



Title:	Analysis of abuse of buprenorphine transdermal delivery system (Butrans®) using data from the RADARS® System Poison Center Program.
Authors:	Wiegand TJ, Le Lait CMC, Green JL, Dart RC
Meeting:	ASAM
Date:	April 2014
Location	Orlando, FL

Abstract:

The number of unique intentional abuse exposure cases for Butrans, other buprenorphine, and schedule II prescription opioids in each year quarter was divided by three different denominators to calculate rates. Denominators used include the population covered in that year quarter, unique recipient of dispensed drug (URDD), and number of prescriptions filled. The time period for this analysis is first quarter 2011 to first quarter 2013. RESULTS The average age of Butrans exposures is 33.6 years, compared to 28.7 years for all other buprenorphine and 31.7 for other schedule II opioids. Most Butrans intentional abuse exposures involved dermal (50.0%) or chewing (33.3%) routes. The most common route for other buprenorphine products was injecting (15.4%), followed by chewing (8.8%) and transmucosal (7.8%). Intentional abuse exposures for schedule II opioids involved swallowing the opioid whole (41.9%), followed by injecting (9.3%), inhaling (8.0%) and chewing (7.3%). Most intentional abuse exposures for the three drug groups resulted in minor or moderate medical outcomes. Exposure rates, 95% CIs, and p values are provided for 2013Q1. There were no differences in trends over time between any of the groups and Butrans. Estimated population rates of intentional abuse exposures per 100,000 for Butrans were 0.0007 (0.0003, 0.0017), for other buprenorphine 0.0394 (0.0326, 0.0475 p < 0.001), and schedule II opioids 0.2954 (0.2777, 0.3142) p < 0.001). Intentional abuse exposure URDD rates for Butrans were 0.0265 (95% CI 0.0098, 0.0713), for other buprenorphine 0.1578 (95%CI 0.129, 0.193 p 0.001) and for schedule II opioids 0.0754 (95%CI 0.0708, 0.0804 p 0.040). Intentional abuse exposure prescription rates per 1,000 prescriptions filled for Butrans were 0.0145 (95%CI 0.0052, 0.0402), for other buprenorphine 0.0417 (0.0346, 0.0503 p 0.046), for schedule II opioids 0.0458 (0.0429, 0.049 p 0.029). Conclusions Adjusting for abuse exposure rates using three different denominators including the population covered in that year quarter, the unique recipients of dispensed drug (URDD), and number of prescriptions filled demonstrate that intentional abuse exposure rates for Butrans patch were significantly lower than rates for other forms of buprenorphine and other schedule II opioids from over the time period studied (2011Q1 2013Q1).

