



Poison HOTLINE

Partnership between UnityPoint Health and
University of Iowa Hospitals and Clinics

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Did you know

Because of the multiple deaths and serious adverse outcomes that have occurred through accidental exposure to fentanyl patches, the FDA recommends that *used* fentanyl patches be immediately flushed down the toilet. This recommendation to immediately flush *used* fentanyl patches applies to patches that have been worn for 72 hours and for patches that fall off before they have been worn for 72 hours. The patch should be folded in half with the sticky sides placed together and then flushed. Do not place fentanyl patches in the trash as there are several cases of children playing in the trash and taking fentanyl patches out of the garbage.

Medication Patches

The delivery of medications via transdermal patches has several advantages compared to the oral and parenteral delivery of medications: ease of application, sustained delivery, consistent blood levels and improved patient compliance. Medications for which there are transdermal delivery systems include scopolamine, nitroglycerine, clonidine, fentanyl, nicotine, lidocaine, oxybutynin, methylphenidate, selegiline, rotigotine, rivastigmine and male and female hormones.

Transdermal patches present several unique issues to poison centers. One common problem is the unintentional exposure of children to the patches. Patches which have fallen off of an adult, unbeknownst by the adult, can wind up on a child if the child unknowingly sits on, steps on or lies on the patch. Children who find medication patches may also play with the patch as a toy or apply it to their skin in imitation of adult behavior. Children may also chew the patches, releasing the medication remaining in the patch. Case reports describe toxicity in children from unintentional exposures to scopolamine, clonidine, nicotine and fentanyl patches.

Another problem related to transdermal medications is that the caller to the poison center may forget to mention the medication when the poison center specialist asks what medications the person is taking. This can be especially important regarding drug-drug interactions with selegiline (Emsam), a monoamine oxidase inhibitor, and rivastigmine (Exelon), a cholinesterase inhibitor.

After a patch has been worn for the prescribed amount of time, there is still a significant amount of active drug remaining in the patch. Fentanyl patches deliver between 12.5 and 100 mcg / hr. A 100 mcg / hr patch will deliver 7.2 mg of fentanyl over 72 hours. The amount of fentanyl remaining in a 100 mcg / hr patch varies depending upon the manufacturer, but ranges from 2.8 to 9.6 mg of fentanyl. Likewise, one brand of patches that delivers 21 mg of nicotine over 24 hours has 31 mg of nicotine remaining in the patch.

For questions regarding exposures to transdermal medication patches, call the Iowa Poison Control Center at **1-800-222-1222**.

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