

Why skin integrity matters.

Patient/resident safety is the prevention of harm within healthcare environments, and it's an expectation of patients/residents, their families and the providers who deliver care.

As the largest organ in the human body, skin is vulnerable to a multitude of threats – especially in healthcare settings. Protecting patients/residents from healthcare-acquired skin damage is a critical part of providing care, but as conditions become more complex, it's ever-more challenging to keep skin safe.

That's why you need a partner like 3M – a partner who thinks differently about skin and is dedicated to elevating the role skin plays in patient/resident health and healing.

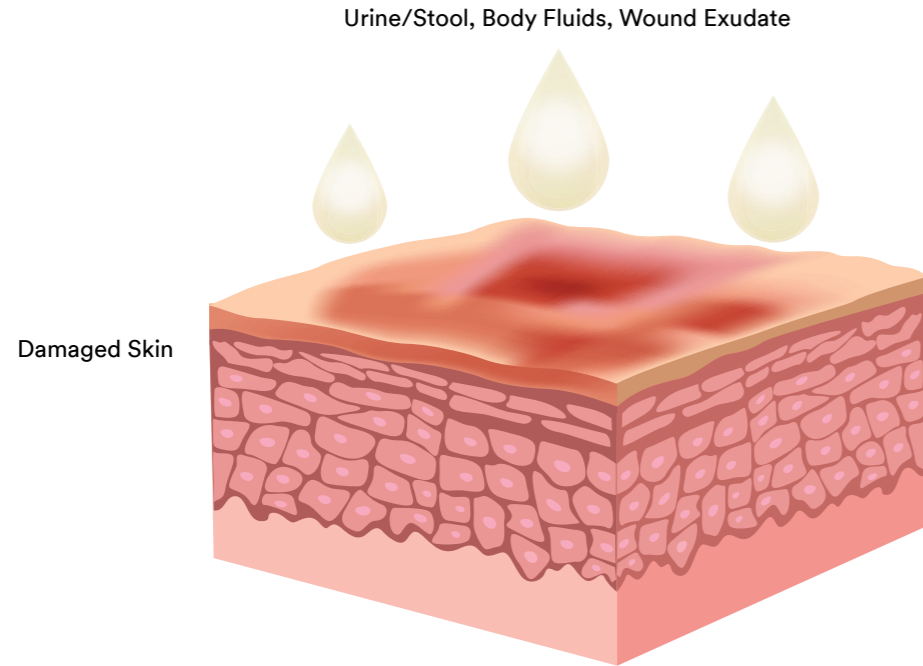
Exposure over time to factors such as irritants, moisture, friction, shear and adhesives can lead to skin breakdown and conditions including:

- Moisture-Associated Skin Damage (MASD)
- Pressure Injury (PI)
- Medical Adhesive-Related Skin Injury (MARS)

Not only can these conditions affect patient/resident health and healing, they can also influence care costs and facility resources. And because they have shared risk factors, it's not uncommon for multiple conditions to present simultaneously – further amplifying their impact.



What is Moisture-Associated Skin Damage (MASD)?



MASD is a term that describes several types of damage that occur when skin is exposed to excessive moisture and/or irritants. With over-hydration, the stratum corneum (outer most layer of the epidermis) becomes more permeable, skin pH becomes more alkaline and inflammation occurs.

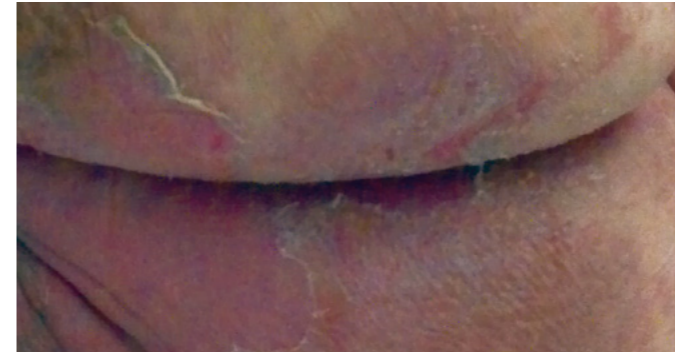
In addition, friction forces are increased when skin is moist or wet, so skin is more susceptible to damage.

Moisture can come from sweating, wound drainage, urine or stool, saliva, or other body fluids. But some fluids such as liquid stool, gastric or pancreatic fluid are problematic, caustic irritants that can directly damage skin.

+
35%

of all IAD cases in the acute care setting are severe¹

The types of MASD



Incontinence-Associated Dermatitis (IAD)

Rich in enzymes and with an alkaline pH, liquid stool is a powerful irritant that can easily disrupt the skin's normal barrier structure. Severe inflammation follows and where epidermis is destroyed, the result is a painful injury that causes needless suffering and can interfere with recovery or quality of life.

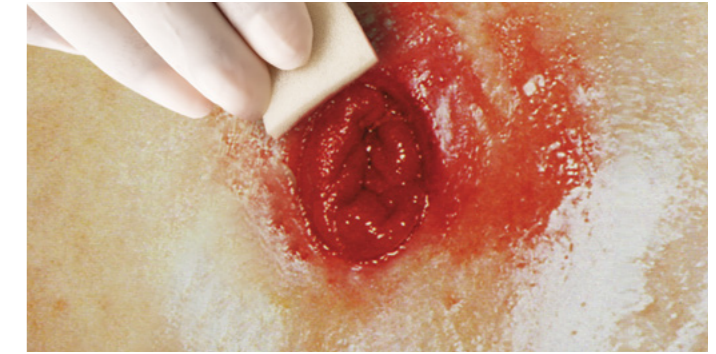
41%

of nursing home residents may have IAD²



Periwound Skin Damage

This type of skin damage is often associated with wounds that produce large quantities of drainage, such as venous ulcers or infected wounds. Adverse skin changes can also be noted when dressings are unable to manage the volume of drainage, or not changed often enough. Once established, maceration is difficult to resolve, especially if exposure has been prolonged and skin changes are severe.

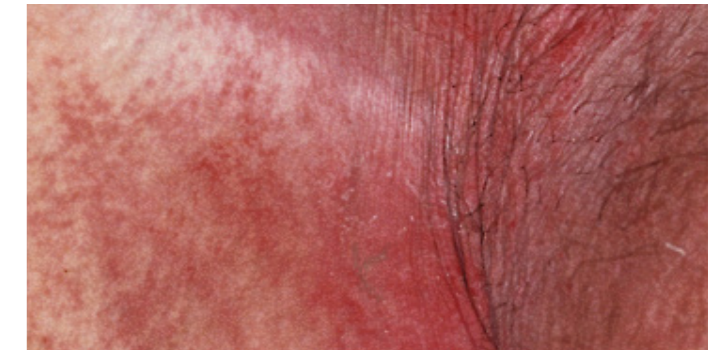


Peristomal Skin Damage

Pouch security is critical to the comfort and well-being of the patient/resident with a stoma, and maintaining intact skin is critical to pouch adherence. Problem stomas, poor stoma location and high-volume output, especially that of liquid stool, can contribute to skin injury that can rapidly progress to erosion.

77%

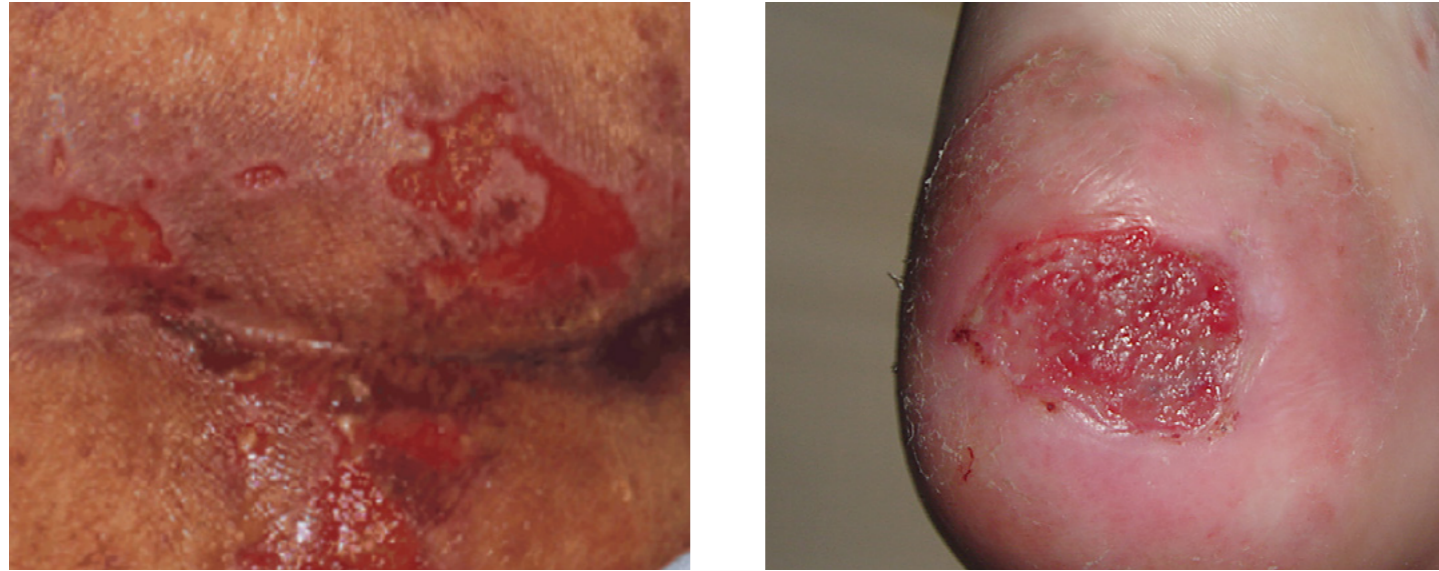
of patients with ostomies develop skin complications, with irritant dermatitis being the most common problem³



Intertriginous Dermatitis (ITD)

When skin is exposed to friction (from rubbing against a surface or itself), heat is generated and epidermal cells are rubbed away, triggering inflammation. If moisture is also present, frictional forces are increased. This combination of factors can result in superficial skin damage.

What is a Pressure Injury (PI)?



A pressure injury is localised injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. Moisture and friction are also known risk factors for pressure injury development.⁴



50%

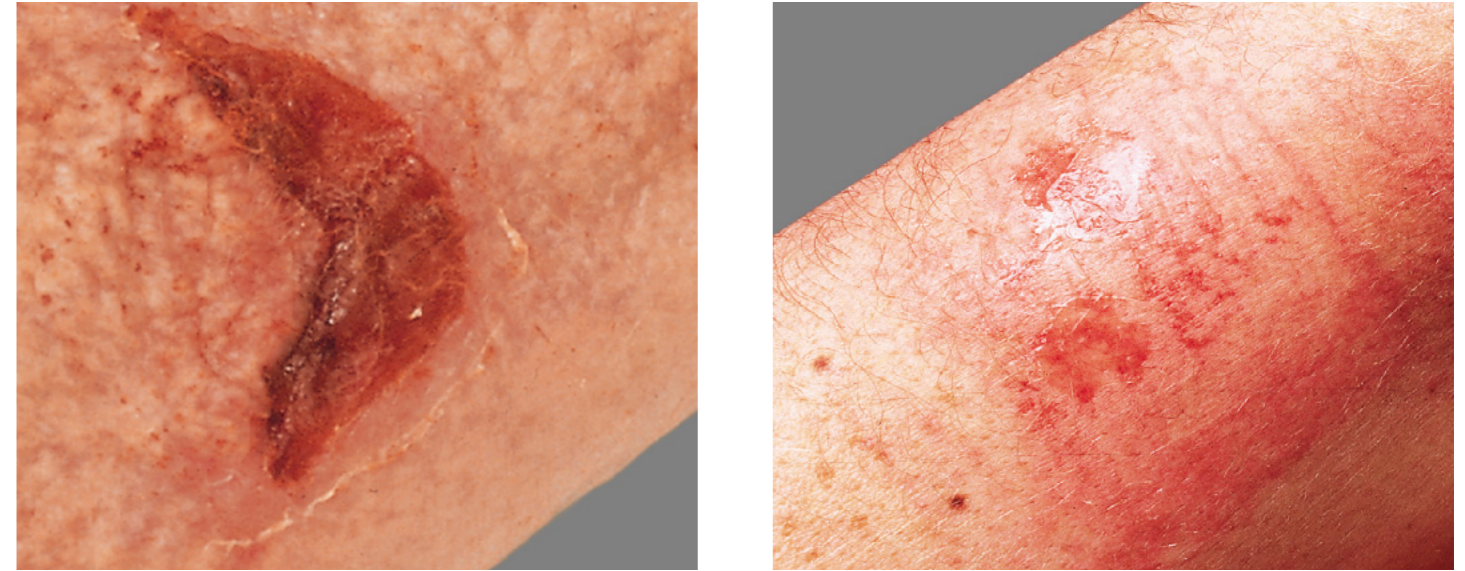
of all pressure injuries occur at anatomical sites that overlay a bony prominence, such as the heel and sacrum^{4,5}



3x

Patients with IAD are at an increased risk of superficial sacral pressure injuries with an odds ratio of 2.99⁶

What is Medical Adhesive-Related Skin Injury (MARSI)?



Medical adhesives are a critical part of healthcare, but can cause Medical Adhesive-Related Skin Injury, or MARSI – a prevalent but under-recognised complication that can be serious enough to require additional treatment. MARSI can cause pain, increase the risk of infection and delay healing – all of which can reduce a patient's/resident's quality of life.⁷ Skin tears, skin stripping and tension blisters are common but avoidable examples of MARSI.



55

treatments for MARSI will be needed for every 100 patients who receive a medical tape application⁸



30%

of oncology patients developed MARSI at their PICC insertion site over the course of two weeks⁹

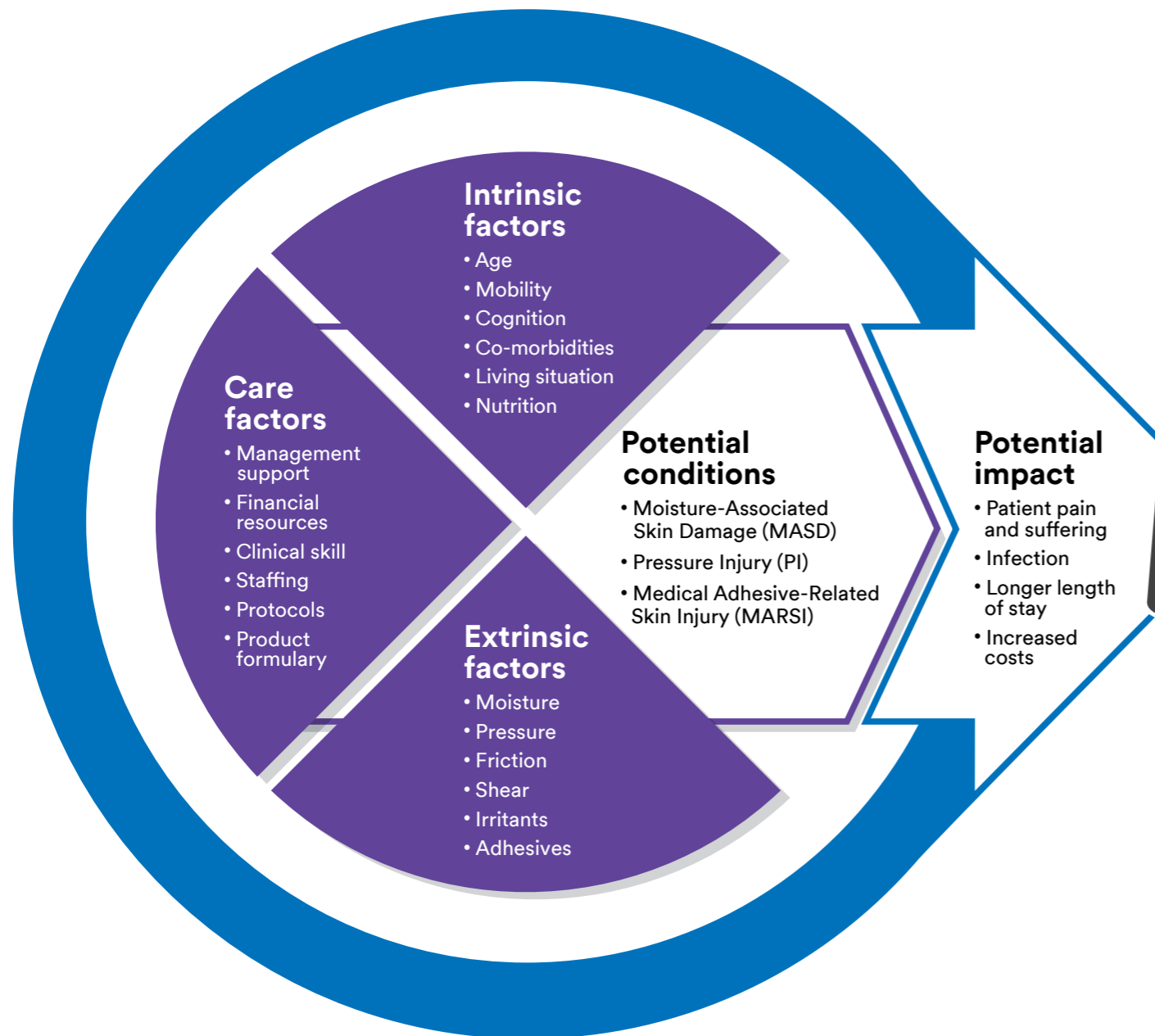
A holistic framework for skin damage.

Comprised of a set of interventions intentionally and primarily designed to prevent healthcare-acquired skin damage, skin safety principles can also be applied to management of skin injury.

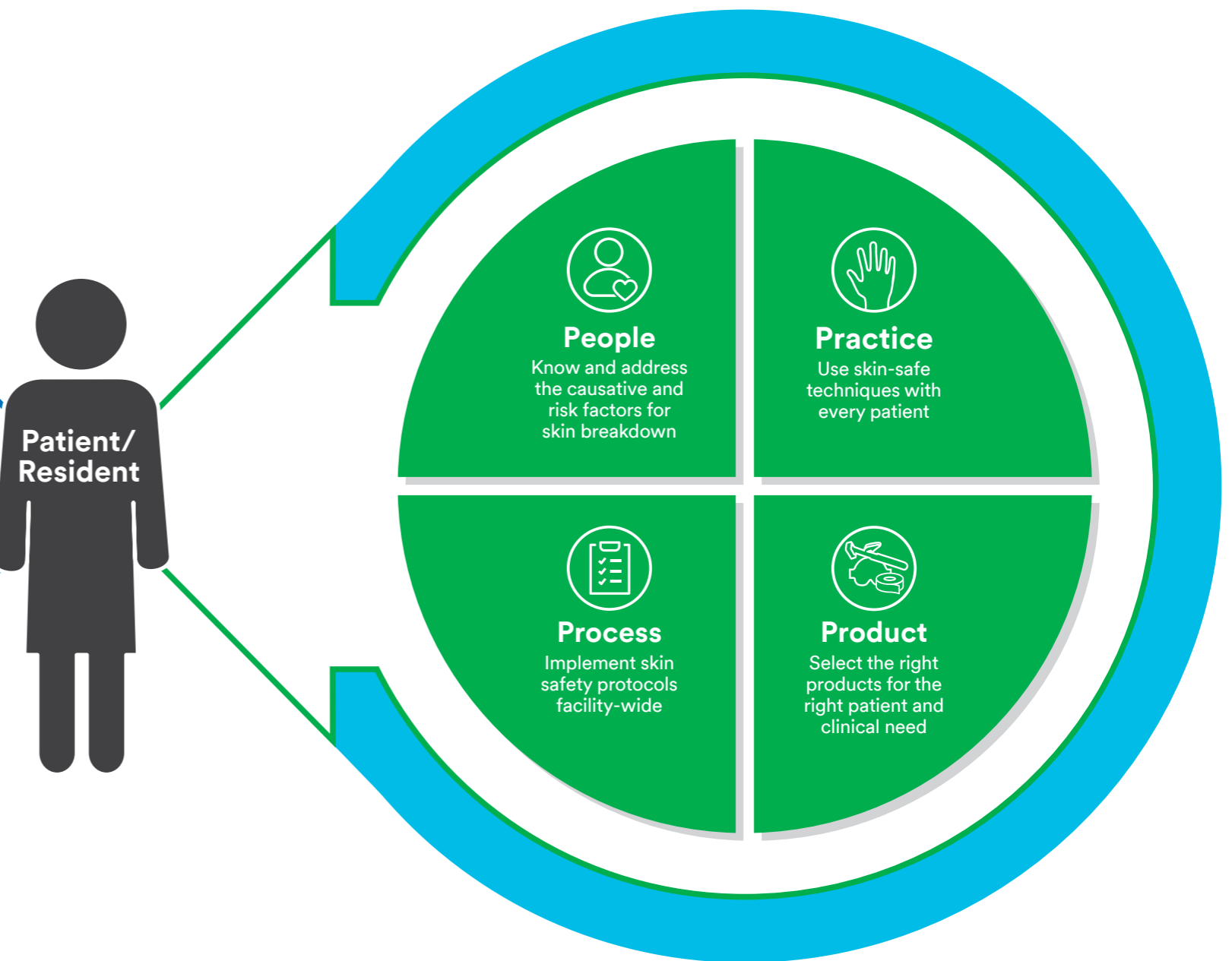
The Skin Integrity Model* proposes that multiple types of healthcare-acquired skin damage share numerous contributing and causative factors. With this in mind, it makes sense for clinicians to think beyond conditions when thinking about prevention.

Preventing skin damage is the ultimate goal but it cannot be done by focusing on one aspect of care. Exploring a more holistic approach to prevention starts with protecting against the vulnerabilities in your facility, in your practice, and most importantly, in your patients/residents.

Multiple factors impacting skin damage¹⁰



Four factors that impact outcomes



*Adapted from: 1) Campbell, Skin Safety Model; and 2) Medical Adhesives and Patient Safety: State of the Science



Simplifying your skin integrity needs.



3M™ Cavilon™ Advanced Skin Protectant

Featuring 3M's revolutionary polymer-cyanoacrylate technology, Cavilon Advanced Skin Protectant creates a highly durable, ultra-thin barrier that attaches to wet, weepy skin¹¹ and lasts up to seven days¹² – protecting patient/resident skin like never before.



3M™ Cavilon™ Contenance Care Wipes

A convenient time-saving alternative to plain soap and water. These disposable, hypoallergenic wipes are designed to gently cleanse, moisturise and provide an effective barrier against moisture and bodily fluids.¹²



3M™ Cavilon™ No Sting Barrier Film

With a unique terpolymer formula that delivers exceptional durability and flexibility, Cavilon No Sting Barrier Film is a gentle, effective and CHG-compatible solution for routine skin protection.¹²



3M™ Cavilon™ Extra Dry Skin Cream

Ideal for patients/residents with diabetes or other dry skin conditions, the moisturising effect of Cavilon Extra Dry Skin Cream lasts 24 hours to soften and relieve rough, cracked or scaly skin.¹²



3M™ Cavilon™ Durable Barrier Cream

Formulated with 3M polymer technology, Cavilon Durable Barrier Cream is a durable, moisturising barrier cream that resists wash-off and allows adhesives to adhere.¹²



3M™ Cavilon™ Moisturizing Hand Lotion*

A moisturising lotion designed specifically for clinicians, Cavilon Moisturizing Hand Lotion can help maintain or restore skin's moisture barrier without affecting the activity of chlorhexidine gluconate (CHG) antiseptic products.¹²

* Currently not available in Australia

Experts in the science of skin integrity.

At 3M, we can help you protect patient/resident skin like no other partner can. Because we apply ingenuity to innovation like no other partner does. When patient/resident skin integrity depends on you, you can depend on the skin care solutions engineered with integrity in mind.

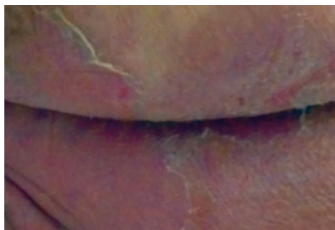
With an advanced skin protectant, novel barriers and a range of companion products that help maintain skin health, 3M™ Cavilon™ Skin Care Solutions has everything you need to protect the skin that protects your patients/residents.

Finding the optimal solution for your skin integrity needs.¹²

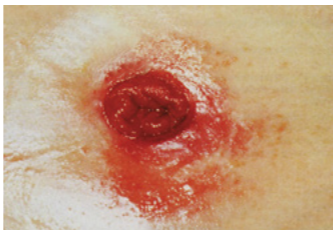
Moisture-Associated Skin Damage (MASD)

Pressure Injury

Medical Adhesive-Related Skin Injury (MARSI)



Incontinence-Associated Dermatitis (IAD)



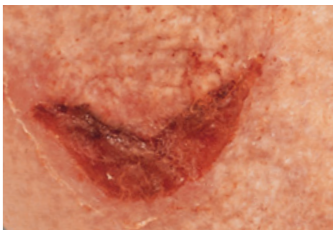
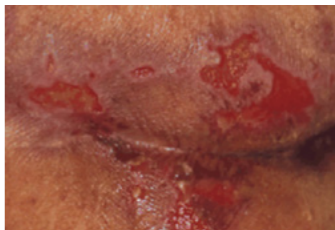
Peristomal Skin Damage



Periwound Skin Damage



Intertriginous Dermatitis (ITD)



3M™ Cavilon™ Advanced Skin Protectant

Manage damaged or broken skin					
Manage IAD	Manage peristomal/perifistular skin damage	Manage periwound skin damage (e.g. maceration)	Manage superficial skin damage from moisture and friction	Manage superficial skin injury in difficult-to-dress locations	Manage superficial skin damage (e.g. stripping, skin tears) from adhesive use
Protect at-risk skin					
Protect intact skin especially in the presence of diarrhea or mixed incontinence	Protect skin around problem faecal or urinary stomas, fistulas or tracheostomies	Protect skin around at-risk wounds (e.g. heavily draining wounds such as diabetic foot ulcers, venous leg ulcers or infected wounds)		Protect intact skin from moisture, friction or shear	



3M™ Cavilon™ No Sting Barrier Film

Ideal for routine protection					
Protect intact skin for low-risk patients/residents	Protect intact skin from moisture and friction	Protect intact skin for low-risk patients/residents	Protect intact skin from moisture, friction or shear	Protect intact skin from adhesive products (e.g. tape, wound and vascular access dressings and ostomy products)	



3M™ Cavilon™ Durable Barrier Cream

When you need to moisturise at-risk or severely dry skin, or protect skin at low risk from breaking down, consider using 3M™ Cavilon™ Durable Barrier Cream.

1. Gray M, Bartos S. Incontinence Associated Dermatitis in the Acute Care Setting: A Prospective Multi-site Epidemiologic Study. Presented at the 23rd Annual Meeting of the Wound Healing Society. 2013.

2. Nix D, Haugen V. Prevention and management of Incontinence-Associated Dermatitis. *Drugs Aging*.2010. 27(6); 491-6.

3. Colwell JC, McNichol L, Boarini J. North America Wound, Ostomy, and Continence and Enterostomal Therapy Nurses Current Ostomy Care Practice Related to Peristomal Skin Issues *J Wound Ostomy Continence Nurs*. 2017; 44(3): 257-261.

4. 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.

5. VanGuilder, C., MacFarlane, G. D., & Meyer, S. (2008). Results of Nine International Pressure Ulcer Prevalence Surveys: 1989 to 2005. *Ostomy Wound Management*, 54(2).

6. Demarre L et al. Factors predicting the development of pressure ulcers in an at-risk population who receive standardized preventive care: secondary analyses of a multicentre randomised controlled trial. *J Adv Nurs*. 2015;71(2):391-403.

7. Cutting KF. Impact of adhesive surgical tape and wound dressing on the skin with reference to skin stripping. *J Wound Care* 2008;157-158,160-162.

8. Maene, B. Hidden costs of medical tape-induced skin injuries. *Wounds UK*. 2013; 9(1), 46-50.

9. Zhao H, et al. Prevalence of medical adhesive-related skin injury at peripherally inserted central catheter insertion site in oncology patients. *J Vasc Access*. 2017 Nov 8:0. doi: 10.5301/jva.5000805.






10. Campbell J, Coyer F, Osborne S. The Skin Safety Model: Reconceptualizing Skin Vulnerability in Older Patients. *J. of Nurs Scholarship*. 2016; 48(1):14-22.

11. Brennan, Mary R.; Milne, Catherine T.; Agrell-Kann, Marie; Ekholm, Bruce P. Clinical Evaluation of a Skin Protectant for the Management of Incontinence-Associated Dermatitis: An Open-Label, Nonrandomized, Prospective Study. *J of Wound, Ostomy & Continence Nurs*. 2017; 44(2):172-180.

12. 3M data on file.

Discover all the ways 3M™ CAVILON™ Skin Care Solutions can help you transform patient/resident skin integrity at 3M.com.au/CAVILON and 3M.co.nz/CAVILON

Proven solutions with the power to make a positive difference.

	3M Code	Product	Size	Items/Box	Boxes/Case
	5050G	3M™ Cation™ Advanced Skin Protectant	2.7 mL applicator	20	1
	3343E	3M™ Cation™ No Sting Barrier Film	1 mL wand	25	4
	3344E	3M™ Cation™ No Sting Barrier Film	1 mL wipe	30	4
	3345E	3M™ Cation™ No Sting Barrier Film	3 mL wipe	25	4
	3346E	3M™ Cation™ No Sting Barrier Film	28 mL spray bottle	12	1
	3392GS	3M™ Cation™ Durable Barrier Cream	2 g sachet	20	12
	3391G	3M™ Cation™ Durable Barrier Cream	28 g tube	12	1
	3392G	3M™ Cation™ Durable Barrier Cream	92 g tube	12	1
	3386	3M™ Cation™ Extra Dry Skin Cream	118 mL tube	12	1
	9205	3M™ Cation™ Moisturizing Hand Lotion*	473 mL pump bottle	12	1
	9274	3M™ Cation™ Contenance Care Wipes, 8 wipes per pack	20 × 30 cm	12	1

For more information, contact your 3M Health Care Sales Representative, call the 3M Health Care Customer Helpline at **1300 363 878** (Australia) or **0800 80 81 82** (New Zealand) or visit 3M.com.au/Cation or 3M.co.nz/Cation.



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* Cation Moisturizing Hand Lotion is not currently available in Australia