

3M shares in your passion and dedication to provide the best health care for your patients. For over 50 years, we have partnered with health care professionals to provide innovative, high-quality skin and wound care products and a full range of educational tools to support you in their use.

Education tools available on our website include: the Tape with Care Continuing Education program, Choosing the Right Tape for the Right Application product selection guide, product training, and other clinical resources. To learn more, visit www.3M.com/medicaltapes and click on the Continuing Education link.



Tape Application

- Tape should be applied without tension to clean, dry skin.
- A clipper may be used to remove hair, if necessary.
- To protect at-risk skin, 3M™ Cavilon™ No Sting Barrier Film may be applied and when thoroughly dry, tape may be applied over it.
- In general, do not encircle a limb completely with tape.
- If distention is anticipated, use a tape that stretches or a self-adherent wrap to secure the dressing or tubing.



A. General taping

Apply the tape without tension, gently but firmly stroking the surface to maximize adhesion. Tape should extend at least one-half inch beyond the dressing. Tape should not be pulled or stretched when applied. If swelling does occur, loosen and re-fasten or replace tape to relieve the tension.





B. When compression is needed

- 1. Place first section of tape without tension onto skin on one side of the dressing. gently pressing downward.
- 2. With one hand, secure tape on one edge of the dressing while slightly stretching next section of tape over the dressing.
- 3. Secure tape on opposite edge of the dressing.
- 4. Press remaining tape onto skin without tension. Compression should come from the multiple layers of dressing material, not from excessive tension in the tape. Skin distention under tape may result in blistering and should be relieved as soon as possible.





C. When distention is anticipated

Foam tapes generally stretch in all directions; however, non-woven soft cloth tapes, such as 3M[™] Medipore[™] Soft Cloth Tape, and 3M™ Medipore™ H Soft Cloth Tape have more stretch in the cross-direction and on the bias. The direction of the stretch should be considered when securing a dressing or tubing to an area that is at high risk for distention, edema, hematoma formation, or movement, Anecdotally, applying soft cloth tape parallel to the incision appears to be associated with fewer skin tension injuries than taping perpendicular to the incision.

Tape and Transparent Dressing Removal

Proper tape removal is critical in reducing the ocurrence of skin trauma.





A. Tape strips

- 1. Loosen edges of tape. If necessary, press a small piece of tape onto a corner to start an edge of the tape.
- 2. Stabilize the skin with one finger. Remove tape "low and slow" in direction of hair growth, keeping it close to skin surface and pulled back over itself. Removing tape at an angle will pull at the epidermis increasing risk of mechanical trauma. As tape is removed, continue supporting newly exposed skin.

B. 3M™ Tegaderm™ Transparent Dressing



Stretch method

- Grasp one edge or catch a "corner" of the Tegaderm[™] Dressing with a piece of tape.
- · Gently lift edge.
- With other hand, place fingers on top of dressing to support skin.
- Gently stretch the Tegaderm[™] Dressing straight out and parallel to skin. This will release the adhesion of the dressing to the skin. As the Tegaderm™ Dressing is loosened, you may either (1) alternately stretch and relax the dressing or (2) "walk" your fingers under the dressing to continue stretching it. With both approaches, one hand continually supports the skin adhered to the Tegaderm™ Dressing.



This procedure is similar to the method described for removing tape strips.

- Stabilize skin next to the Tegaderm™ Dressing.
- With other hand, grasp one edge of the dressing.
- Slowly peel dressing back over itself, "low and slow," in direction of hair growth.

Removing dressing at an angle will pull at the epidermis, increasing risk of mechanical trauma.

As dressing is removed, continue moving finger as necessary. supporting newly exposed skin.

Reducing The Risk Of Superficial Skin Damage Related To Adhesive Use

Superficial skin damage can occur when adhesive products are used. Skin stripping and tension blisters are the most common problems associated with taping. Many of these injuries may be prevented by correct use including careful attention to skin preparation, choice of tape, and proper application and removal of tape. Less common types of skin damage are irritant contact dermatitis, allergic contact dermatitis, folliculitis and maceration. A small percentage of individuals may experience hypopigmentation or hyperpigmentation of the skin following the removal of an adhesive product. Similar problems may occur with skin closure strips.

Problem	Cause	To reduce the risk of injury
Stripping	A partial thickness injury occurring when adhesive bond between tape and skin is greater than the bond between epidermis and dermis. As tape is removed, the epidermis remains attached to the adhesive, resulting in epidermal damage or a painful area of exposed dermis. Degree of stripping varies with skin condition, adhesive characteristics, and frequency of taping.	 Use gentle, hypoallergenic tape Match strength of adhesive to clinical needs and skin condition Apply tape to clean, dry skin For high risk patients, avoid using skin tackifiers under tape Protect skin with 3M™ Cavilon™ No Sting Barrier Film allowing it to dry before taping If repeated taping is anticipated, consider applying tape over a platform Use proper removal technique
Mechanical Injury Due To Tension	The most common causes of tension injury are inappropriate strapping of tape during application and distention of skin under an unyielding tape. Strapping tape across skin is mistakenly thought to increase adhesion. As the tape backing resists stretch or regains its original shape, the epidermis begins to lift. This results in "tension blisters" typically seen at ends of the tape. Skin tears may occur before a blister even forms. Tension injuries may also occur when edema, hematoma formation, or distention distorts the skin surface or when a joint or other area of movement is covered with an unyielding tape.	 Apply tape without tension Identify patients at high-risk: fragile skin, medical conditions (e.g., long-term corticosteroid use, malnutrition) or surgical procedures where edema or distention is expected (abdominal, orthopedic) Protect skin with 3M™ Cavilon™ No Sting Barrier Film If swelling or movement is expected, use a tape that stretches. Apply tape so direction of stretch corresponds with direction of swelling If desired, compression may be obtained by carefully stretching tape over a dressing while securing the tape to the skin without tension. If distention or edema is noted, loosen, reposition, or replace tape
Non-Allergic Contact Dermatitis	A non-allergic contact dermatitis may result when chemical irritants such as tackifiers or some skin preparations are trapped between adhesive and skin. The affected area will correlate to the area of exposure and may appear reddened, swollen, blistered, or weeping.	 Assure that skin is clean and dry before applying tape Protect skin with 3M™ Cavilon™ No Sting Barrier Film allowing it to dry before applying tape If possible, avoid using tackifiers
Allergic Contact Dermatitis	Allergic reactions are cell-mediated immunologic responses to a particular component of a tape adhesive or backing and occur infrequently. Patients may be mistakenly identified as having tape allergies when, in fact, they have experienced a non-allergic contact dermatitis. Clinical signs include well-defined areas of erythema and edema; vesicles may be present, as well as small erosions.	 Identifying type of tape causing sensitivity Options may include identifying an alternative hypoallergenic tape or contacting tape manufacturer for assistance Using 3M™ Cavilon™ No Sting Barrier Film may not prevent an allergic reaction
Folliculitis	Folliculitis is an inflammation of the hair follicle caused by shaving or entrapment of bacteria.	Use a clipper or depilatory preparation if hair removal is necessary
Maceration	Maceration refers to skin changes seen when moisture is trapped against the skin for a prolonged period. The skin will turn white or gray, softens and wrinkles. Macerated skin is more permeable and prone to damage from friction and	 Keep taped skin clean and dry Replace tape if soiled Use breathable tape in moist areas Avoid occlusive tapes unless clinically indicated

irritants.

Two Common Taping Concerns

	Tape doesn't stick? The problem might be:	Skin Damage? The problem might be:
Skin preparation	Damp or oily skinPrep solution containing surfactant or glycerin was not allowed to dry	Vigorous alcohol prepSensitivity to tackifierSkin irritated/denuded before tape applied
Application/ removal technique	 Tape not gently and firmly stroked after applying Gaps left between tape and tubing/dressing Loose tape edges "Folded tab" left on tape Tubing subjected to tension/pulling 	 Tape applied under tension Traumatic removal Tape removed at an angle Skin not supported during removal Too much tape Area completely encircled with tape
Choice of tape	 Adhesive not strong enough for the particular application, for example: very active patient patient pulls at tubing/dressing heavy device or tubing lacking tension loop "critical" application Tape too stiff to conform to contours Inappropriate tape for degree of skin moisture or surface of dressing/device Adhesion may vary depending on skin type and body chemistry; if one tape doesn't adhere, consider selecting another 3M medical tape 	 "Non-stretch" tape used on area that "expanded" (e.g., edema, hematoma formation, distention) or moved Adhesive more aggressive than needed Occlusive tape left on too long Patient sensitive to specific adhesive Irritating tape or substance placed over perforated or porous tape

For more information, visit us at www.3M.com/medicaltapes, contact your 3M Health Care Sales Representative or call the 3M Health Care Customer Helpline at 1-800-228-3957. These products can be ordered from your local distributor. Outside the United States, contact the local 3M subsidiary.





Skin & Wound Care Division 3M Health Care

3M Center, Building 275-4W-02 St. Paul, MN 55144-1000 U.S.A. 1-800-228-3957

www.3M.com/healthcare