Skin Care for Diabetes Devices

This handout gives tips to help with adhesives and skin problems. Talk to your diabetes team if you have questions.

Insulin pump infusion sets and CGM sensors use adhesive to stay on the skin. These devices need to be sticky enough to stay on but also come off gently.

Some people, like young kids or those with asthma, allergies, and/or eczema may have more sensitive skin and might have more reactions to adhesives or things used to help devices stick. Others who sweat a lot or have oily skin may have trouble getting devices to stick or keeping them on.

Irritation or Allergy
True adhesive allergies are very rare but repeat skin reactions may be a reason to have allergen testing.

Irritated skin looks red, flaky, itchy, or dry where the adhesive was touching it. It usually gets better after removing the adhesive.

An allergy looks like irritation but may cause blisters and swelling. Usually, the reaction starts to get worse the more you use the products, and it may not go way when you remove the device.

General Skin Care

- Use warm, not hot, water for baths and showers.
- Wash gently with mild unscented soap (like Dove® bar soap) and rinse well.
- Pat the skin dry with a towel.
- Apply a thick, unscented cream or ointment to keep skin soft. Choose moisturizing creams like Vanicream™, CeraVe®, Eucerin®, or Vaseline®. Avoid areas where you will place a device.
- Products that may irritate the skin and should be avoided include:
    - Neosporin® (or other over-the-counter antibiotic ointments).
    - Herbal remedies (essential oils, tallow, witch hazel).
    - Alcohol wipes (unless using to remove adhesive).

Getting a Site Ready Before Putting on a Device
Choose a site that has clean, healthy skin and has not been used for a while. Make sure it is fairly flat and away from body parts that bend and flex. Rotate sites used for a device. If possible, allow at least 1 week for skin to heal before reusing the same site.

Clean the site where the sensor or infusion set will be inserted. Use antibacterial soap (without oils) and water and gently scrub the area. Alcohol wipes can dry the skin, so avoid them if possible.

Avoid prep wipes with known allergens or perfumes.

Let the skin dry completely. You can use a blow dryer on a cool setting to help skin dry. **Never** use heat that could burn the skin.

Removing Adhesives
Taking the patch off after a warm shower or bath can help it come off more easily. You can use baby oil, mineral oil, coconut oil, or olive oil to loosen the adhesive.

Some adhesive removers can cause skin reactions. Only use them if other options do not work.

Gently lift edges of the adhesive with your finger and slowly pull it off while pressing on the skin near the edges with your other hand. After the device is removed, clean the skin to remove any leftover oil or adhesive.

If you use them, wash skin well with warm water and a mild soap.

Preventing Skin Problems
Before putting on a device, try a barrier wipe to protect the skin. Let it dry all the way before placing a device. These products create a clear, flexible film between the skin and any adhesive. Leave a small area of skin without the barrier on it where you will insert the sensor.

Examples include:

- IV Prep®
- SurePrep®
- Skin Prep®/No Sting Skin Prep®
- Cavilon® No Sting Barrier
- AllKare® protective barrier wipe

Treating Persistent Redness and Irritation
Rotate sites and do not reuse an area until it has healed. You can put a clear dressing on the skin first. Then stick the device on top. This keeps the device adhesive from touching your skin. Cut small hole in the dressing before applying for inserting the sensor.

Examples include:

- IV3000®
- Tegaderm™
- Tegaderm® HP
- Opsite® Flexifix

For CGM users who cannot use a thin dressing or need a stronger barrier, use a hydrocolloid dressing. These include Duoderm®, Band-aid Toughpads®, and Dynaderm™. These dressings are thick, so we do not recommend using them with pump sites. They are also expensive.

If skin stays red and itchy after the device is removed, you can use a small amount of over-the-counter hydrocortisone cream or ointment. **Do not** use for more than a few weeks (unless told to do so by a provider). Some families use Flonase® nasal mist (fluticasone) before putting the device on to help prevent irritation. To use, put 1-2 sprays of the mist onto clean skin and let dry before putting on the device.

Important: This use of the medicine has not been studied and we do not know if there are any risks when using Flonase® in this way.

Open or Sore Skin
Wash the area gently with soap and water. **Do not** use antibiotic ointments unless your doctor tells you to. After bathing, apply a thick unscented cream like Aquaphor®, Eucerin®, Vanicream™, or Vaseline®. **Do not** put the creams where a device will go.

Tips if Devices Fall off or do not Stick

- Make sure the skin is clean and completely dry before putting the device on.
- Check that clothing or body movements are not pulling on the adhesive.
- Use patches provided by the manufacturer, like Dexcom and Omnipod® to help them stick. They work best if you put them on at the same time you place the sensor.
- If you sweat a lot, spray an unscented antiperspirant spray on the site after you clean it. Let the

antiperspirant spray dry 10-15 minutes before putting the device on.

- Use the patches provided by the manufacturer. Dexcom and Omnipod® both offer overlay patches to apply over the device to help them stick. They work best if you put them on at the same time as the site or device. Other products include: Grifgrips®, Simpatch™, RockaDex™, and Expressionmed®.
- If edges of the sticker peel up, you can use Hypafix® tape, Blenderm™, Transpore™ surgical tape, orkinesiology tape to try to keep the edges down.
    - To help the device stick better, use a liquid adhesive before placing it. You can also use some of the liquid adhesive on top of the adhesive after it is placed. Before using a liquid adhesive, apply some to a small area to see if it causes any skin irritation. Liquid adhesives from least sticky to most sticky Skin prep/No-Sting Skin Prep.
    - Skin Tac®
    - Mastisol® (more likely to cause irritation)

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 2/2024 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8166.