Mask Wearing and Skin Sensitivity

The COVID-19 pandemic has led to an increased use of face protection such as surgical masks and eye protection among health workers (HWs). Prolonged wearing of masks and eye protection can cause adverse skin reactions such as acne, contact dermatitis and skin injuries from pressure effects, as well as exacerbating any underlying skin conditions. Some people may also notice redness and dryness where the mask touches their skin or experience contact dermatitis.

This guidance relates solely to considerations for surgical mask use to reduce skin irritation. Other aspects of PPE as part of standard and transmission-based precautions are not addressed in this document. This document should be used in conjunction with CEC Infection Prevention and Control Application of PPE During Covid-19.

Facial skin care to reduce adverse effects of wearing masks

- Use a mild skin cleanser (or soap substitute) or micellar water at the beginning and end of the day. Standard soap is alkaline and has been shown to change skin pH and can damage the skin barrier function.
- Moisturise regularly with simple formulations. Avoid fragranced products.
- Start with a less greasy lotion before progressing to a greasier cream if tolerated.
- Avoid greasy creams if you are prone to acne.
- Anti-ageing skin care products containing glycolic acids or retinoids can be very irritating, especially when the skin barrier is damaged or compromised. These products may also exacerbate skin sensitivity.
- Moisturise face before going to bed.

Mask Fitting

(For more information on appropriate use of masks refer to CEC Infection Prevention and Control Application of PPE During Covid-19)

- Perform hand hygiene before putting on your mask and after taking it off.
- Find the best fitting mask you can; and take time to fit your mask.
- Do not overtighten.
- Do not touch your mask, it may be contaminated by microorganisms.
- If you get skin irritation, try an alternative brand of mask if available.
Wearing a surgical mask

To help prevent or minimise skin problems while wearing a mask you should:

- **At home (before you leave to work or 1 to 2 hours before donning your surgical mask)**
  - Wash your face and hands well, dry thoroughly.
  - Apply moisturiser to face and hands, should be completely absorbed.

- **At work, before donning surgical mask, if experiencing any sensitivity issues**
  - Apply skin barrier wipe to dry face: forehead, nose, cheeks and ears.
  - Let it dry.

Don surgical mask

- Try to minimise time of wearing a mask as much as possible and give your skin regular breaks for at least 5 minutes (preferably every few hours).

- Find the best fitting mask you can.

- Remain hydrated for general skin health.

Reduce Friction

- If this is a problem, apply moisturising lotion at least 30 minutes before mask wearing to lubricate and reduce friction between the skin and surgical mask.

- Silicone protectors such as a no sting barrier film wipe will protect the skin and prevent friction.

- Barrier creams can also be used when wearing masks for an extended length of time, however these products tend to be greasy which may aggravate acne. Choose a lighter silicone-based product.

After Use

- Take your mask off carefully by holding the straps, it may be contaminated.

- Dispose of the mask in a bin.

- Perform hand hygiene after taking it off.

- Moisturise, especially at night if your skin feels irritated.

- Regularly inspect your skin for signs of redness/scaling.
Allergic Reactions are Rare

There are very few chemicals used in masks, and reactions are most likely irritation rather than allergy. Monitor areas that may contribute to a reaction:

- The glue strip along the nose.
- Nose bridge that contains a metal wire for moulding.
- Where the mask is in contact with cheeks.

What should you do if the mask irritates your skin?

Irritant contact dermatitis is nearly always the cause of mild redness and dryness from masks.

- Change the brand or type of a mask to a softer variety if available.
- Put a soft dressing or a thin silicone pad or a barrier wipe under the surgical mask where irritation occurs (not indicated when using a tight-fitting respirator).
- Increase moisturiser use, particularly at night when you might choose to use a greasier variety.
- If significant dermatitis persists, low-strength topical steroids (which are available over the counter) can be used.

If the irritation worsens, you may need to see a dermatologist. Report to your line manager or supervisor for risk assessment.

Pressure injuries

Pressure from the mask can cause skin indentation and minor injuries.

- Most indentation will resolve spontaneously.
- Apply compresses with three to four layers of gauze soaked in cold water/normal saline applied to the skin for around 20 minutes every 2 to 3 hours.
- Moisturisers can be applied to intact skin before and after wearing a surgical mask.
- Use of a silicone dressing (e.g. tape, thin pad) under your surgical mask, and behind your ears may protect your skin. These dressings conform to the face and are designed to reduce pain, shear and friction and are gentle on removal. The pad redistributes pressure.
- Hydrocolloids may also protect your skin but are not indicated when wearing tight fitting respirators. Care should be taken when removing the hydrocolloid to reduce trauma and monitor moisture build up.
- Avoid using hot water or ethanol or other irritants to clean your skin.
- If pressure from goggles is the main problem, switch to a visor.
• If there is skin breakdown secondary to pressure, use a medical grade silicone-based cream cloth to moisturise, protect and restore the skin when a dressing can’t be applied.

• Consult your doctor or dermatologist if there is further aggravation of the skin condition.

• Do not wear a mask whilst skin is broken and redeployment away from clinical care may be required until skin has recovered.

Reporting of Incidents
Staff should notify No Person incidents in ims+ when PPE has contributed to harm or near misses, such as masks with defective strings or ear loops.

Staff should notify as a Worker incident case in which PPE caused a skin rash, allergic reaction or other adverse effect to the person.

For health services that do not use ims+, staff should use their usual local process (e.g. IIMS) for reporting incidents with or harm caused by PPE.

References

• Keep your face healthy during COVID-19, Skin health institute, Occupational Dermatology research and education, The Australian College of Dermatologists.


• Gefen, A. (2020). Skin tears Medical Masks and Coronavirus. Wounds Manage Prevent, April 2020