Remove gloves when not necessary Wear cotton liner inside rubber gloves Moisturise frequently Consider alternative gloves (non-latex or non-nitrile) if rash does not resolve
 Masks, respirators and goggles	Acne Irritant contact dermatitis Allergic contact dermatitis Urticaria (hives/bommels) Pigmentation Erosions and pressure effects	Use a barrier cream such as a baby bum cream or Vaseline under the edges of the mask Consider alternative PPE e.g. a full-face respirator or face shield Ensure goggles are not too tight Referral to dermatology if not resolving
 Gowns	Irritant contact dermatitis Allergic contact dermatitis Itch Rash	Try to keep environment cool Wear a layer of clothing underneath the gown Ensure gown is not too tight May require shorter shifts to limit exposure





Fig 2. Irritant hand eczema

How to protect your hand skin from irritation

1. At work, use a 70% alcohol sanitizer instead of washing your hands if they are not visibly soiled.
2. Moisturise as frequently as possible during your work shift. Use a good quality, fragrance-free moisturizer such as cetomacrogol (e.g. Epimax, Epizone A, EpyDerm C) or emulsifying ointment.
3. At night, apply a thick layer of moisturiser, and then sleep with gloves or socks over your hands.
4. When you're not at work, avoid contact with irritant cleaning chemicals such as bleach (e.g. Jik) or ammoniated cleaning agents (e.g. Handy Andy). If you are doing housework, wear gloves with a cotton liner and try to keep your hands dry.
5. Avoid wearing disposable gloves when you're not at work or cleaning. Gloves can spread infection if they become contaminated, and they may worsen your risk of skin problems if you use them more than necessary.

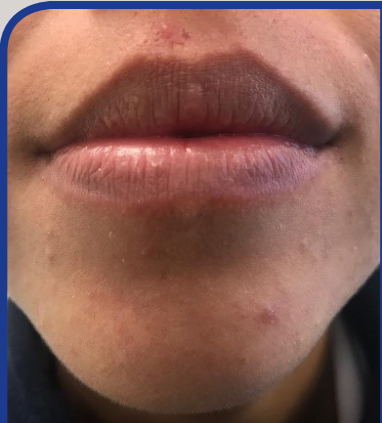


Fig 3. Acne in area under N95 mask

How to treat skin problems on your face

1. For acne (pimples) under the mask:
 - Wash your face as soon as you can after your shift ends
 - Use a benzoyl peroxide wash (e.g. Clearasil) in the areas affected by acne
 - Use a non-comedogenic moisturizer (look for the words 'non-comedogenic' on the packaging)
2. For irritation of your skin (itchy rash) under the mask:
 - Before wearing a mask, you can apply a barrier cream with zinc oxide (a baby bum cream) on the bridge of your nose and cheeks where the mask rests
 - Wash your face with a gentle facial cleanser after your shift
 - Moisturise your face after your shift with a fragrance-free moisturizer
 - If the itchy rash persists, you can use an over the counter hydrocortisone cream such as Mylocort for a few days (less than a week).

If your skin problems persist despite these measures, speak to your doctor or the PHC nurse at your clinic about additional treatment. Contact details for your nearest CHC can be found at <https://www.westerncape.gov.za/dept/health/facilities>. If your doctor or nurse would like more advice about managing the skin condition, they can contact the Groote Schuur Hospital Occupational Dermatology clinic at occmedclinic@uct.ac.za.

References

Foot CCI, Goon ATJ, Leow Y-H and Goh C-L. Adverse skin reactions to personal protective equipment against severe acute respiratory syndrome – a descriptive study in Singapore. *Contact Dermatitis*, 2006; 55: 291-294.

Gheisari M, Araghi F, Moravvej H, Tabary M, and Dadkhahfar S. Skin reactions to non-glove personal protective equipment: An emerging issue in the Covid-19 pandemic. *J Eur Acad Dermatol Venereol*, 2020; doi: 10.1111/jdv.16492.

Yan Y, Chen H, Chen L et al. Consensus of Chinese experts on protection of skin and mucous membrane barrier for health-care workers fighting against coronavirus disease 2019. *Dermatologic Therapy*, 2020; e13310. <https://doi.org/10.1111/dth.13310>



**Western Cape
Government**
Health



Preventing COVID-19 in your workplace
National hotline: 0800 029 999
Provincial hotline: 021 928 4102
WhatsApp "Hi" to 060 012 3456
Operating 24 hours a day.