Preventing PPE-related skin injuries.
Frequently asked questions.

Adequate fit and seal of filtering facepiece respirators (FFRs) – such as N95, FFP2, KN95, or equivalent respirators – with the skin are required to provide expected and effective exposure reduction. The proper seal helps ensure that the majority of inhaled air will travel through the respirator’s filter material. Anything that disrupts the fit and seal of the respirator will result in a reduction in the level of protection that the wearer can achieve with the respirator.

General tips for skin protection when wearing facial personal protective equipment (PPE) include choosing a skin protection product that:

- does not interfere with the seal of the respirator and/or fit of other facial PPE.
- does not transfer off your skin and onto the facial PPE
- protects skin from friction and moisture (waterproof)
- is breathable, so moisture can evaporate from your skin
- does not require removal or washing off
- has a low dermatitis potential
- always read and follow all respirator user instructions, including conducting a user seal check every time the respirator is donned (put on)

3M skin health products may help protect the skin and not interfere with the fit of the respirator including:

- 3M™ Cavilon™ No Sting Barrier Film
- 3M™ Cavilon™ Advanced Skin Protectant

Additionally, every time a respirator is donned, the wearer must conduct a user seal check. If a successful user seal check cannot be conducted, the wearer should not use the product with the respirator.

Other dressings, such as polyurethane foams and hydrocolloids, should not be used under the area where the respirator seals to the face as they are expected to interfere with the fit of the respirator.
Can I use ointments (e.g. petroleum jelly) to protect my skin under a 3M respirator?

3M does not recommend the use of petroleum jelly (also known as petrolatum), ointments, or thick creams because of the potential for interference with the seal of any of 3M’s respirators. Petroleum jelly may cause the respirator to slip around on the face.

Can I use 3M™ Cavilon™ No Sting Barrier Film to protect my skin under a 3M respirator?

Yes, Cavilon No Sting Barrier Film will help protect intact skin from moisture and friction and, when used properly, would not be expected to interfere with the fit of 3M respirators.

- The 1ml wipe or 1ml wand applicator should be used
- The product should be applied to clean, dry skin over any area where the respirator is likely to cause friction and/or where moisture may collect, e.g. the bridge of the nose, cheeks, tops of ears, or forehead
- It can be used on the face, but should not be used in the eye, or on the eyelid
- The product should be allowed to dry completely (at least 90 seconds) before the respirator is donned (put on). This allows fluid to dry on the skin and vapours to dissipate
- Upon application, an odour may be noted as the solvent ingredient evaporates. The odour will disappear as the product dries
- Always read and follow all respirator user instructions, including conducting a use seal check every time the respirator is donned (put on)
- We recommend starting with a once daily application. If the user experiences buildup of the product, decrease the frequency of application, e.g. 3 times/week
- Cavilon No Sting Barrier Film does not require removal but can be removed with a medical grade adhesive remover
- Every time a respirator is donned, the wearer must conduct a user seal check. If a successful user seal check cannot be conducted, the wearer should not use the product with the respirator

If my skin is already damaged, what type of skin protection product can I use under my 3M respirator?

3M™ Cavilon™ Advanced Skin Protectant* can be used to help protect damaged skin, e.g. abrasions from friction or other superficial skin damage

- The 0.7ml applicator is recommended
- It can be used on the face, but should not be applied in or near the eye
- The product should be applied in a thin layer
- The product should be allowed to dry completely (at least 90 seconds) before the respirator is donned (put on). This allows fluid to dry on the skin and vapours to dissipate.
- Upon application, an odour may be noted as the solvent ingredient evaporates. The odour will disappear as the product dries.
- Always read and follow all respirator user instructions, including conducting a use seal check every time the respirator is donned (put on)
- We recommend starting with a 2–3 times per week application. If the user notes buildup of the product, decrease the frequency of application, e.g. 1–2 times/week
- Cavilon Advanced Skin Protectant does not require removal but can be removed with a medical adhesive remover containing hexamethyldisiloxane or a silicone
- Every time a respirator is donned, the wearer must conduct a user seal check. If a successful user seal check cannot be conducted, the wearer should not use the product with the respirator.
Can I use 3M™ Cavilon™ Advanced Skin Protectant in the larger 2.7ml applicator?

The 0.7 ml” is preferred. If the 2.7 ml” applicator is used, the following steps are recommended to minimise fluid dripping or pooling during application:

- Open and retain package nearby
- Activate the applicator and allow the foam to fill
- Press the foam applicator against the white package flap to express excess fluid
- Then, apply as indicated

Will the use of Cavilon No Sting Barrier Film or Cavilon Advanced Skin Protectant affect decontamination?

Once completely dry on the skin, Cavilon No Sting Barrier Film or Cavilon Advanced Skin Protectant is not expected to transfer off the skin onto respirators. However, 3M has not tested respirators for the presence of residual barrier film or skin protectant, or the impact that this material could have on decontamination processes.

If my skin is already damaged, can I use a dressing under 3M respirators?

3M does not recommend use of dressings such as polyurethane foams and hydrocolloids. These types of dressings can raise the respirator off the cheeks and nose and may interfere with the intended seal and exposure reduction associated with the respirator.

- If use of a dressing or bandage is desired, select the thinnest dressing available (e.g. 3M™ Tegaderm™ Transparent Film Dressing) and perform fit testing, as well as a user seal check every time the respirator is donned (put on)
  - Fit testing should be conducted following local regulatory requirements or recognised fit test protocol where fit testing is not required by local regulation
  - For those respirators with adjustable headbands, it is important to not over-tighten 3M respirators as this can interfere with the seal against the skin and increase the risk of pressure-related skin damage

Note: Dressings or film barriers can be used to help prevent or cover areas of skin damage under equipment, such as face shields, where fit and seal is not critical to the function of the protective equipment.

*Please refer to the product inserts (instructions for use) for Cavilon No Sting Barrier Film for complete indications and instructions for use, contraindications, precautions, and warnings.

**Single use only.

1 No effect on respirator fit was observed in studies comparing the fit of filtering facepiece respirators with and without these Cavilon products applied to skin as shown in the application guide. If there is any doubt or concern regarding the impact of these products on the respirator’s seal, employees should be fit tested with these products applied to the skin as they would be during respirator wear.