



POLICY NAME:	Medication Administration
	Transdermal
POLICY NO:	C.ME.16
EFFECTIVE DATE:	March 2017
REFERENCE:	ORGANIZATION WIDE
DATE REVIEWED/REVISED:	June 2022
AREA/DEPARTMENT:	CLINICAL

Purpose: To support and standardize safe medication practices surrounding transdermal medication application and administration.

Policy:

This policy is specific to transdermal medication administration. For general practices of medication administration, please refer to CPCH Policy [C.ME.02 Medication Administration](#).

Transdermal Medication

Transdermal patches are medicated adhesive coverings that deliver a specific dose of medication absorbed through the skin and into the bloodstream. The route is designed to release medication over a long period of time to be absorbed at a fairly steady rate. The most common medication patches at Canuck Place are scopolamine and fentanyl patches (See Appendix A for medication references and family teaching resources).

Heat sources at the skin site should be avoided as they are known to increase absorption; in addition, a fever can also affect absorption. Lotions, alcohol based cleansers, oils and creams may interfere with adhesion and/or increase absorption.

No patch delivery systems should be cut for any clinical reasons. There is insufficient evidence to support the safety of cutting patches and this practice is contrary to product's license indications.

The gold standard of care is to prescribe full patches for a child. Only in the case of pediatric opioid dosing (i.e. fentanyl patches), a full patch may not be appropriate for the child. The clinical team may need to discuss the appropriateness of prescribing an alternative route or other dose modifying methods (See Appendix B).

Ensure child and/or family have an understanding of the medication, application and care. Spend time familiarizing the child and family with the concept of transdermal patches prior to initiation. If a child is being discharged home on a transdermal patch, ensure family understands safe disposal of medication, application and other associated care.

Procedure for Transdermal Medication Administration:

1. Wash hands
2. The RN/LPN responsible for the transdermal medication administration follows the process and guidelines outlined in the CPCH policy [C.ME.02 Medication Administration](#)
3. Gather supplies and wear gloves for the procedure

4. If applicable, remove old patch by lifting from the edges and folding the patch onto itself before safely disposing as per CPCH policies (disposal in white bin in medication room).
5. Place the fentanyl patch on a clean, dry, unbroken/non-irritated skin surface. If changing patches, please rotate skin site used.
6. Continue appropriate monitoring and assessment associated with the prescribed medication.
7. Document on MAR.

References

Delgado-Charro, B. & Guy, H. (2013). Effective use of transdermal drug delivery in children. *Advanced Drug Delivery Reviews*. 73, 63-82

Expert Opinion Drug Safety (2014). A systematic review of medication administration errors with transdermal patches. 13(8)

International Medication Safety Network (2008). Medication incidents related to the uses of fentanyl transdermal systems: an international aggregate analysis

ISMP Medication Error Report Analysis (2009). Risk of Cutting Certain Medication Patches. 44(1), 18-20.

ISMP Canada Safety Bulletin (2006). Transdermal Fentanyl: A Misunderstood dosage form. 6(5), August

Information for Families

Fentanyl can be applied to the skin and absorbed through the skin into the bloodstream by a medication patch. This route allows medication to be released slowly and constantly, rather than in a large, single dose. Patches are simply placed on the skin, worn for a prescribed period of time, removed, and replaced with a new patch.

The Fentanyl Patch can be worn for 72 hours.

- When the patch is finished, remove it from the skin and fold it in half so it sticks to itself and flush down the toilet.
- Use a different part of the body each time you use a new patch (if possible).
- If the patch falls off replace with a new one.
- If more than one patch is prescribed the edges of the patches should not overlap or touch.

Equipment

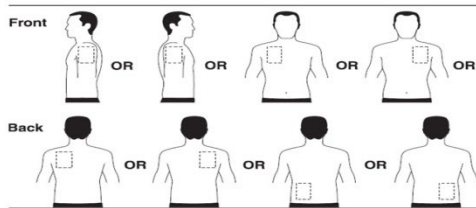
- Fentanyl Patch
- Wash cloth and water
- Tegaderm (if applying half of a patch – only applicable for Fentanyl Patches)

Procedure

Preparing the skin and placing a patch

1. Wash your hands.
2. Remove old patch (if applicable) by gently peeling up the sides. Fold the patch in half so it sticks to itself and flush down the toilet.
3. Wash your hands.
4. Select the area of skin to apply the patch. **Rotate** the site (ex: choose a new area of skin to place the patch than its previous location).

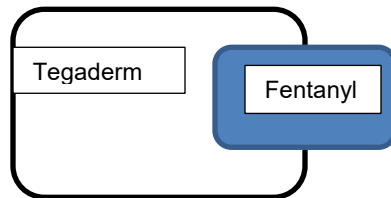
****DO NOT place over broken or irritated skin****



5. Wash the area with water and pat dry – do **NOT** use soaps to clean the skin. Ensure there are no lotions, oils or powders on or near the area of application.
6. Carefully open the packaging – avoid using scissors if possible.
NEVER use a patch that has been cut or damaged
7. Remove the protective liner. Be sure not to touch the sticky part of the patch.
8. Press the patch firmly down with the palm of your hand for 30 seconds and then go around the edges with your fingers to press them on to the skin. Make sure the patch is flat against the skin.
9. Wash your hands.

If applying half of a patch:

1. Place a Tegaderm onto the skin where the patch will be applied.
2. Remove protective liner from patch and **place half of the patch directly on the skin** and the **other half over the Tegaderm**.



If applying more than one patch:

1. You **can** place patches in the same area.
2. Ensure that there is space between the patches and that the edges **DO NOT** overlap or touch.
3. Apply patches at the same time so there is no confusion about which patch to change after 72 hours.

Safety measures to consider

- At high temperatures, more fentanyl can be released from the patch. Avoid exposing the area to external heating sources such as heating pads, electric blankets or hot water bottles.
- This medicine should be thrown out when your child no longer needs it or if the medicine is expired. Remove the patch from the pouch, remove the liner. Fold in half. Flush the folded patch down the toilet. Make sure children and pets do not come in contact with disposed patches.

If you have any questions, please call Canuck Place: 604-742-3475

APPENDIX B: Alternative dosing for fentanyl patches

In pediatrics, the situation may arise when a full patch is not appropriate and alternative routes/measures do not support the child and family goals and care. The clinical team must discuss and review the best interests of the child, best prescribing practices, and medication safety before proceeding. Initiation and use of dose-modifying methods (such as halving) with transdermal fentanyl is a clinical decision with a judgment risk and is best avoided due to safety concerns.

In the rare circumstance that transdermal fentanyl remains the best option for the child, the possibility of a “half patch” by means of covering half of the patch may be considered. In theory, by adjusting the area of the absorption surface, the method of covering half the patch with an occlusive dressing provides an adjustable dose of less than a whole patch. The clinical team recognizes that although the intent would be for a half-patch, that the child may receive more or less of that amount as there is no sufficient evidence exhibiting the reliability of this off-label use. The consideration of a half patch should only occur for dose enhancements above 12mcg/hour.

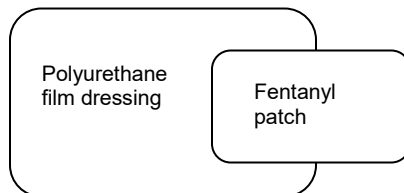
In addition, the clinical team is aware of standards in the adult population that do not approve covering or blocking skin absorption attempts to deliver partial doses; however, in the pediatric population it is recognized that smaller titration doses are often needed. The prescriber is not to ever prescribe anything less than a half patch for opioids (i.e. ¼ of a patch is not approved).

If the clinical team reviews and decides this approach is in the best interest of the child, then the following procedure should be followed for covering half the patch surface.

Under no circumstances should a fentanyl patch be cut.

Procedure for Fentanyl Patch Covering

1. Wash hands
2. The RN/LPN responsible for the transdermal medication administration follows the process and guidelines outlined in the CPCH policy Medication Administration.
3. Gather supplies (occlusive polyurethane film dressing, fentanyl patch, gloves).
4. If applicable, wearing gloves remove old patch by lifting from the edges and folding the patch onto itself before safely disposing as per CPCH policies (in white bin in medication room).
5. Place the polyurethane film dressing on a clean, dry, unbroken skin surface. Next apply a fentanyl transdermal patch so that half of the patch would cover the polyurethane film dressing and the other half would be directly on the clean, dry, unbroken skin surface. (see figure)



6. Document on MAR.
7. Continue appropriate monitoring and assessment associated with severe pain and use of Fentanyl (see CPCH Policy [C.PSM.01 Pain Assessment](#) and CPCH Policy [C.ME.02 Medication Administration](#))