

# RADARS<sup>®</sup> SYSTEM



Researched Abuse, Diversion and Addiction-Related Surveillance System



## Third Quarter 2013 Technical Report

### *Comparison of Drug Diversion Street Price and StreetRx Programs*

#### Key Points:

1. The price paid for illicit prescription drugs are tracked in two RADARS<sup>®</sup> System programs, Drug Diversion Street Price and StreetRx.
2. Median prices were compared across the two programs for several opioid drug classes using data collected from 1Q 2011 through 4Q 2012.
3. Although ranks of median price per mg were similar across programs median Street Price data were generally higher than StreetRx prices.

## Background

Data on the street price of drugs provide valuable information about the availability and appeal of different substances. The RADARS<sup>®</sup> System collects data on drug product prices from the Drug Diversion Street Price Program and StreetRx Program, described below.

## Methods

### **RADARS System Drug Diversion Street Price Program**

The RADARS System Drug Diversion Street Price Program surveys drug diversion officers quarterly about the cost of diverted products on the street in their jurisdiction. Drug diversion officers include municipal police departments, multi-jurisdictional drug task forces, county sheriffs' departments and state police agencies. In 4Q 2012, 79 drug diversion officers participated in the Street Price Program. Data are collected by specific drug product and most common dosage size.

### **RADARS System StreetRx Program**

StreetRx ([www.streetrx.com](http://www.streetrx.com)) is a collection of databases, websites and citizen reports intended to enable real-time collection, organization and display of street price data on diverted pharmaceutical controlled substances [1]. Based on principles of crowd-sourcing for public health surveillance, site users anonymously submit prices they paid or heard were paid for diverted prescription drugs. The site allows users to select the drug, US city and state, price, formulation, dosage strength and source.

## Statistical Analysis

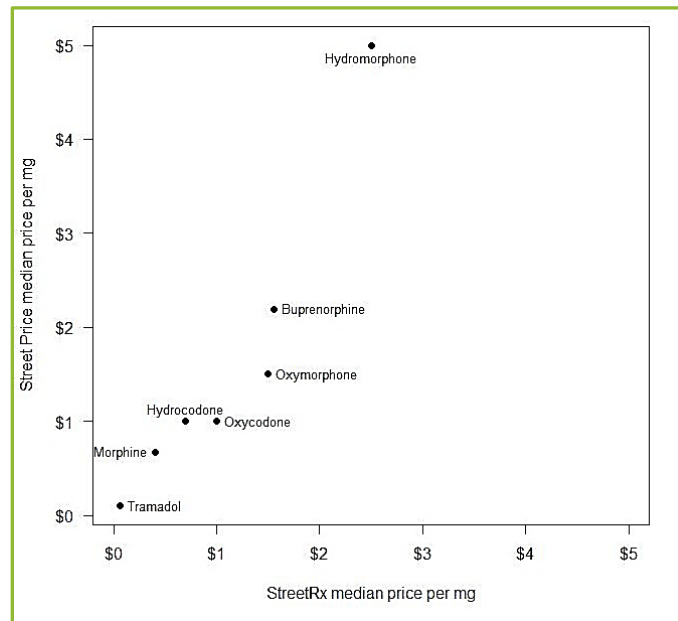
Tablet formulations of drug products were combined into 7 drug classes based on active pharmaceutical ingredient: hydromorphone, buprenorphine, oxycodone, methadone, hydrocodone, morphine and tramadol. Fentanyl and other patch formulation drugs were excluded from the analysis. The median price per mg in each class from 1Q 2011 through 4Q 2012 was ranked from highest to lowest. The intraclass correlation coefficient (ICC) was computed to assess the agreement between the median prices for the two programs.

## Results

Street Price and StreetRx median prices per mg have consistent rankings, with the exception that the street prices for methadone, hydrocodone and oxycodone have equal median prices per mg in the Street Price program. Street Price median prices are higher for all drugs except methadone, where the median price is the same in both programs. The figure below shows the median prices for the two programs plotted against each other. The intraclass correlation coefficient (ICC) between the two measures is 0.71, suggesting that Street Price and StreetRx have fair agreement in the median price per mg for the drug classes examined.

**Figure 1:** RADARS System Poison Center abuse rates per 1,000 URDD and 100,000 population 2011Q1 through 2013Q1

Drug	Street Price			StreetRx		
	Rank	N	Median Price per mg	Rank	N	Median Price per mg
hydromorphone	1	186	\$4.38	1	201	\$2.50
buprenorphine	2	300	\$2.19	2	100	\$1.88
oxymorphone	3	140	\$1.38	3	105	\$1.31
methadone	5	296	\$1.00	4	87	\$1.00
oxycodone	5	893	\$1.00	5	1492	\$0.92
hydrocodone	5	686	\$1.00	6	658	\$0.68
morphine	7	255	\$0.67	7	259	\$0.45
tramadol	8	147	\$0.10	8	72	\$0.08



## Conclusions

This analysis shows that the Drug Diversion Street Price and StreetRx programs have similar rank orders of median prices per mg for the drug classes considered. However, Street Price consistently has higher median prices. The agreement in median prices for the two programs was fair, as seen in the ICC of 0.71.

## Suggested citation

Le Lait C, Bucher Bartelson B, Severtson G, Dart R (2013). Comparison of Drug Diversion Street Price and StreetRx Programs, 2013Q3.

## Reference

1. Dasgupta N, Freifeld C, Brownstein JS, Menone CM, Surratt HL, Poppish L, Green JL, Lavonas EJ, Dart RC. Crowdsourcing black market pricing of prescription opioids. Journal of Medical Internet Research. 2013;15(8):e178. DOI:10.2196/jmir.2810.