



3M Medical Solutions Division

# Pressure ulcer (PU) category guide

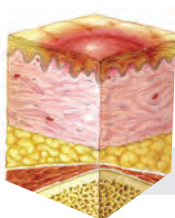


## Category 1 pressure ulcer

### Nonblanchable erythema

Intact skin with non-blanchable redness of a localised area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area.

The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Category 1 may be difficult to detect in individuals with dark skin tones. May indicate 'at risk' individuals (a heralding sign of risk).<sup>1</sup>



**Category 1**



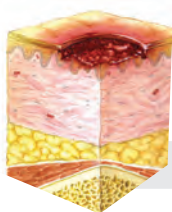
## Category 2 pressure ulcer

### Partial thickness skin loss

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum filled blister.

Presents as a shiny or dry shallow ulcer without slough or bruising.\* This Category should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.<sup>1</sup>

\*Bruising indicates suspected deep tissue injury.



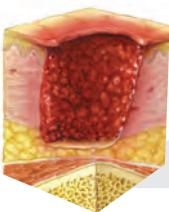
**Category 2**



## Category 3 pressure ulcer

### Full thickness skin loss

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling. The depth of a Category 3 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and Category 3 pressure ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Category 3 pressure ulcers. Bone/tendon is not visible or directly palpable.<sup>1</sup>



**Category 3**

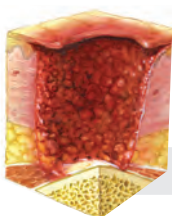


## Category 4 pressure ulcer

### Full thickness tissue loss

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.

The depth of a Category 4 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Category 4 ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.<sup>1</sup>



**Category 4**



## Unstageable

### Obscured full thickness skin and tissue loss

Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore Category, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as 'the body's natural (biological) cover' and should not be removed.<sup>1</sup>



**Unstageable**

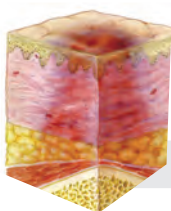


## Deep tissue injury (DTI)

Persistent non-blanchable deep red, maroon, or purple discoloration

Purple or maroon localised area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

Deep tissue injury may be difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered by thin eschar. Evolution may be rapid exposing additional layers of tissue even with optimal treatment.<sup>1</sup>



**Deep tissue injury**



## Medical device related pressure ulcer<sup>1</sup>

Pressure ulcers that result from the use of devices designed and applied for diagnostic or therapeutic purposes.<sup>2</sup>

Device-related pressure ulcers should be reported and identified by the notation of (d) after the report – e.g. Category 2 PU (d) – to allow their accurate measurement.<sup>3</sup>

# Distinguishing between MASD (Moisture Associated Skin Damage) and pressure ulcers

A pressure ulcer is localised damage to the skin and/or underlying tissue, usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear). The damage can be present as intact skin or an open ulcer and may be painful.<sup>3</sup>

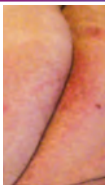

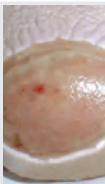
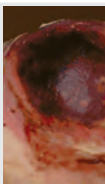



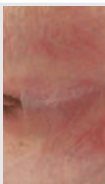



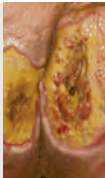
MASD has been defined as, 'inflammation and erosion of the skin caused by prolonged exposure to various sources of moisture, including urine or stool, perspiration, wound exudate, mucus, or saliva'.<sup>4</sup>

Pressure ulcers and moisture associated skin damage (such as IAD – Incontinence Associated Dermatitis) are clinically and pathologically different conditions, but recent evidence suggests an association between IAD and pressure ulcers.<sup>5</sup>

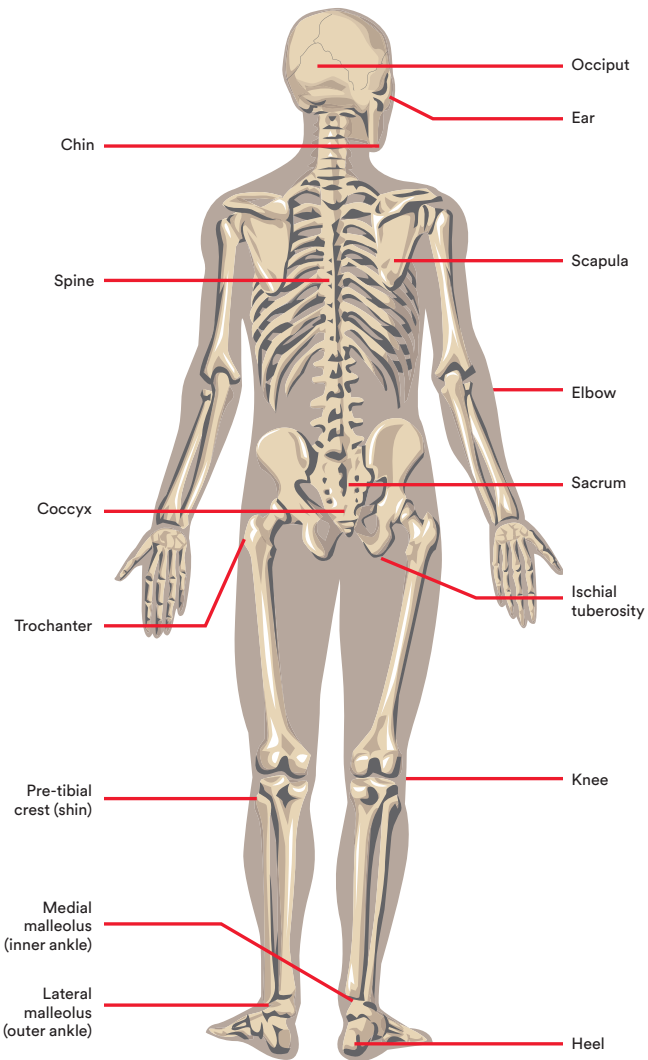
It is important therefore to be able to differentiate between pressure damage and moisture damage. They need to be identified and diagnosed correctly to ensure the correct care is provided. Distinguishing MASD, such as IAD and ITD (Intertriginous Dermatitis), from category 1 and 2 pressure ulcers can be difficult, opposite is a guide to identification.

# Moisture associated skin damage (MASD) vs pressure ulcers

Moisture associated skin damage is referred to below as MASD.

Location		Necrosis	
MASD			There is no necrosis in a MASD.
Pressure ulcers			A black necrotic scab on a bony prominence is a pressure ulcer.
Depth		Colour	
MASD			If redness is not uniformly distributed, the lesion is likely to be MASD.
Pressure ulcers			If redness is non-blanchable, this is most likely a pressure ulcer. In dark pigmented skin, persistent redness may manifest as blue/purple.
Shape		Edges	
MASD			MASD often has diffuse or irregular edges.
Pressure ulcers			If the edges are distinct, the lesion is most likely to be a pressure ulcer.

# Frequent anatomical sites of pressure ulcers



## To find out more:



**3M.co.uk/medical**



**0330 053 8938**



**C3SD@mmm.com**

- 1 National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. *Prevention and treatment of pressure ulcers: quick reference guide*. Emily Haesler (Ed.). Cambridge Media: Perth, Australia; 2014.
- 2 Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System Revised Pressure Injury Staging System, *J Wound Ostomy Continence Nurs*. 2016 Nov; 43(6): 585–597.
- 3 Pressure ulcers: revised definition and measurement. Summary and recommendations, NHSI, June 2018.
- 4 Gray M, Black JM, Baharestani MM *et al* (2011) Moisture-associated skin damage: overview and pathophysiology. *Journal of Wound Ostomy Continence Nurse* 38(3): 233–4.
- 5 Beeckman D. *et al*. A systematic review and meta-analysis of incontinence-associated dermatitis. Incontinence and moisture as risk factors for pressure ulcer development. *Research in Nursing & Health*. 2014.

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