Proper disposal of fentaNYL patches is critical to prevent accidental exposure

On April 18, 2012, the U.S. Food and Drug Administration (FDA) alerted healthcare providers and consumers about the importance of proper storage, application, and disposal of transdermal fentaNYL (fentaNYL patch) to prevent dangerous, accidental pediatric exposure (www.fda.gov/Drugs/DrugSafety/ucm300747.htm). FDA noted 26 cases of accidental pediatric exposure during the past 15 years, including 10 that resulted in death and 12 that resulted in hospitalization. Sixteen events involved children 2 years old or younger. Incidents have occurred in the home but can also originate within a healthcare institution, where children may accompany adults who are visiting patients.

On the heels of a heartbreaking event recently reported to the ISMP National Medication Errors Reporting Program (ISMP MERP) by a grieving mother, this alert is intended to complement the recent FDA alert by focusing on safe disposal of fentaNYL patches in hospitals and long-term care facilities.

Last November, a 2-year-old boy, Blake (see photo in upper right corner), died after accidental exposure to a used fentaNYL patch hastily discarded in a long-term care facility. The family was visiting the boy’s great-grandmother at a nursing home. Two days after the visit he was found unconscious, in respiratory arrest, and was unable to be resuscitated. A medical examiner later found a small, white, 1 inch by ½ inch piece of what appeared to be tape in the boy’s throat. Later, a toxicology report came back indicating that a lethal dose of fentaNYL was in Blake’s system. The "tape" was sent to a laboratory for processing and turned out to be a used fentaNYL patch, with a high concentration of the potent opioid fentaNYL still remaining.

Blake’s parents spoke with authorities and related a history of the boy’s visit to the nursing home. County detectives and the state health department officials began an investigation. At the facility, authorities found that medication patches were not being disposed of properly. A used fentaNYL patch was seen on a bedside table and, according to the mother, patches had been disposed of in the trash pail in the boy’s great-grandmother’s room. Authorities also found used medication patches in other patient rooms on the floor, stuck to bed railings, and in other unsecured patient areas.

A theory emerging about the child’s death is that he may have run over a used fentaNYL patch on the floor of his great-grandmother’s room with his Tonka truck wheels. After the visit, he may have peeled off the patch and stuck it in his mouth. Used fentaNYL patches can still contain a large quantity of unabsorbed medicine after they are removed, so both new and used patches can be dangerous to children and pets.

The theory is quite feasible given that other children have been exposed to patches in a similar manner. In another case received through the ISMP MERP, a child sat on a used fentaNYL patch that had fallen off a family member, and it stuck to her thigh, causing drug-related symptoms. Another child...
removed a patch while his grandmother was sleeping and put it on his skin. And yet another child who tragically died found a fentaNYL patch in household trash and applied it to his skin. Children may think of medicine patches as stickers, tattoos, or Band-Aids.

To prevent this kind of accident, the fentaNYL patch label is one of several places where FDA labeling specifically mentions that the discarded drug patch should be flushed down the toilet. Health professionals removing a fentaNYL patch from a patient are urged to immediately fold the adhesive side of the patch against itself, then immediately flush the patch down the toilet. Only after those steps are taken should a new patch be placed upon the patient. The used patch should never be placed temporarily on a bedside table or stuck to a bed rail while applying a new patch. At Blake’s mother’s request, we are relaying this information on proper disposal of fentaNYL patches to hospitals and long-term care facilities.

Blake’s mother also asked us to emphasize the need for healthcare providers to educate parents about possible hazards when a family member or friend uses medication patches, or if they and their children visit family or friends in a healthcare facility. All too often, this simply does not happen. She said if she had only been reminded that hazards like drug patches were around, she would have been more alert. To assist with patient and family education, you can access a consumer safety tips handout for fentaNYL on our website (www.ismp.org/docs/Fentanyl-Brochure.pdf) and make free copies to distribute to your patients.

Besides proper disposal and awareness of the hazards associated with new and used medication patches, parents and healthcare providers should also keep any medication patch far out of the reach or discovery of children. They should not let children see how patches are applied or call them stickers, tattoos, or Band-Aids. We also hope to see stepped-up oversight by accreditation agencies and state surveyors to focus more on safe drug disposal methods.

The National Alert Network (NAN) is a coalition of members of the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP). The network, in cooperation with the Institute for Safe Medication Practices (ISMP) and the American Society of Health-System Pharmacists (ASHP), distributes NAN alerts to warn healthcare providers of the risk for medication errors that have caused or may cause serious harm or death. NCC MERP, ISMP, and ASHP encourage the sharing and reporting of medication errors both nationally and locally, so that lessons learned can be used to increase the safety of the medication use system.