

## DET Score

Discolouration  
Erosion  
Tissue overgrowth

### How to calculate the DET Score

#### Step 1:

Examine the peristomal skin (not the stoma mucosa) and evaluate the skin based on the descriptions in each of the three domains (discolouration, erosion and tissue overgrowth).

Maximum points in each domain:

- 3 points for the size of the affected area
- 2 points for the severity

#### Step 2:

Assess the **size of the area affected** in each of the three domains and score based on the key (right).

Assess the **severity** in each of the three domains using the definitions and photographs as a guide.

- If there is no discolouration then the skin is healthy – the area score is 0 and the total DET score must be 0.
- If there is discolouration, assess the area affected and the severity within this domain and in the other two domains.
- If the area score is 0 in either the erosion or tissue overgrowth domains then the severity score within that domain will automatically be 0 as well.

For each of the three domains calculate the subscore.

#### Step 3:

Calculating the Total Score

- Calculate the Total Score (maximum 15) by adding all of the subscores from each domain together.

Please go through the descriptions for each score in the scoring system every time you perform an assessment. The total DET score gives information on overall severity, while the subscores for each domain help define the skin problem.

**Note:** In a situation where a large area of skin with low severity includes a small area with a high severity, the highest severity should always be scored even though the area is small.

Area* affected	Score
Unaffected	0
<25%	1
25-50%	2
>50%	3

\*Area is defined as the peristomal skin area that is covered by the adhesive

### Domain 1: Discolouration

Area of Discolouration (including eroded areas and tissue overgrowth)

Normal skin (absence of any visible change and damage to epidermis)

If the **Area of Discolouration** score is 0, the score for Domain 1 must be 0 + 0. The skin is normal and the **Total Score** must be 0

**Score = 0**

Less than 25% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 1**

Between 25% and 50% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 2**

More than 50% of the skin covered by the adhesive is affected

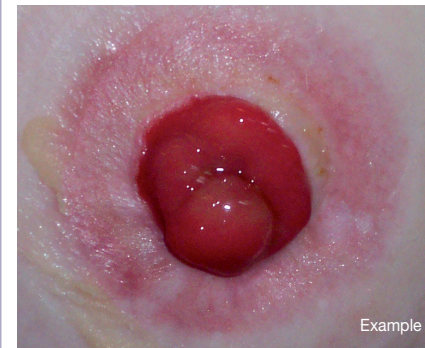
**Please assess severity**

**Score = 3**

### Domain 1: Discolouration

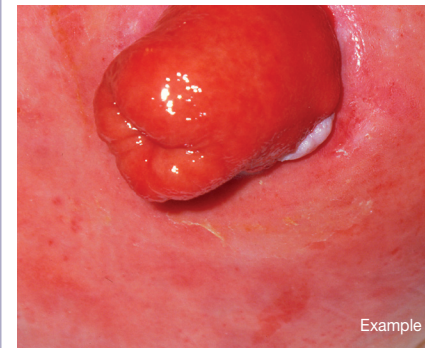
Severity of Discolouration

Discolouration of the peristomal skin



**Score = 1**

Discolouration of the peristomal skin with complications (pain, shiny, indurated, hot, itching, burning)



**Score = 2**

### Domain 2: Erosion

Area of Erosion / Ulceration

No Erosion

If the **Area of Erosion** score is 0, the score for **Domain 2** must be 0 + 0

**Score = 0**

Less than 25% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 1**

Between 25% and 50% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 2**

More than 50% of the skin covered by the adhesive is affected

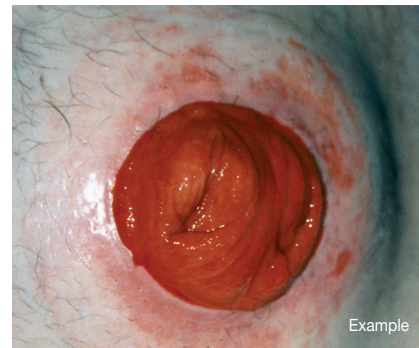
**Please assess severity**

**Score = 3**

### Domain 2: Erosion

Severity of Erosion / Ulceration

Damage to the upper level of the skin



**Score = 1**

Damage to the lower layers of the skin with complications (moisture, bleeding or ulceration)



**Score = 2**

### Domain 3: Tissue Overgrowth\*

Area of Tissue Overgrowth

\*Tissue Overgrowth is defined as raised tissue above skin level including hyperplasia, hypergranulation or keratinisation

No Tissue Overgrowth

If the **Area of Tissue Overgrowth** score is 0, the score for **Domain 3** must be 0 + 0

**Score = 0**

Less than 25% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 1**

Between 25% and 50% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 2**

More than 50% of the skin covered by the adhesive is affected

**Please assess severity**

**Score = 3**

### Domain 3: Tissue Overgrowth

Severity of Tissue Overgrowth

Raised tissue above skin level



**Score = 1**

Raised tissue above skin level with complications (bleeding, pain, moisture)



**Score = 2**

Total Score

Developed in cooperation with the Coloplast Global Advisory Board



# AIM\* Guide for Peristomal Skin Care

## How to use the Ostomy Skin Tool

The flowchart below illustrates how to use this tool.

### Step 1:

Assess the peristomal skin using the DET Score (see details on reverse side).

### Step 2:

If the skin is healthy (DET = 0), continue with the usual care and monitoring routine. Re-evaluate the skin as necessary.

### Step 3:

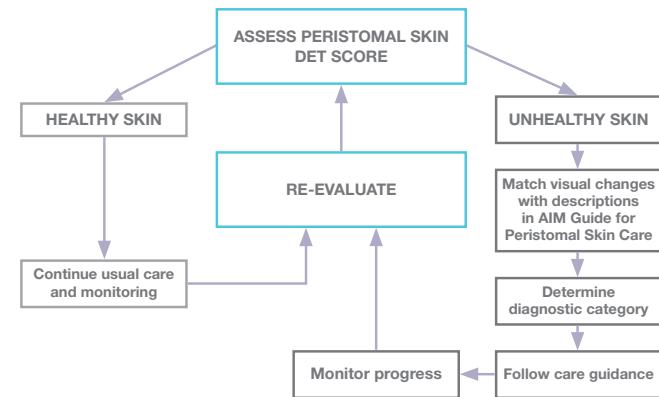
a) If the skin appears unhealthy, use the visual changes observed during the DET scoring process and match with the descriptions in the top horizontal row of the AIM Guide for Peristomal Skin Care.

b) This will allow the most appropriate diagnosis category or categories to be determined as there may be more than one cause. Skin disorders are classified into five diagnostic categories: **irritant contact dermatitis** (which is the most common); **allergic dermatitis**; **mechanical trauma**; **infection-related**; or **disease-related**.

c) Once a diagnosis category (or categories) has been chosen, ask the patient the questions in Section 2 “Assess Cause” to establish the most likely cause of the skin complication. It is important to ask **all** of the questions since several may be relevant to the same patient. Based on the answers, follow the recommendations for care and when necessary refer for further evaluation and treatment.

[Note: these are general recommendations for care and you should follow the regulations and guidelines of your own country or institution if there are differences.]

d) Continue monitoring and re-evaluating to check that the peristomal skin condition is improving.



## CHEMICAL IRRITATION

### 1. VISUAL SYMPTOMS

#### IRRITANT CONTACT DERMATITIS

- Red or discoloured skin and/or
- Loss of epidermis and/or
- Moist skin surface and/or
- Bleeding skin surface and/or
- Hyperplasia (wart-like papules, nodules, white

- grey or reddish-brown hyperkeratosis) and/or
- Ulcer/wound involving all three skin layers
- Maceration (moist, white-coloured softening of the skin)

### 2. ASSESS CAUSE

Does the construction of the stoma cause the skin to be exposed to faeces, urine or other secretions?

YES

- Use a convex appliance along with accessories such as a paste, barrier ring or belt
- Surgical revision may be required
- Consider irrigation for adults with a colostomy

NO

Is the hole in the adhesive a different size than the stoma, allowing the skin to be exposed to faeces, urine or other secretions?

YES

- Assess the appliance fitting technique. Consider using a mouldable or pre-cut appliance so that the adhesive fits exactly to the diameter of the stoma
- If the stoma diameter tends to vary, use a barrier ring, paste or mouldable appliance

NO

On removal, is the adhesive eroded from exposure to faeces, urine or other secretions?

YES

- Change the appliance more frequently
- Observe the erosion pattern on the adhesive to determine where leakage occurs
- Use adhesive and accessories with an extended wear time
- Use a protective skin product such as barrier film
- If there is a high volume of watery output, provide dietary advice and/or medication to thicken it (may require referral)

NO

Does the appliance inadequately adhere to the skin allowing exposure to faeces, urine or other secretions?

YES

- Ensure skin is completely dry before applying adhesive
- For moist skin from erosion, use products to dry and heal the skin (e.g. aloe vera products, ostomy powder, gentian violet), topical sucralfate and accessories with high absorbency
- For excessive perspiration, use a protective skin product, paste, barrier ring or a different type of adhesive
- For uneven skin, use accessories to provide a smooth surface, or consider a more flexible adhesive or belt. Consider a convex product for creased/folded peristomal areas
- For tissue overgrowth, treat with silver nitrate or a steroid (non-greasy formulation) according to local regulations/guidelines (may require referral)
- Consider irrigation for adults with a colostomy

NO

Does the person use soaps, solvents, adhesive removers or other products containing chemicals in the peristomal area?

YES

- Assess cleansing technique and provide skin care guidance as the products listed can cause skin irritation

NO

Does the person complain of pain, burning or itching in the area?

YES

- Consider changing the appliance and accessories
- Consider possible allergic reaction (see Allergic Dermatitis)
- Consider the possibility of a secondary infection

### 1. VISUAL SYMPTOMS

#### ALLERGIC DERMATITIS

- Red, irritated skin corresponding to the shape of the adhesive contact surface

### 2. ASSESS CAUSE

Does the person suffer from allergies and have papules, plaques, oedema and/or excoriation on the skin corresponding to the size and shape of the appliance or product being used?

YES

- Avoid using appliances or accessories containing allergenic materials
- Consider patch testing to identify an unknown allergy – apply a small amount of a product to the skin on the opposite side of the abdomen from the stoma and observe any reaction. If the allergen is not identified, consider laboratory testing
- Use a protective skin product such as barrier film\*\*
- Consider using a steroid (non-greasy formulation) according to local regulations/guidelines (may require referral)

NO

Is the peristomal skin disorder associated with a change in appliance, skin care product or medication?

YES

- Stop using all accessories, use only water to clean the skin and reassess after a few days
- Assess the affected skin to determine if there is a pattern that matches any part of the adhesive
- Consider patch testing to identify an unknown allergy – apply a small amount of a product to the skin on the opposite side of the abdomen from the stoma and observe any reaction. If the allergen is not identified, consider laboratory testing
- Consider oral or topical antihistamines

NO

Does the person have a systemic skin rash visible on other areas of the body?

YES

- Determine whether any foods – particularly new foods introduced to the diet – have the potential to cause an allergy
- If a new medication is being used, seek medical advice
- Consider laboratory testing to identify the causative allergen

NO

## MECHANICAL TRAUMA

### 1. VISUAL SYMPTOMS

- Discolouration and/or
- Loss of epidermis - full thickness tissue loss can be seen and/or
- Moist skin surface and/or

- Bleeding skin surface and/or
- Pain
- Lesions have irregular borders

### 2. ASSESS CAUSE

Is there a risk of friction or pressure (e.g. from convex appliance, belt, clothing or obesity)?

YES

- If a belt is used, assess whether it is necessary
- Use a shallower or softer convex appliance or an adhesive with an extra seal (e.g. barrier ring)
- Assess and modify where possible other factors that may cause friction or pressure
- Provide education on monitoring for symptoms of friction and pressure
- Provide advice on lifestyle modification
- Consider irrigation for adults with colostomies

NO

Has friction caused bleeding, lesions and tearing around the edges of the adhesive?

YES

- Consider changing to a different adhesive or cut the adhesive to a different shape
- Consider changing the position of the adhesive at each appliance change
- Consider using a protective skin product, such as barrier film\*\*

NO

Is the adhesive removal or cleansing technique too rough?

YES

- Assess the adhesive removal technique. Use an adhesive remover if necessary\*\*
- Assess cleansing technique and cleansing products used

NO

Is the adhesive changed too frequently?

YES

- Switch to extended wear appliances and accessories
- Use accessories that will prolong adhesive properties (e.g. paste, barrier film)\*\*
- Use a less sticky adhesive

NO

Is the skin shaved too frequently?

YES

- Assess shaving technique and only shave when necessary
- If hair growth is excessive, consider laser treatment
- Consider applying povidone-iodine
- If folliculitis has developed, please refer to the INFECTION RELATED care guidance

## DISEASE RELATED

### 1. VISUAL SYMPTOMS

- Solitary or multiple lesions
- Lesions indurated or ulcerated
- Red to purplish discolouration
- Necrosis with undermined ulcer edges

- Bleeding or purulent exudate
- Erythematous, thick, silvery-white, scaly plaques
- Fistula
- Köbners phenomenon (consequence of psoriasis)

### 2. ASSESS CAUSE

Is the skin red and itchy with moisture exuding from raised areas or are there areas of patchy dry skin?

YES

- Cause: possible eczema/atopic dermatitis**
- Use a steroid (non-greasy formulation) on the affected area according to local regulations/guidelines (may require referral)
- Ensure steroid is completely absorbed before attaching the appliance
- If skin is weeping, consider using appliances and accessories with high absorbency

NO

Does the skin have irregular, raised, thick, silvery-white scaly plaques or is there a history of psoriasis?

YES

- Cause: possible psoriasis**
- Use a steroid (non-greasy formulation) on the affected area according to local regulations/guidelines (may require referral)
- Assess cleansing technique
- Consider using a soft, flexible appliance and accessories

NO

Does the skin have a bluish-purple hue and/or obvious dilation of the veins?

YES

- Cause: possible caput medusa (peristomal varices)**
- Use gentle cleansing technique to prevent bleeding
- Change appliance less frequently and use a soft, flexible one-piece appliance without a belt (avoid two-piece appliances) to relieve any pressure
- Assess stomal varices at the mucocutaneous junction, particularly for signs of haemorrhage
- If haemorrhage occurs, apply direct pressure and cauterise using silver nitrate or a topical dressing designed to promote haemostasis. If severe, refer for further treatment
- Refer for treatment of underlying disease

NO

Is the skin ulcerated with irregular, painful, raised purple margins and/or does the patient have a history of Crohn's disease, ulcerative colitis or rheumatoid arthritis?

YES

- Cause: possible pyoderma gangrenosum**
- Use local (non-greasy formulation) or systemic steroids, or immunosuppressive drugs (e.g. tacrolimus) according to local regulations/guidelines (may require referral)
- Change appliance less frequently and consider using a soft, flexible appliance without a belt
- Provide pain and ulcer management
- Appliance may need to be refitted once the skin has healed due to full-thickness tissue destruction or an uneven healed area
- Refer for treatment of underlying disease

NO

Does the skin have red, oedematous, palpable nodules or cauliflower-like lesions?

YES

- Cause: possible benign or malignant lesions**
- For dry lesions, consider using a soft, flexible appliance
- If discharge is present, consider an appliance with a drainable pouch
- Ensure the adhesive is properly cut to fit around the stoma and draining lesion to collect all discharge in the pouch
- Consider odour-eliminating products
- May require more frequent monitoring if growth distorts peristomal area or changes size or shape of stoma
- Refer for treatment of underlying disease

## INFECTION RELATED

### 1. VISUAL SYMPTOMS

- Discoloured (redness, hyperpigmentation)
- Red papules with a white top
- Maceration (moist, white-coloured softening of skin); may include satellite lesions at the periphery

- Papules, pustules (folliculitis)
- Swelling / oedema

### 2. ASSESS CAUSE

Are there red pustules around the hair follicles that progress to papules and then crusted reddened areas?

YES

- Cause: possible folliculitis**
- Assess shaving technique and reduce frequency of shaving
- Remove appliance using adhesive removers
- Consider cleansing peristomal skin with a mild or antibacterial soap until cured
- Consider applying povidone-iodine or gentian violet according to local regulations/guidelines
- For deep/severe/persistent folliculitis – which can lead to cellulitis or abscess formation – consider oral antibiotics according to local regulations/guidelines (may require referral)

NO

Does the skin have a red, raised, pruritic rash (localised or generalised) with satellite pustules and maceration?

YES

- Cause: possible fungal infection**
- Determine potential causes of infection such as leakage from appliance
- Cleanse skin gently and dry completely
- Consider antifungal powder/spray (e.g. containing miconazole) or silver powder (rub into area and brush off excess)
- Consider applying povidone-iodine or gentian violet according to local regulations/guidelines
- Consider an accessory or appliance with increased absorbency
- Assess frequency of appliance changes, either change less frequently by using an extended wear appliance to ensure optimal skin protection or change daily to allow treatments to be applied
- Treat fungal infection elsewhere in body according to local regulations/guidelines (may require referral)

NO

Is the skin swollen, red and painful?

YES

- Cause: possible abscess**
- For a fluid-filled abscess allow collection to drain
- If abscess wound is deep, packing may be required to protect the wound from faeces, urine or other secretions, and prevent healing at the surface before the base has healed
- If systemic symptoms are present, use antibiotics according to local regulations/guidelines (may require referral)

\*Assessment, Intervention and Monitoring

\*\*This is not recommended in premature babies

Note: All information is based where possible on the best available evidence.