

# Barrier Products for use in adults in Primary Care for the prevention of moisture associated skin damage

# **Key Messages**

- Barrier products have a role in preventing and managing skin damage due to moisture and irritants. This can be due to:
  - Urinary and/or faecal incontinence
  - Chronic venous leg ulcers and other wounds
  - Perspiration in skin folds
  - Presence of a stoma (see below).
- Patient pathways (NICE) that incorporate appropriate use of barrier products, along with other interventions, can support clinicians in managing problems such as incontinence associated moisture lesions.
- Do not use barrier products in isolation as sole protection against contact with irritants, but rather as part of a strategy that includes risk assessment and an appraisal of the underlying issue.
- Stoma: This fact sheet does not cover products for stoma related skin damage. Seek advice and consider referral to a specialist Stoma nurse / Continence nurse / Tissue Viability Nurse (TVN) where barrier products are needed. See also SWL stoma care guidance.
- Barrier products are available in a variety of forms such as ointments, creams and films therefore
  it is important to follow the individual manufacturer's instructions.
- Prescriptions should include clear instructions instead of 'as directed'.
- Choose a barrier product that does not reduce the effectiveness of other interventions. Some
  products (particularly oil-based) can impede dressing or tape adhesion and interfere with the
  absorption capability of incontinence pads.
- Ensure that there is a process in place for identifying and investigating prescriptions for nonformulary barrier products or excessive quantities.

#### Why and how moisture and irritants cause skin damage?

Healthy skin provides a barrier to moisture, harmful substances, and environmental irritants. The skin's outermost layer, the stratum corneum, can be damaged by prolonged exposure to moisture. Skin damage following exposure to excessive moisture, caused by urine, faeces, and wound exudate, is not an uncommon problem. Using appropriate measures to protect vulnerable skin and prevent skin breakdown is an essential element of patient care. For many years, barrier products have been used in an attempt to protect the skin from moisture damage.

#### **NICE Guidance**

NICE discusses the use of barrier creams in the clinical guideline 'Pressure ulcers: prevention and management' (CG179)<sup>3</sup>. NICE recommends a skin assessment is undertaken for those patients identified at high risk of developing a pressure ulcer and to start appropriate preventative actions, if required. NICE states under section 1.1.18 'Consider using a barrier preparation to prevent skin damage in adults who are at high risk of developing a moisture lesion or incontinence-associated dermatitis, as identified by skin assessment (such as those with incontinence, oedema, dry or inflamed skin).'

#### **Choice of formulation**

- In most cases first line is either a cream or ointment as they are the most cost-effective unless the skin is broken. Medi-Derma S® and Cutimed® PROTECT are water-based products and are therefore easily removed.
- **Barrier films** should only be used if the skin is broken or where the area is sensitive to touch or when using an adhesive dressing.
- **Skin cleansers:** In less severe cases any soap free cleansers are effective. Avoid using soap substitutes or soap and water as they can change the pH of the skin from acidic to alkaline which, in turn, can lead to dryness and cracking<sup>2</sup>. However, for incontinent patients with very severe cases of moisture associated skin damage, it may be necessary to use both a foam cleanser and a barrier cream / film, refer to **Table 1**.

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## Categories of barrier products<sup>4</sup>

#### **Barrier creams and ointments**

- Available in a sachet or tube, depending on the quantity required.
- Barrier creams are water-based containing dimethicone, lanolin or zinc oxide. They may be breathable or occlusive (sealing), and can moisturise, as well as repel fluid and keep air out.
- Ointments are thicker and more occlusive compared to creams, and harder to apply. Therefore, care should be taken when applying ointments to fragile skin to not drag the skin.

#### **Barrier Films**

- Available as sprays, wipes and foam applicators containing silicone polymers, such as dimethicone, to form a dry, water-repellent, transparent barrier, therefore can be applied to broken or irritated skin without stinging.
- Should be allowed to completely dry, to prevent pads or clothing sticking to the film.
- Applying too many layers can make the area feel stiff and cause cracking allowing moisture to penetrate.
- Does not affect adhesion therefore useful with adhesive dressings or around stoma sites.

## Advice to prescribers

- Patient factors to consider before selecting a barrier product include:
  - If the skin is intact or broken
  - If skin infection is present barrier products may be contraindicated
  - o If incontinence pads are being used
  - If the person has any sensitivities to any of the ingredients.
- When prescribing barrier products ensure there are clear directions for use.
- On their own, barrier products form a protective barrier between the skin and irritants. They do not moisturise to any significant extent and do not protect against pressure damage<sup>2</sup>.
- Further advice and information may be sought from the tissue viability service for each borough.

Less suitable products

- Zinc oxide products, e.g., Sudocrem<sup>®</sup>, are not recommended to be used as barrier products as:
  - They are greasy in nature and can impede dressing or tape adhesion.
  - They may interfere with the absorption capability of incontinence pads.
  - Ointment does not allow visualisation of the underlying skin<sup>1</sup>.
- Sudocrem<sup>®</sup> is not advocated as a barrier product<sup>5</sup>. It is an antiseptic healing cream designed to treat skin irritations such as rashes, eczema, and sunburn.
- Conotrane® is a liquid paraffin-based product and may be difficult to wash off causing more discomfort and increasing the tenderness of the skin. Build-up of product in fabric is a fire-hazard. Contains cetostearyl alcohol which may cause local skin reactions (e.g., contact dermatitis)<sup>6</sup>.

## **Good Practice tips for care home staff**

- Barrier products should only be used when needed. Regular use may only be required in certain circumstances, e.g., for incontinent patients.
- Ensure the skin is thoroughly cleansed using the usual cleansing processes before any barrier product is applied.
- Do not use on skin where an infection is present, or if there is a known allergic sensitivity to the ingredients.
- Morbidly obese patients may not need a barrier product. Consider other causes such as a fungal infection.
- For moisture-related lesions, the use of a barrier product and regular skin care will have an effect within days.
- If the affected area is **not improving within a week**, there may be other causes, e.g., an infection. To discuss further management, contact your TVN for advice. Some signs that the area is getting worse include increased broken skin, redness and or increasing exudate.
- Check stock cupboards and resident rooms prior to ordering further supplies and only order what is required.
- Please note the potential for fire hazard risk for barrier creams / ointments, refer to the MHRA 2018 alert and associated safety guidance.

#### **Application**

- ✓ Barrier products are suitable for use on both broken and unbroken skin.
- ✓ Follow the directions on the dispensing label. If not clear, seek clarification from the prescriber.
- ✓ Follow the manufacturer's instructions on application in conjunction with the individual care plans and assess regularly.
- ✓ Reminder: Always check the expiry date before application and follow manufacturer's instructions once opened.
- ✓ Only a small (pea-sized) amount of barrier product should be applied as a thin layer to clean, dry skin. Applying too much can affect the adhesion of dressings.
- ✓ At each episode of skin care, the barrier product should be removed to avoid a build-up as this can result in further skin damage. See above information for 'Skin cleansers'.

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#### **Table 1 - Preferred Barrier Products**

The aim of this preferred product list is to guide the clinician in their choice of barrier product so that optimum skin protection can be achieved whilst using cost effective treatment options. The manufacturer's instructions must be read before applying in conjunction with the information in the table below.

Barrier Creams					
Product name	Cost*	Rationale	Other information		
First Line: Medi Derma-S® Barrier Cream	28g - £2.98 90g - £5.95	<ul> <li>Can be applied to both damaged and intact skin.</li> <li>Similar to Cavilon™ durable barrier cream.</li> <li>Does not contain alcohol, fragrance, latex and parabens and is free from phthalates.</li> <li>Product benefits and features can be found here.</li> <li>Administration: follow manufacturer's instructions https://www.medicareplus.co.uk/resources/details/medi-dermas-cream-and-filminstructions-for-use-guide</li> </ul>	Fire hazard risk: A statement from the manufacturer regarding fire hazard risk as per the MHRA 2018 guidance can be found here <a href="https://www.medicareplus.co.uk/resource-pages/fire-safety-hazard-company-statement">https://www.medicareplus.co.uk/resource-pages/fire-safety-hazard-company-statement</a> Safety data sheet can be found <a href="here">here</a> .     Use of Medi Derma® Products with Oxygen Therapy, see: <a href="https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy">https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy</a>		
Second Line: Cutimed® PROTECT Cream	28g - £3.41 90g - £6.49	<ul> <li>Can be applied to both damaged and intact skin.</li> <li>Product benefits and features can be found here</li> <li>Product information: refer to Patient Information Leaflet (PIL) in the product packing.</li> </ul>	Fire hazard risk: No formal risk assessment of the Emollients MHRA 2018 guidance has been undertaken and according to the manufacturer, since there is no flammable component, we would not consider Cutimed® PROTECT Cream as a product of concern. The Product Safety Data Sheet was updated in 2021 (after the MHRA guidance) and re-confirms lack of flammability risk. (Email correspondence from Essity (BSN Medical) on 3 <sup>rd</sup> February 2022)  However, we would refer healthcare professionals to the latest Emollients MHRA 2018 guidance with the potential of paraffin and non-paraffin containing emollients and fire risk hazard.  The Product Safety Data Sheet is unavailable electronically but can be requested by contacting BSN medical Limited via contracts.uk@essity.com.		
Barrier Ointments					
Product name	Cost*	Rationale	Other information		
First Line: Medi Derma-Pro® Skin Protectant Ointment 115g	115g - £8.50	Similar to Proshield plus skin protectant.     Product benefits and features can be found here     Administration: follow manufacturer's instructions https://www.medicareplus.co.uk/resources/details/medi-derma-pro-ointment-and-cleanserinstructions-for-use-guide	Fire hazard risk: A statement from the manufacturer regarding fire hazard risk as per the MHRA 2018 guidance can be found here <a href="https://www.medicareplus.co.uk/resource-pages/fire-safety-hazard-company-statement">https://www.medicareplus.co.uk/resource-pages/fire-safety-hazard-company-statement</a> Safety data sheet can be found <a href="here">here</a> .     Use of Medi Derma Products with Oxygen Therapy, see: <a href="https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy">https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy</a>		

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Barrier Films				
Product name	Cost*	Rationale	Other information	
First Line: Medi Derma-S® Non Sting Barrier Film Pump Spray	30ml - £5.35	<ul> <li>Long-lasting protection – resilient, hydrophobic protective barrier (up to 72 hours) from moisture associated skin damage.</li> <li>Can be applied to both damaged and intact skin.</li> <li>Product benefits and features can be found here</li> <li>Administration: follow manufacturer's instructions <a href="https://www.medicareplus.co.uk/resources/details/medi-derma-s-cream-and-filminstructions-for-use-guide">https://www.medicareplus.co.uk/resources/details/medi-derma-s-cream-and-filminstructions-for-use-guide</a></li> </ul>	<ul> <li>Highly flammable.</li> <li>Does not contain alcohol, fragrance, latex and parabens and is free from phthalates.</li> <li>Safety data sheet can be found here.</li> <li>Use of Medi Derma Products with Oxygen Therapy, see: https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy</li> </ul>	
Skin Cleansers				
Product name	Cost*	Rationale	Other information	
First Line: Medi Derma- Pro® – Foam & Spray Incontinence Cleanser	250ml - £5.95	<ul> <li>Can be applied to damaged and intact skin.</li> <li>Effectively removes even dried-on bodily fluids.</li> <li>pH-balanced.</li> <li>No-rinse formulation minimises skin rubbing and potential friction damage.</li> <li>Product benefits and features can be found here.</li> <li>Administration: follow manufacturer's instructions https://www.medicareplus.co.uk/resources/details/medi-derma-pro-ointment-and-cleanserinstructions-for-use-guide</li> </ul>	<ul> <li>Does not contain alcohol, fragrance, latex, and parabens and is free from phthalates.</li> <li>Safety data sheet can be found here.</li> <li>Use of Medi Derma Products with Oxygen Therapy, see: https://www.medicareplus.co.uk/resource-pages/medi-derma-products-use-with-oxygen-therapy</li> </ul>	

#### \*Costs taken from Drug Tariff April 2022

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#### References:

- 1. Barrier products PrescQIPP, Bulletin 181, 2.0, April 2017
- 2. Lloyd Jones M (2013) Wound Essentials: Barrier products and their purpose. Volume 8 No 1 (48-54)
- 3. Pressure ulcers: prevention and management Clinical guideline [CG179] Published date: 23 April 2014 <a href="https://www.nice.org.uk/guidance/cg179/chapter/1-Recommendations#prevention-adults">https://www.nice.org.uk/guidance/cg179/chapter/1-Recommendations#prevention-adults</a>
- 4. Fletcher J (2015) Wound Essentials: Appropriate selection and use of barrier creams and films. Volume 10 No 2 (64-68) https://www.wounds-uk.com/download/resource/1288
- 5. Sudocrem® Antiseptic Healing Cream Summary of Product Characteristics
- 6. Conotrane® Summary of Product Characteristics

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