StreetRx Data Usage

# Please NEVER submit data onto the website when exploring the interface. These will show up as reports in the dataset.

# About StreetRx

StreetRx is an on-going observational public health surveillance study based on crowdsourcing. The website (StreetRx.com) gathers user-submitted information on street prices of diverted prescription or illicit drugs. Visitors can anonymously view, post, and rate submissions in a format that offers price transparency to an otherwise opaque black market, while providing a novel data set for public health surveillance.

StreetRx.com has been used to generate valuable insights for health promotion programs and epidemiological research. The site is able to identify differences in the appeal of conventional versus abuse-deterrent formulations, regional variances in diverted drug prices, and changes in the localized price and availability of newly released products. Information on drug prices and preferences help health communication specialists to tailor outreach information to local needs, and assist epidemiologists and policymakers to understand the effects of product formulations, prescribing practices, and pricing structures on the diversion of prescription drugs.

The StreetRx protocol was determined to be non-human subject research and the project was granted exemption status by the Colorado Multiple Institutional Review Board. In addition to the United States, StreetRx has been launched in Australia, Canada, France, Germany, Italy, Spain, and the United Kingdom.

# Conditions Prior to Dissemination

Use the associated Limited Data Set (LDS) only for the purposes identified in Schedule 1 of the Data Use Agreement (DUA), or as otherwise required by law, and for no other purpose. Interest in any other analyses other than what is defined in the DUA requires new application for data request.

The recipient of the LDS agrees to provide to RMPDC for review a copy of manuscripts, slide presentations, conference abstracts, posters, or dissertations at least thirty (30) days prior to public presentation of any graphic, table, figure or text for the first time.

The recipient may utilize and possess data for a period not to exceed two (2) years unless an extension for research purposes is approved in writing by RMPDC. The recipient shall promptly return or destroy the LDS received from RMPDC in connection with the purpose identified on Schedule 1 of the DUA. If return or destruction of the LDS is not feasible, the recipient shall continue the protections required under the DUA for the LDS.

# Citation

Denver Health and Hospital Authority. (**YYYY**). RADARS® System StreetRx Program, **YEAR RANGE OF DATA** [Data file]. StreetRx.com. Denver, CO: Denver Health and Hospital Authority in partnership with Booz Allen Hamilton.

# Study Personnel

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# StreetRx Data Dictionary

| **Name** | **Description** | **Format** | | **Analytical Considerations** |
| --- | --- | --- | --- | --- |
| **Information on Report** | | | | |
| record | Unique ID number for each reported price | Numeric | |  |
| submitted\_date | Date of submission | Numeric: SAS MMDDYY10 | | This is the date the user logged the purchase on the website. Automatic based on report, not selected by users |
| price\_date\* | Date of price reported | Numeric: SAS MMDDYY10. | | This is the date of the reported purchase. This is the date that should be used for analyses that involve time. This is selected by the user. Cannot be past the submitted date plus one day. |
| yq\_sdate | Corresponding year-quarter for submitted date | Numeric | | The year and quarter for the submitted date. Formatted as numeric where first 4 numbers are the year, and last number is the quarter (1st through 4th).  For example, March 2018 submissions were 1st quarter 2018 so yq\_sdate would equal 20181. |
| yq\_pdate | Corresponding year-quarter for price date | Numeric | | The year and quarter for the price date. Formatted as numeric where first 4 numbers are the year and last number is the quarter (1st through 4th).  For example, March 2018 prices were 1st quarter 2018 so yq\_pdate would equal 20181. |
| city | City of reported price (if reported) | Character | | Manually entered by user, and user is allowed to omit this field. |
| state\* | State/province/region of reported price (if reported) | Character | | The level of granularity of this variable is country specific. In the US it is state, in Canada is province, in the United Kingdom is it country, etc. Prior to April 2015 this was an open text field. After that, these became drop down menus on the website compared. |
| USA\_region | USA census region | Character | | Missing for all non-USA reports. USA reports are based on state and options include:  NE (Northeast)  MW (Midwest)  W (West)  S (South)  Other/Unknown (Other USA territories such Guam) |
| country\* | Country of reported price | Character | | This is based on which website the user is using. |
| latitude | Latitude of reported price | Numeric | | These two variables represent the centroid of the reported location. If a respondent reports a city, it would be the centroid of that city. If a user omits a city, it would be the centroid of the state variable. |
| longitude | Longitude of reported price | Numeric | |
| source | Reported source of information | Character | | Users do not have to just report what they have purchased, it can be a second-hand report and this variable will indicate the source of the price information submitted. All identifying information (such as addresses or email addresses) have been removed. |
| client\_device | Type of device used to submit report | Character | | Type of devices used (e.g. android, iphone, desktop, etc.) |
| **Information on Drug** | | | | |
| pname | Product name of reported drug | Character | These come from a limited administrative database which comprises selected products and possible dosages. | |
| Api\_temp | Active generic ingredient of reported drug of interest | Character | This is a derived variable based on the product selected; the user does not specify it. It is the active pharmaceutical ingredient for that product (e.g. oxycodone, tramadol, etc.)  \*Note: This is called temp since this variable is currently being worked on to be considered harmonized. Missing values are not assessed yet, but assigned values are. | |
| price | Price reported (in country’s currency) | Numeric | Currency may change by country (e.g. USD for US, CAD for Canada, etc.). This is the raw entry reported directly to the website. | |
| form\_temp\* | Dosage form of reported drug | Character | Examples: pill/tablet, patch, suppository, etc.  \*Note: This is called temp since this variable is currently being worked on to be considered harmonized. Missing values are not assessed yet. | |
| mgstr | Dosage strength of reported drug in milligrams | Numeric | This is a derived variable from dose entry (not provided in raw data).  This is the dosage strength in milligrams of one unit purchased (i.e. one pill, one patch). For example, if a user buys 5 pills at 10mg/pill for $50, they should report price was $10 and dose was 10mg making milligram strength = 10mg and price per milligram = price / mgstr = $1.  For combination products, this variable will be the opioid mgstr. | |
| ppm | Price per milligram: Unit price of reported drug in currency/mg | Numeric | This is a derived variable from the price entry.  Currency may change by country. This is the price per one unit purchased (i.e. one pill, one patch). See example above in mgstr row. | |
| bulk\_purchase | Indicator for if purchase was a bulk purchase (10+ at a time). | Numeric | Options include 1 if submitter reported the price as a bulk purchase (10+ at a time), 0 otherwise.  This variable is typically taken into consideration when doing analyses on price data. | |
| primary\_reason\* | Primary reason for making purchase | Numeric | Data collection began in 4th quarter 2016. Values include:  0 = Reporter did not answer the question  1 = To treat a medical condition (ADHD, excessive sleepiness, etc.)  2 = To help me perform better at work, school, or other task  3 = To prevent or treat withdrawal  4 = For enjoyment/to get high  5 = To resell  6 = Other reason  7 = Don’t know  8 = Prefer not to answer  9 = To self-treat my pain  10 = To treat a medical condition other than pain  11 = To come down  12 = To treat a medical condition (anxiety, difficulty sleeping, etc.)  Ordering of numbers does not indicate the order in which they appear to the user on the website. | |

\* These variables are selected by a drop-down menu, and are limited options provided to the user.