



Dealing with Diabetes Tech Adhesives

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😊 Children with Diabetes*

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Diabetes technologies hope to improve both diabetes management and the burden that goes along with it. Countless studies have shown that use of these technologies can do both things, but they are not without their challenges. The Panther Program from the Barbara Davis Center has a lot of great resources including their page about Skin Solutions. Here are some key recommendations about Skin and Diabetes Tech.

Keeping Devices Attached

Some people seem to have a lot of difficulty keeping devices attached – and summer, swimming, and anything that involves sweating can make it even more of a challenge. There are a number of ways to help keep them affixed including:

- **Location of Wear:** Avoid waistline, especially where the top of pants/shorts/skirts land, Choose an area that does not get easily bumped or bent.
- **Cleaning of Skin:** Wash skin with antibacterial soap such as Dial or Dawn versus moisturizing soap such as Dove and ensure it is adequately dry before placement; shave skin if there is excess hair in the area.
- **Helping it Adhere:** Many of the tapes are heat-activated, so once you insert your diabetes tech device, it's recommended to rub your finger around the tape in a circular pattern a few times to help it attach to the skin; Additionally, some manufacturer's recommend avoiding getting it wet for the first 24 hours.
- **Tape Options:** There are many types of tape that you can try for keeping things affixed and can either tape around the device or on top of it (including some fun designs and customizable ones at [Peelz](#)).
- **Liquid Adhesives:** Using wipes such as Skin Tac or Mastisol before inserting the devices can help keep it stuck as well.
- **Non-Tape Options:** There are some wrap devices that have elastic and a holder specifically designed for the device that do not stick to the skin but help keep it in place (example: [bandsfordiabetics.com](#)).

Preventing Irritation

Some people struggle with irritation at the adhesive site or with the part that enters the skin. It is extremely difficult to find out what insulin pump infusion sets pumps are made of, and if you are finding that you have this issue, you should speak to your healthcare team for assistance. Here are some recommendations if the adhesive itself seems to be the issue:

1. Avoid Alcohol Swabs – Alcohol swabs for cleaning the area can make irritation worse – using soap and water is a better option.
2. Barrier Options – There are a few types of barriers that can be used to create a barrier between the skin and the adhesive:
 - a. Barrier Wipes – such as IV prep, Cavilon Barrier Wipes, and Bard Barrier Wipes.
 - b. Transparent Tape Barriers – such as Tegaderm and cutting a hole in the clear barrier to avoid inserting the barrier into the skin.
 - c. Hydrocolloid Barrier – for severe allergies this thick barrier can be placed underneath, though some insert directly through this while others cut a hole for insertion.
3. Topical Options – Many people find that using fluticasone (Flonase) on the skin prior to insertion can reduce the inflammation or irritation response; it has also been reported that people use Pepto-Bismol on the skin, but this is even less tested than the Flonase option.

Removing Devices

It's a common expression to "Rip the Band Aid Off," but this way for removing adhesives can actually be more harmful. The Panther Program recommends removing devices slowly and with the assistance of something to help the tape come off such as baby oil, olive oil, or wipes such as Unisolve or Tac Away.

Once devices are removed, avoiding that area of skin for at least a week is recommended and, then, if there is irritation use whatever topical option is recommended. For example, if the skin is dry, use a lotion or if there is redness or irritation you could try hydrocortisone cream. Monitor for worsening reactions and reach out to your healthcare team if there is warmth, pain, spreading or persistent redness as these could be a sign of an infection requiring treatment.

Rotation of Adhesives

When it comes to continuous glucose monitors (CGMs), the rotation of the adhesive is important for the skin itself. When it comes to insulin pump infusion sets, the rotation is even more important to prevent scar tissue development that can impact the absorption of insulin, as well as for the skin itself. We have another article about the [importance of rotation insulin injection or infusion site locations](#). Here is an image that shows the locations for infusion sets and CGMs:

While CGM's can create some scar tissue, it is insulin administration that tends to be more of a challenge when it comes to scar tissue.

Hopefully these tips will help you continue to use the diabetes technologies of your choice!

Resources:

1. [Preserving Skin Integrity with Chronic Device Use in Diabetes](#)
2. [Panther Program](#)

Insulin Injection and Infusion Site Locations

