The Opioid Files
and accessible data

The Washington Post
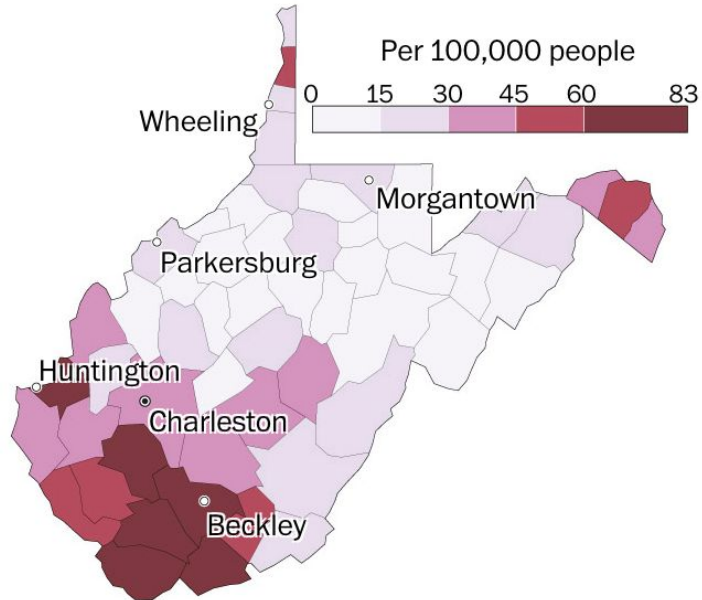
Andrew Ba Tran
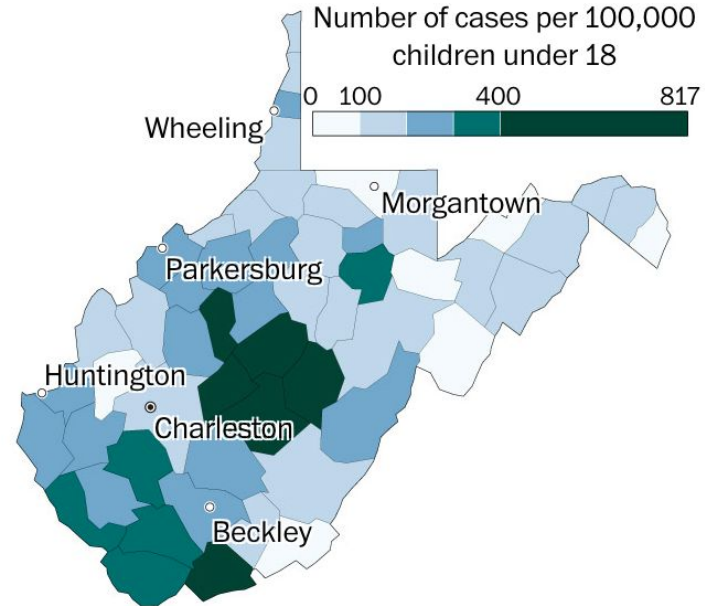
AVERAGE ANNUAL
Opioid overdose death rate

Per 100,000 people

0   15   30   45   60   83

Wheeling

Morgantown

Parkersburg

Huntington

Charleston

Beckley

AVERAGE ANNUAL
Child abuse and neglect cases

Number of cases per 100,000
children under 18

0   100   400   817

Wheeling

Morgantown

Parkersburg

Huntington

Charleston

Beckley

Source: CDC and West Virginia Supreme Court of Appeals annual reports
BRITTANY RENEE MAYES AND STEVEN RICH/THE WASHINGTON POST

Automation of
Reports and
Consolidated
Orders
System

Received Date	Closed Date	Request Description	Final Disposition
11/3/17	1/5/18	All data in the ARCOS database about opioids distributed in Florida by the McKesson Corporation between January 1, 2012 and the present.	Denied in Full
11/3/17	1/5/18	All data in the ARCOS database about opioids distributed in West Virginia by the McKesson Corporation between January 1, 2012 and the present.	Denied in Full
11/3/17	1/5/18	All data in the ARCOS database about opioids distributed in Illinois by the McKesson Corporation between January 1, 2012 and the present.	Denied in Full
11/3/17	1/5/18	All data in the ARCOS database about opioids distributed in Ohio by the McKesson Corporation between January 1, 2012 and the present.	Denied in Full
3/9/18	3/28/18	ARCOS data for the state of Missouri from 2012 - present	Denied in Full
4/9/18	5/11/18	ARCOS transaction records for Blenheim Pharmacal, Inc. DEA Registrations from 2004 through 201?	Denied in Full
6/19/18	6/28/18	All ARCOS Database records referenced in MDL 2804 Court Order dated June 13, 2018 Judge Daniel Polster: Opiate Litigation USDC ND Ohio	Denied in Full
7/19/18	8/3/18	ARCOS Data from the US Northern District of Ohio's case no. 1:17-MD-2804 from 01/01/2006 - 12/31/2014	Denied in Full - Other

```
Columns: 42
$ REPORTER_DEA_NO      <chr> "PM0150538", "PM0150538", "PM0150538", "PM0150538"…
$ REPORTER_BUS_ACT     <chr> "DISTRIBUTOR", "DISTRIBUTOR", "DISTRIBUTOR", "DIST…
$ REPORTER_NAME        <chr> "MCKESSON CORPORATION", "MCKESSON CORPORATION", "M…
$ REPORTER_ADDL_CO_INFO <chr> NA, NA, NA, NA, "D/B/A GUARANTEED RETURNS", "D/B/A…
$ REPORTER_ADDRESS1    <chr> "DBA MCKESSON DRUG CO", "DBA MCKESSON DRUG CO", "D…
$ REPORTER_ADDRESS2    <chr> "710 132ND STREET SW", "710 132ND STREET SW", "710…
$ REPORTER_CITY        <chr> "EVERETT", "EVERETT", "EVERETT", "EVERETT", "HOLBR…
$ REPORTER_STATE       <chr> "WA", "WA", "WA", "WA", "NY", "NY", "NY", "NY", "N…
$ REPORTER_ZIP         <dbl> 98204, 98204, 98204, 98204, 11741, 11741, 11741, 1…
$ REPORTER_COUNTY      <chr> "SNOHOMISH", "SNOHOMISH", "SNOHOMISH", "SNOHOMISH"…
$ BUYER_DEA_NO         <chr> "BF5407312", "BF5407312", "BF5407312", "BF5407312"…
$ BUYER_BUS_ACT        <chr> "HOSP/CLINIC FED", "HOSP/CLINIC FED", "HOSP/CLINIC…
$ BUYER_NAME           <chr> "FEDERAL DETENTION CTR SEATAC", "FEDERAL DETENTION…
$ BUYER_ADDL_CO_INFO   <chr> "BOP/DOJ", "BOP/DOJ", "BOP/DOJ", "BOP/DOJ", "MCNEI…
$ BUYER_ADDRESS1       <chr> "2425 S 200TH STREET", "2425 S 200TH STREET", "242…
$ BUYER_ADDRESS2       <chr> NA, NA, NA, NA, "PO BOX 88900", "PO BOX 88900", "P…
$ BUYER_CITY           <chr> "SEATAC", "SEATAC", "SEATAC", "SEATAC", "STEILACOO…
$ BUYER_STATE          <chr> "WA", "WA", "WA", "WA", "WA", "WA", "WA", "WA", "W…
$ BUYER_ZIP            <dbl> 98198, 98198, 98198, 98198, 98388, 98388, 98388, 9…
$ BUYER_COUNTY         <chr> "KING", "KING", "KING", "KING", "PIERCE", "PIERCE"…
$ TRANSACTION_CODE     <chr> "S", "S", "S", "S", "P", "P", "P", "P", "P", "P", …
$ DRUG_CODE            <chr> "9143", "9143", "9143", "9143", "9143", "9801", "9…
$ NDC_NO               <chr> "59011010720", "59011010320", "59011010020", "0040…
$ DRUG_NAME            <chr> "OXYCODONE", "OXYCODONE", "OXYCODONE", "OXYCODONE"…
$ QUANTITY             <dbl> 10, 6, 5, 5, 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1…
$ UNIT                 <lgl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA…
$ ACTION_INDICATOR     <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA…
$ ORDER_FORM_NO        <chr> "062083647", "062083621", "062083661", "076804657"…
$ CORRECTION_NO        <chr> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA…
$ STRENGTH             <chr> NA, NA, NA, NA, NA, NA, NA, "0010", "0010", "0440"…
$ TRANSACTION_DATE     <chr> "04092007", "05012007", "10202008", "06272011", "0…
$ CALC_BASE_WT_IN_GM   <dbl> 14.3440000, 2.1516000, 0.8965000, 2.2412500, 1.793…
$ DOSAGE_UNIT          <dbl> 200.00, 120.00, 100.00, 500.00, 100.00, NA, 10.00,…
$ TRANSACTION_ID       <dbl> 704040909, 705042854, 810040630, 1106011577, 35849…
$ Product_Name         <chr> "OXYCONTIN - 80MG OXYCODONE.HCL CONTR", "OXYCONTIN…
$ Ingredient_Name      <chr> "OXYCODONE HYDROCHLORIDE", "OXYCODONE HYDROCHLORID…
$ Measure              <chr> "TAB", "TAB", "TAB", "TAB", "TAB", "ML", "PO/PA", …
$ MME_Conversion_Factor <dbl> 1.50, 1.50, 1.50, 1.50, 1.50, 100.00, 100.00, 1.50…
$ Combined_Labeler_Name <chr> "Purdue Pharma LP", "Purdue Pharma LP", "Purdue Ph…
$ Revised_Company_Name  <chr> "Purdue Pharma LP", "Purdue Pharma LP", "Purdue Ph…
$ Reporter_family      <chr> "McKesson Corporation", "McKesson Corporation", "M…
$ dos_str              <dbl> 80.0, 20.0, 10.0, 5.0, 20.0, NA, NA, 5.0, 5.0, 30.…
```

Big Data

Data formats:
Parquet
Feather

Processing:
doParallel

Sharing analyses

Notebooks:
Jupyter
RMarkdown

Interactive:
Shiny

Sort table first by descending

pills_per

Sort table then by descending
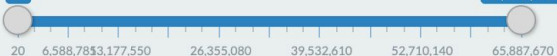
growth

Choose a state

ALL STATES

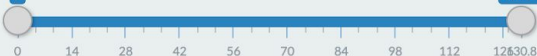Choose a group

ALL

⟳ Refresh

Set pills range

20   65,887,670

20   6,588,78$3,177,550   26,355,080   39,532,610   52,710,140   65,887,670

Set pills per capita range

0   130.8

0   14   28   42   56   70   84   98   112   12$30.8

Set county pop population range

1,185   9,763,540

1,185   977,4211,953,657   3,906,129   5,858,601   7,811,073   9,763,540

Set death range

| Top 1000 | | | | | | | | | |

Show 50 entries   Search: [   ]

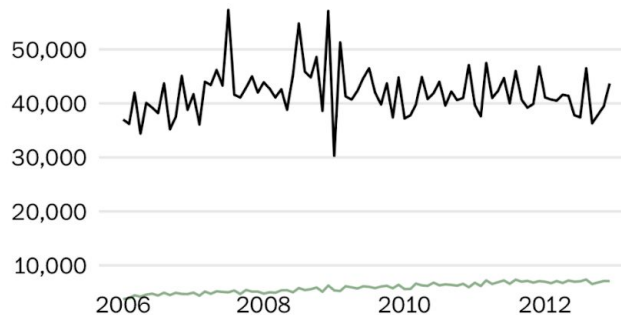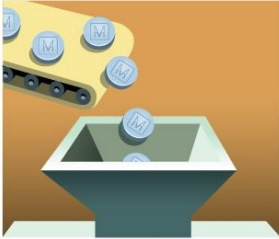| pharmacy	pills	pills per person	county population	deaths	Percent growth	county pharms	% county	% state
1 ⊖ WAL-MART PHARMACY 10-1302	3534780	130.8	3862	23	5.13	7	46.42	0.22

Percent oxy 93.58

tab30   0.46

WAL-MART PHARMACY 10-1302

Chain Pharmacy in Norton compared to the state average dosage orders
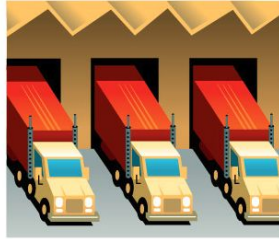
monthly chart

THE PATH OF A PAIN PILL

Manufacturers

The oxycodone pills' journey begins at Mallinckrodt Pharmaceuticals. The tablets are created and packaged in a facility in Hobart, N.Y.

Distributors

Mallinckrodt sends the pills to a network of distributors like Sunrise Wholesale and KeySource Medical. The distributors then supply the drugs to retailers.

Retailers

Retailers such as pharmacies and hospitals dispense drugs that doctors prescribe to patients. Some retailers have been accused of illegally diverting oxycodone.

Patient

When patients pay in cash or receive an unusually high volume of oxycodone, that can be an indication of abuse or diversion of the pills to the black market.

Sources: Centers for Disease Control and Prevention; Drug Enforcement Administration

ILLUSTRATIONS BY PETER AND MARIA HOEY FOR THE WASHINGTON POST

Investigations

More than 100 billion pain pills saturated the nation over nine years

From 2006 through 2014, more than 100 billion doses of oxycodone and hydrocodone were distributed nationwide, according to federal drug data. (John Moore/Getty Images)
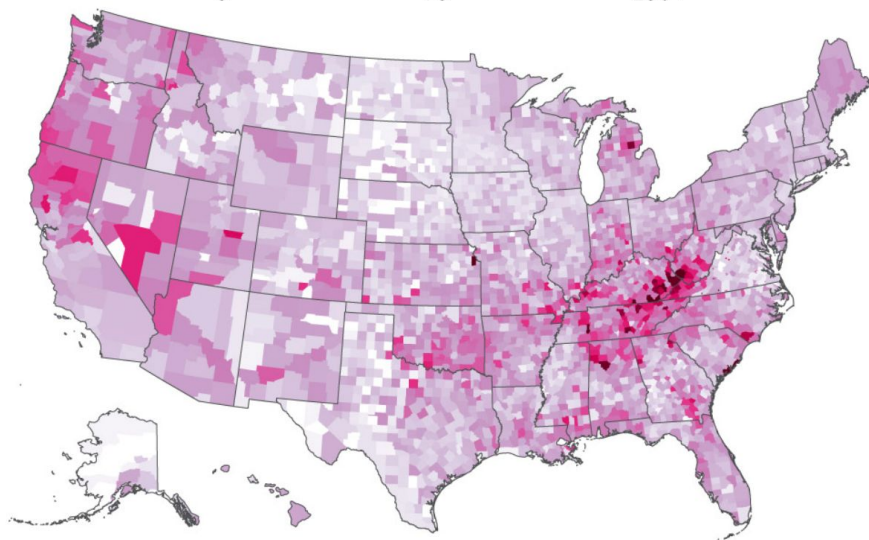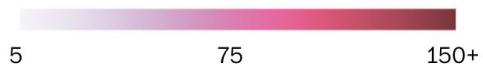
By **Steven Rich**, **Scott Higham** and **Sari Horwitz**

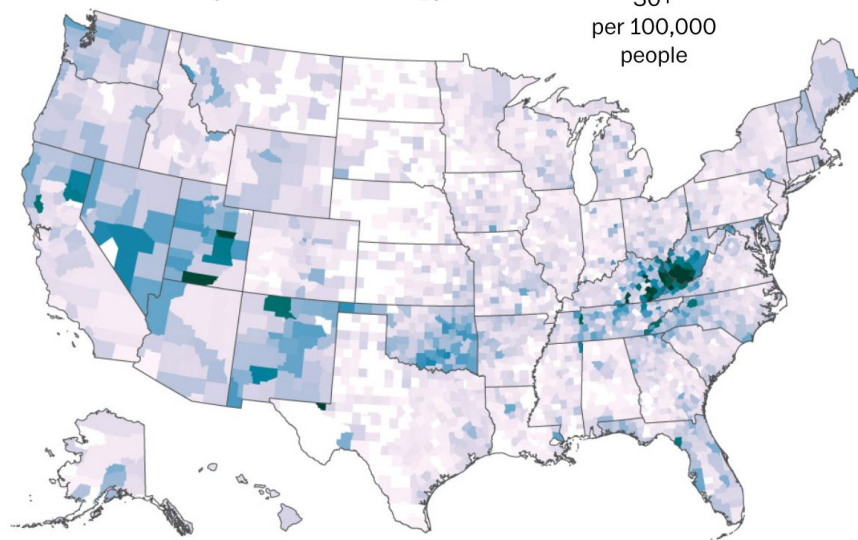Jan. 14, 2020 at 7:13 p.m. EST

➕ Add to list

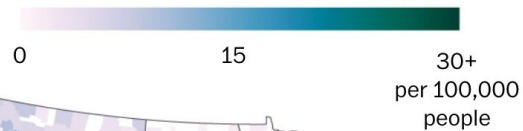**Number of pills per person per year**
Average county yearly total 2006 through 2014

5   75   150+

Opioid Deaths
Cumulative opioid death rate 2006 through 2014

0   15   30+
per 100,000
people

Source: Data compiled by the DEA and CDC and analyzed by The Post

10 biggest prescription opioid distributors, 2006-2012

DISTRIBUTOR	NUMBER OF PILLS	MARKET SHARE
McKesson Corp.	14,107,192,480	18.4%
Walgreens	12,636,815,170	16.5%
Cardinal Health	10,709,959,627	14.0%
AmerisourceBergen	8,952,844,625	11.7%
CVS	5,909,410,160	7.7%
Walmart	5,255,663,660	6.9%
Smith Drug Co.	1,348,619,950	1.8%
Rite Aid	1,314,386,010	1.7%
Kroger	1,231,379,170	1.6%
H. D. Smith	1,142,193,715	1.5%

10 biggest prescription opioid manufacturers, 2006-2012

MANUFACTURER	NUMBER OF PILLS	MARKET SHARE
SpecGx	28,863,435,081	37.7%
Actavis Pharma	26,476,395,830	34.6%
Par Pharmaceutical	11,996,780,871	15.7%
Purdue Pharma	2,492,496,319	3.3%
Amneal Pharmaceuticals	2,257,973,121	2.9%
Teva Pharmaceuticals USA	686,276,053	0.9%
KVK Tech	580,825,207	0.8%
West-Ward Pharmaceuticals	384,200,988	0.5%
Kaiser Foundation Hospitals	366,492,050	0.5%
Endo Pharmaceuticals	297,306,324	0.4%

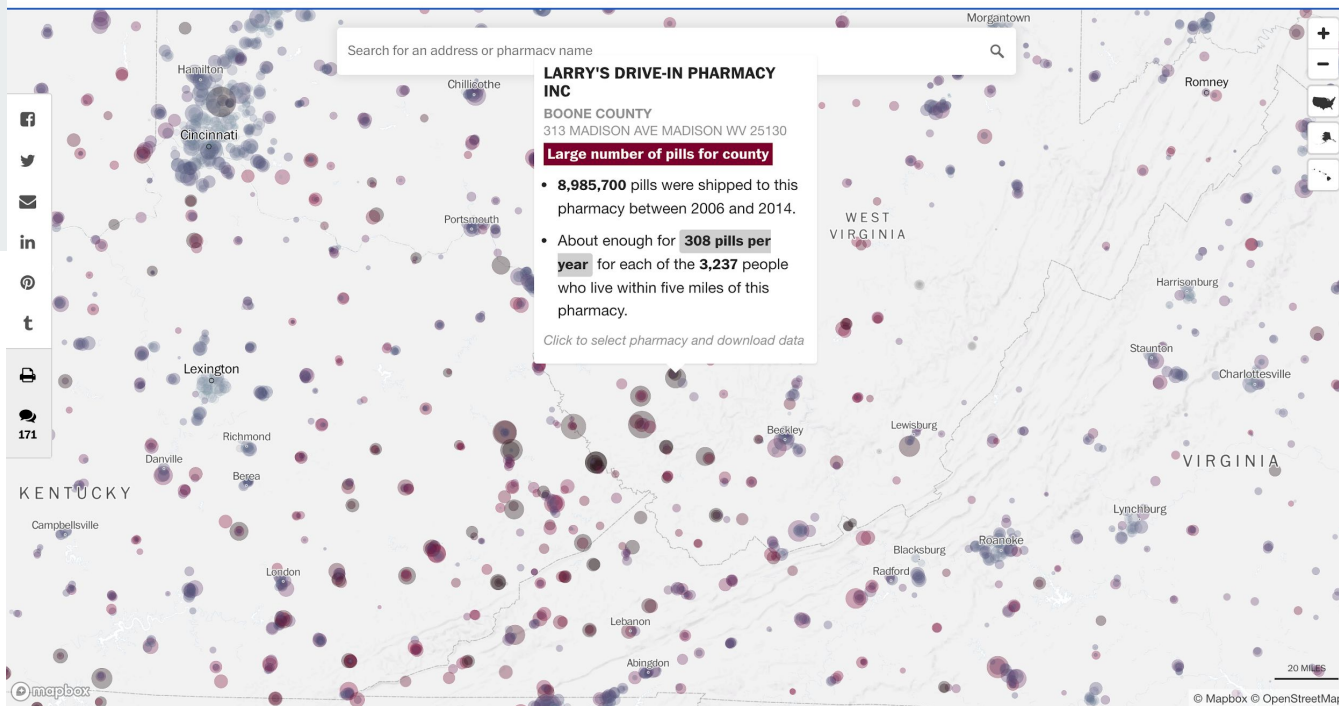# At height of crisis, Walgreens handled nearly one in five of the most addictive opioids

The company acted as its own distributor and, according to a lawsuit, failed to report suspicious orders of pain pills and prevent diversion to the black market.
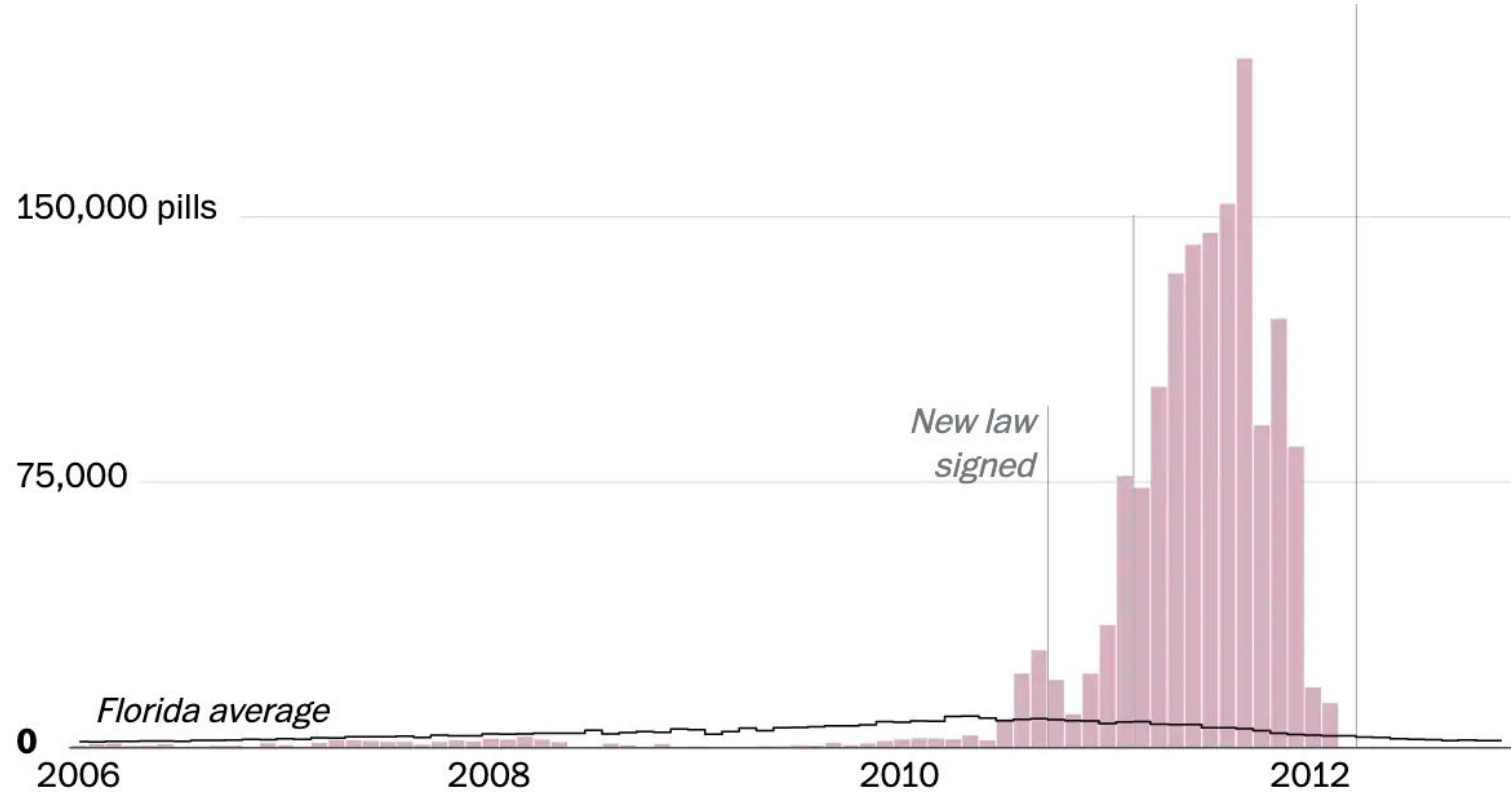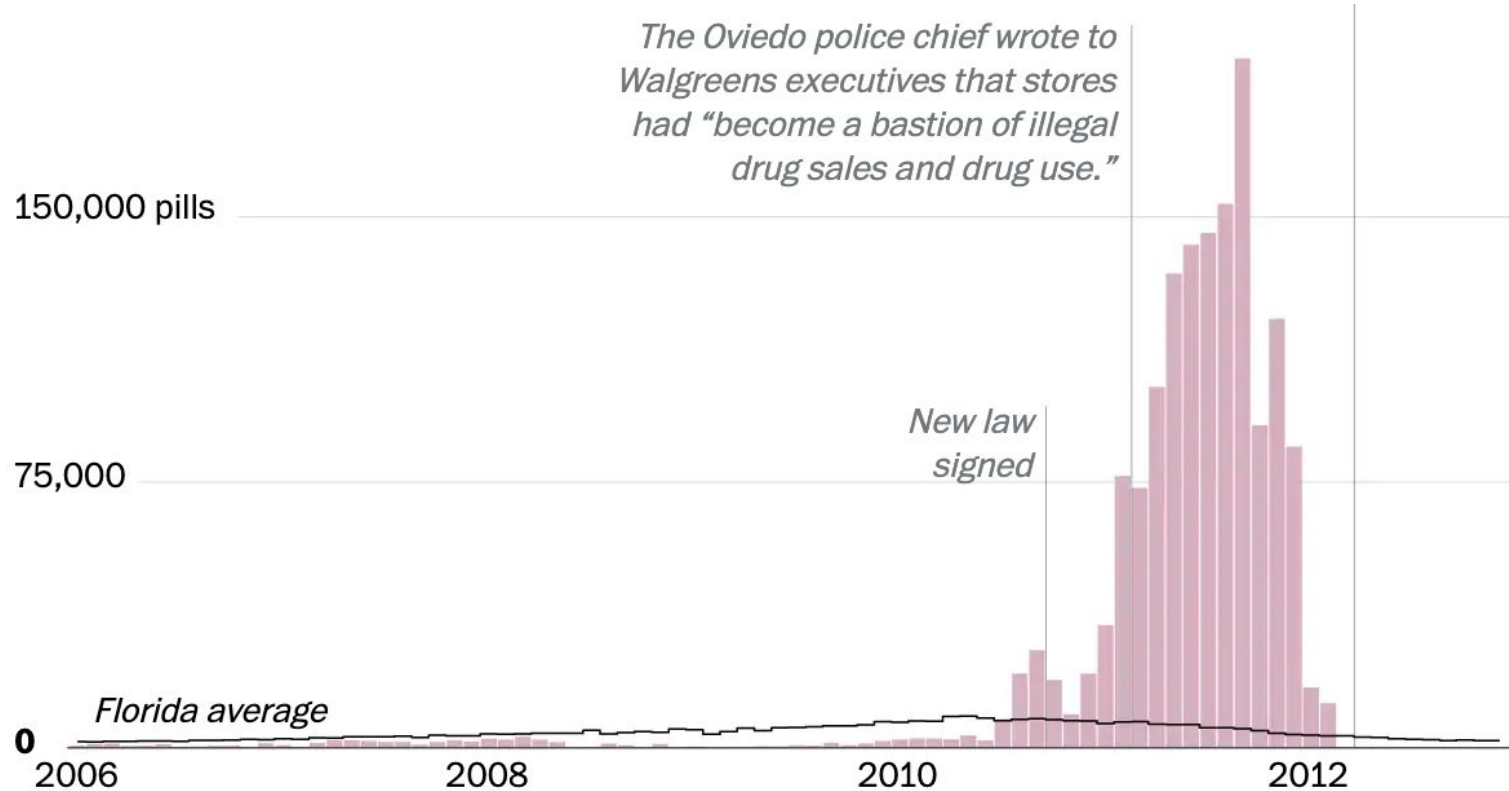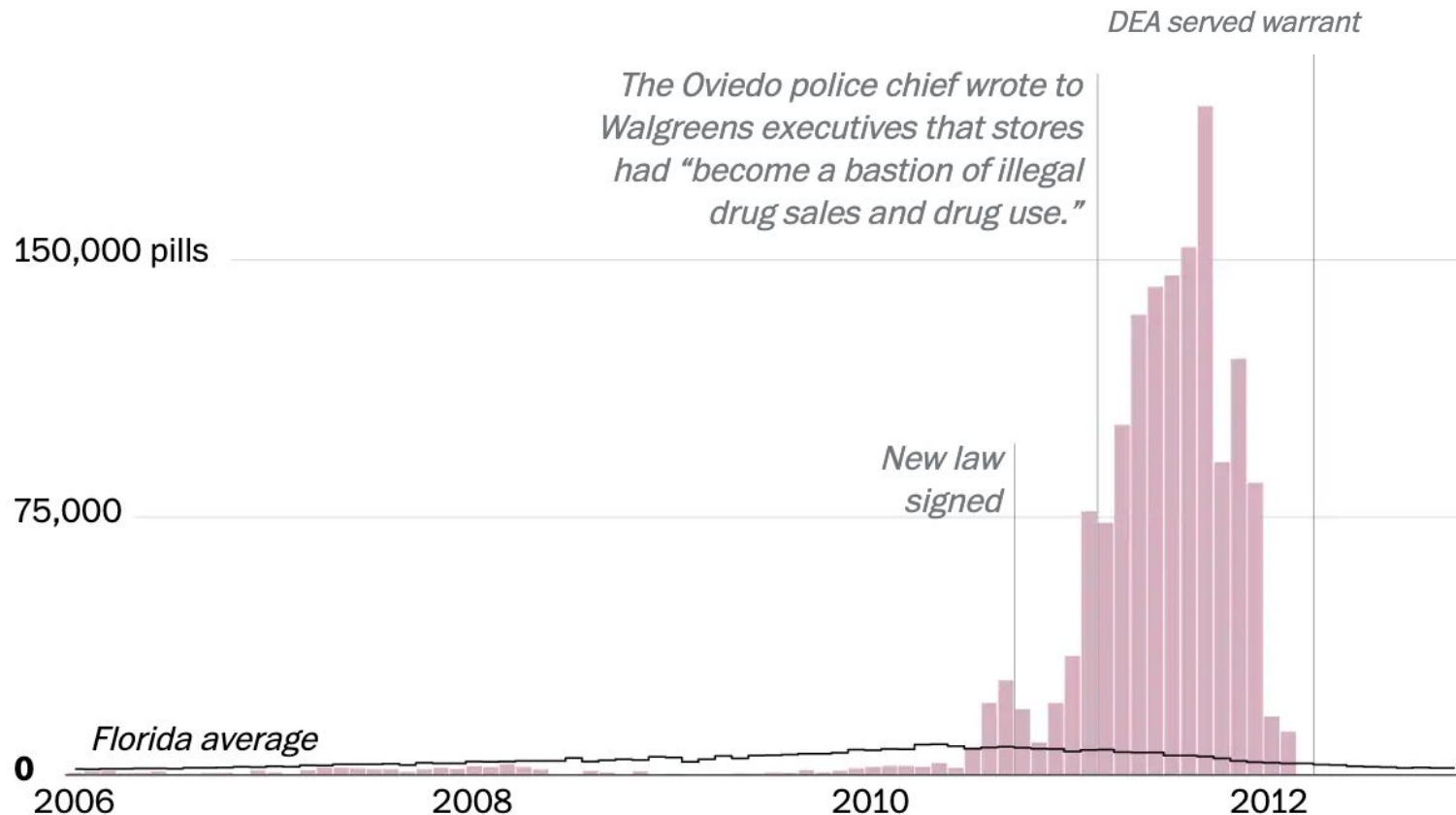
THE OPIOID FILES

Circles in the map are scaled by the **total number of pills** shipped to each pharmacy from 2006 through 2014.

Circles are colored by the total number of **pills per person within a five-mile radius of the pharmacy per year.***

| 0 | 25 | 75 | 150 | 300+ |

Search for an address or pharmacy name

LARRY'S DRIVE-IN PHARMACY INC

BOONE COUNTY
313 MADISON AVE MADISON WV 25130

Large number of pills for county

- **8,985,700** pills were shipped to this pharmacy between 2006 and 2014.

- About enough for **308 pills per year** for each of the **3,237** people who live within five miles of this pharmacy.

Click to select pharmacy and download data

Morgantown
Romney
Hamilton
Chillicothe
Cincinnati
WEST VIRGINIA
Harrisonburg
Portsmouth
Staunton
Charlottesville
Lexington
Lewisburg
Beckley
VIRGINIA
Richmond
Lynchburg
Danville
Berea
Roanoke
KENTUCKY
Blacksburg
Campbellsville
Radford
London
Lebanon
Abingdon

20 MILES

© Mapbox © OpenStreetMap

171

150,000 pills

75,000

New law signed

0

Florida average

2006   2008   2010   2012

150,000 pills

75,000

0

The Oviedo police chief wrote to Walgreens executives that stores had "become a bastion of illegal drug sales and drug use."

New law signed

Florida average

2006   2008   2010   2012

150,000 pills

75,000

0

DEA served warrant

The Oviedo police chief wrote to Walgreens executives that stores had "become a bastion of illegal drug sales and drug use."

New law signed

Florida average

2006   2008   2010   2012

10 billion pills

5

0

DEA served warrant

2006   2008   2010   2012

How to download and use the DEA pain pills database

By **Steven Rich**, **María Sánchez Díez** and **Kanyakrit Vongkiatkajorn**

July 18, 2019 at 12:07 p.m. EDT

+ Add to list

This page will be updated as we address your questions about the data.

The Washington Post published a significant portion of a database that tracks the path of every opioid pain pill, from manufacturer to pharmacy, in the United States between 2006 and 2012. We have reported a number of stories using this data set, but we believe there are more stories to be told.

We are making this data accessible to journalists to download and use in their reporting to promote a deeper understanding of the regional and local effects of the opioid crisis. Academics and readers may also download and explore this data for their own use.

we believe there are more stories to be told

Find the data for where you live

West Virginia ▼	Mingo County ▼

- From 2006 to 2014 there were **43,247,080** prescription pain pills, enough for **179** pills per person per year, supplied to **Mingo County, W.Va.**

- **12,432,710** of the pills were distributed by **Miami-Luken** and **31,142,920** were manufactured by **Actavis Pharma, Inc.**

- **STROSNIDER, KERMIT** pharmacy received the highest number of pills. See a map of pharmacies in Mingo County, W.Va.

Distributors

Top five, from 2006 to 2014, in Mingo County, West Virginia.

Miami-Luken

████████████ **12,432,710 pills**

McKesson Corporation

█████████ 9,793,810

H. D. Smith

████████ 8,964,730

Cardinal Health

███ 3,979,150

AmerisourceBergen Drug

███ 3,701,200

Download distributor data for Mingo County, West Virginia

Get chart as image

Manufacturers

Top five, from 2006 to 2014, in Mingo County, West Virginia.

Actavis Pharma, Inc.

████████ **31,142,920 pills**

Par Pharmaceutical

██ 7,026,600

SpecGx LLC

█ 3,680,600

Purdue Pharma LP

| 266,920

Amneal Pharmaceuticals LLC

| 213,600

Download manufacturer data for Mingo County, West Virginia

Get chart as image

Pharmacies

Top five, from 2006 to 2014, in Mingo County, West Virginia.

STROSNIDER, KERMIT

████████ **13,168,350 pills**

HURLEY DRUG COMPANY INC, WILLIAMSON

█████ 9,864,690

TUG VALLEY PHARMACY, LLC, WILLIAMSON

█████ 9,823,650

RIVERSIDE PHARMACY, GILBERT

█ 2,491,280

ADKINS PHARMACY INC, GILBERT

█ 2,365,930

Download pharmacy data for Mingo County, West Virginia

Get chart as image

The Post believes this is a critically important set of data, which is why we are making it public and accessible to readers and other journalists. We think there are hundreds of stories within this data set and need your help to understand what it means to you and your community. **Want to use this data or our findings in your own work? Click here to find out how.**

Download raw data for Mingo County, West Virginia

⟨•⟩ **swagger**

Washington Post ARCOS API `1.0.0`

[Base url: arcos-api.ext.nile.works/]

https://arcos-api.ext.nile.works/swagger.json?schemes=https&host=arcos-api.ext.nile.works&path=/

API to access the DEA's ARCOS data prepared by The Washington Post. Check out the R package arcos and Python library arcospy, which are wrappers for this API. Use "WaPo" as the key or use any of the keys listed here. We reserve the right to discontinue these keys and invite users to sign up for their own individual one in the future if the need arises. There are three categories of data offered in this API. 1) Raw and slices of the raw data 2) Summarized data (based on our filters and criteria) for easier analysis and 3) Supplemental data, such as county, census tracts, and latitude and longitude for chain and retail pharmacies. Please refer to our guidelines for using this data.

Schemes

HTTPS ⌄

raw ⌄

GET	**/v1/county_data**	Returns all data by county (Will be large and could take extra time to load)

GET	**/v1/county_data_la**	Returns all data by county (Will be large and could take extra time to load)

GET	**/v1/county_data_drug**	Returns all data by county (Will be large and could take extra time to load)

GET	**/v1/county_fips_data**	Returns all data by county FIPS code (Will be large and could take extra time to load)

GET	**/v1/county_fips_data_drug**	Returns all data by county FIPS code (Will be large and could take extra time to load)

arcos

`CRAN` `not published` `downloads` `140/month`

The Washington Post published a significant portion of a database that tracks the path of every opioid pain pill, from manufacturer to pharmacy, in the United States between 2006 and 2014. We have reported a number of stories using this data set, but we believe there are more stories to be told.

We are making this data accessible as an API for everyone to download and use in their reporting or research to promote a deeper understanding of the regional and local effects of the opioid crisis.

This ARCOS package is a wrapper to utilize the ARCOS API. There is also a Python wrapper: arcospy

---

Installation

Get the latest stable release from CRAN:

```
install.packages("arcos")
```

To install the development version from GitHub:

```
# install.packages("devtools")
devtools::install_github('wpinvestigative/arcos')
```

Tips on how to use the API in R

- Annual maps
- County analysis
- Per capita pharmacies

Links

Download from CRAN at
https://cloud.r-project.org/package=arcos

Browse source code at
https://github.com/wpinvestigative/arcos

Report a bug at
https://github.com/wpinvestigative/arcos/issues

License

MIT + file LICENSE

Developers

Steven Rich
Author, contributor

Andrew Ba Tran
Author, maintainer

Aaron Williams
Author, contributor

All authors...

arcospy 1.1.1

`pip install arcospy`

Released: Sep 14, 2020

Python version of the R arcos package

Navigation

- ≣ Project description
- ↺ Release history
- ⬇ Download files

Project links

- 🏠 Homepage

Statistics

GitHub statistics:

- ★ Stars: 1

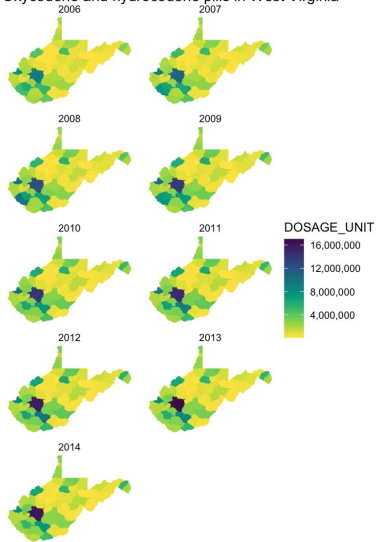## Project description

arcospy

`build` `passing`

Introduction

Welcome to `arcospy`, the python version of the R `arcos` package maintained by *The Washington Post*. `arcospy` is the result of a R-to-python translation project carried out at the University of Maryland in the Fall of 2019. The project was motivated a *Washington Post* data-driven story on a large pain pill database recently made publicly available.

The `arcospy` module was built to offer the exact same functionality as `arcos`, with the only difference being the ability to run the API calls in `python`! All of the commands in `arcospy` inherit the names from the original commands in `arcos`. Both `arcos` and `arcospy` act as wrappers for the DEA ARCOS dataset.

```
# Mapping with ggplot2, sf, and viridis

wv %>%
    ggplot(aes(geometry=geometry, fill = DOSAGE_UNIT, color = DOSAGE_UNIT)) +
    facet_wrap(~year, ncol=2) +
    geom_sf() +
    coord_sf(crs = 26915) +
    scale_fill_viridis(direction=-1, label = comma) +
    scale_color_viridis(direction=-1, label = comma) +
    theme_void() +
    theme(panel.grid.major = element_line(colour = 'transparent')) +
    labs(title="Oxycodone and hydrocodone pills in West Virginia", caption="Source: The Washington Post, ARCO
```


Oxycodone and hydrocodone pills in West Virginia

Source: The Washington Post, ARCOS

```
# Setting up some color options
cof <- colorFactor(c("#ffa500", "#13ED3F"), domain=c("PHARMACY", "DETOX/MAINTENANCE"))

# mapping with leaflet
m <- leaflet(buyers) %>%
    addProviderTiles(providers$CartoDB.DarkMatter) %>%
    setView(-71.091112, 42.338827, zoom = 12) %>%
    addCircleMarkers(~lon, ~lat,
                     popup=paste0(buyers$BUYER_NAME, "<br />",
                                  buyers$total, " total methadone"),
                     weight = 3,
                     radius=sqrt(buyers$total)/30,
                     color=~cof(type),
                     stroke = FALSE,
                     fillOpacity = 0.3)%>%
    addLegend("bottomright",
              colors= c("#ffa500", "#13ED3F"),
              labels=c("Detox", "Pharmacy"),
              title="Buyer type")
m
```

All functions

arcos   `arcos` package

`buyer_addresses()`   Get DEA designated addresses for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)

`buyer_details()`   Get monthly summarized pill totals by county

`buyer_list()`   Get list of business types listed in the BUYER_BUS_ACT in the ARCOS database

`combined_buyer_annual()`   Get annual total pills for each buyer (pharmacy, etc) in a county

`combined_buyer_monthly()`   Get annual total pills for each buyer (pharmacy, etc) in a county

`county_list()`   Get dataframe of counties, states, and fips codes that are represented in the ARCOS data

`county_population()`   Get annual population for counties between 2006 and 2012

`county_raw()`   Download raw prescription data for specified county (by state and county names) into R

`county_raw_fips()`   Download raw prescription data for specified county (by county FIPS code) into R

`drug_county_biz()`   Download raw prescription data for individual drugs and business type by county into R

`drug_fips_biz()`   Download raw prescription data for individual drugs and business type by county FIPS code into R

`drug_list()`   Get list of drugs available in the ARCOS database

`not_pharmacies()`   Get list of misidentified pharmacies by BUYER_DEA_NOs

`pharm_cbsa()`   Get the core-based statistical area GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)

`pharm_counties()`   Get county GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)

`pharm_latlon()`   Get latitude and longitude data for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)

`pharm_tracts()`   Get census tract GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)

`pharmacy_raw()`   Download raw prescription data for specified pharmacy (by BUYER_DEA_NO) into R

`raw_data()`   Download raw ARCOS data (Warning 130+ GB file) Warning: Not recommended to run in R due to server stability. If interested in the raw data, you can download via the link below.

`reporter_addresses()`   Get DEA designated addresses for each Reporter based on REPORTER_DEA_NO (Includes Manufacturers and Distributors)

`state_population()`   Get annual population for states between 2006 and 2012

`summarized_county_annual()`   Get annual summarized pill totals by county

`summarized_county_monthly()`   Get monthly summarized pill totals by county

`total_distributors_county()`   Get total pills for each distributor in a county

`total_distributors_state()`   Get total pills for each distributor in a state

`total_manufacturers_county()`   Get total pills for each manufacturer in a county

`total_manufacturers_state()`   Get total pills for each manufacturer in a state

`total_pharmacies_county()`   Get total pills for each pharmacy in a county

`total_pharmacies_state()`   Get total pills for each pharmacy in a state

Data Accessibility

7-21-2020

Cluster Analysis of Opioid Accessibility in the Carolinas Using Data from the ARCOS Database and an Enhanced Two-Step Floating Catchment Area Method

Michael T. Bunker
Coastal Carolina University

Health Crisis and Housing Market Effects - Evidence from the U.S. Opioid Epidemic*

Walter D'Lima[†]   Mark Thibodeau[‡]

June 19, 2020

ABSTRACT

We present a view of housing market effects relating health crises to house prices. Using data on opioid prescriptions and repeat sales in Ohio, we find that house price changes around opioid dispensaries (pharmacies and practitioners) are negatively associated with the quantity of opioids dispensed and the magnitude of the effect dissipates with distance from opioid dispensing locations. The results are consistent across different measures of opioids dispensed. We present a series of robustness checks and show that the treatment effect is more pronounced around pharmacies that

Tyler Dukes ✓
@mtdukes

Far from perfect, but I was able to use the @washingtonpost team's fantastic R package on opioid data to produce a grid of per-person prescription rates for each of NC's 100 counties from 2006-2012.
wpinvestigative.github.io/arcos/index.ht…

6:24 PM · Aug 19, 2019 · TweetDeck

Tyler Dukes ✓
@mtdukes

Replying to @mtdukes

R might be my new favorite thing.

6:28 PM · Aug 19, 2019 · TweetDeck

13 Likes

	STORY	OUTLET	STATE	TYPE	URL	COMMENT
1						
2	Where the opioid epidemic hit Alabama hardest	AL.com	AL	Web/Print	https://www.al.com/news/2(	
3	Washington Post prescription pain pill database: 1.7 billion pain pills in Alabama from 2006-2012	WHNT	AL	Digital/TV	https://whnt.com/2019/07/1	
4	Avalanche of opioids: Why are millions of pills prescribed in rural Walker County?	Montgomery Advertiser	AL	Web/Print	https://www.montgomeryadvertiser.com	
5	The Opioid Crisis: A National Health Emergency | Data reveals scope of crisis across Sand Mountain	The Sand Mountain Reporter	AL	Web/Print	http://www.sandmountainreporter.com/t	
6	Why 2012 in Post stories? We know now...	Daily Mountain Eagle	AL	Web/Print	http://mountaineagle.com/stories/why-2	
7	The Opioid Crisis: A National Health Emergency | Data reveals scope of crisis across Sand Mountain	The Sand Mountain Reporter	AL	Web/Print	http://www.sandmountainreporter.com/t	
8	Millions of opioid pills flooded Arizona communities during prescription drug boom	Arizona Republic	AZ	Web/print	https://www.azcentral.com/:	
9	Opioid crisis data: 70 million pain pills dispensed in Humboldt County from 2006 to 2012	Times Standard	CA	Web/Print	https://www.times-standard	
10	LA's Opioid Problem Is Big, But Also Relatively Small. Follow The Map Of Pain Pills	LAist	CA	Web	https://laist.com/2019/07/22	
11	Santa Barbara area included in DEA opioid data obtained by Washington Post	KEYT	CA	Digital/TV	https://www.keyt.com/health	
12	Defining an epidemic: Washington Post investigation sheds light on opioid prescriptions in Tuolumne County, elsewhere	The Union Democrat	CA	Web/Print	https://www.uniondemocrat	
13	158 million opioid pills flowed into Ventura County between 2006-2012	Ventura County Star	CA	Web/Print	https://www.vcstar.com/story/news/loca	
14	Want To Know Where The Opioid Epidemic Hit Colorado Hardest? Follow Where The Pills Went	Colorado Public Radio	CO	Radio	https://www.cpr.org/2019/07	
15	Opioid Crisis: 1 Billion Pain Pills Flooded Colorado In 7 Years	Patch (Across Colorado)	CO	Web	https://patch.com/colorado/	
16	Prescription Opioids Targeted Connecticut's Most Vulnerable Citizens	The Connecticut Health I-Team	CT	Web	http://c-hit.org/2019/07/30/p	
17	In 7-year period, 300 million painkillers shipped into Delaware	Delaware Online	DE	Web/Print	https://www.delawareonline	
18	Stopping the flow of opioids in Delaware	Delaware State News	DE	Web/Print	https://delawarestatenews.net/news/sto	

'Unfathomable': How 1.6 million pills from a small-town doctor helped fuel the opioid crisis in Ohio

Updated Sep 01, 2019; Posted Sep 01, 2019

story

How An Influx Of Opioids Took Its Toll On Jackson County, Ohio

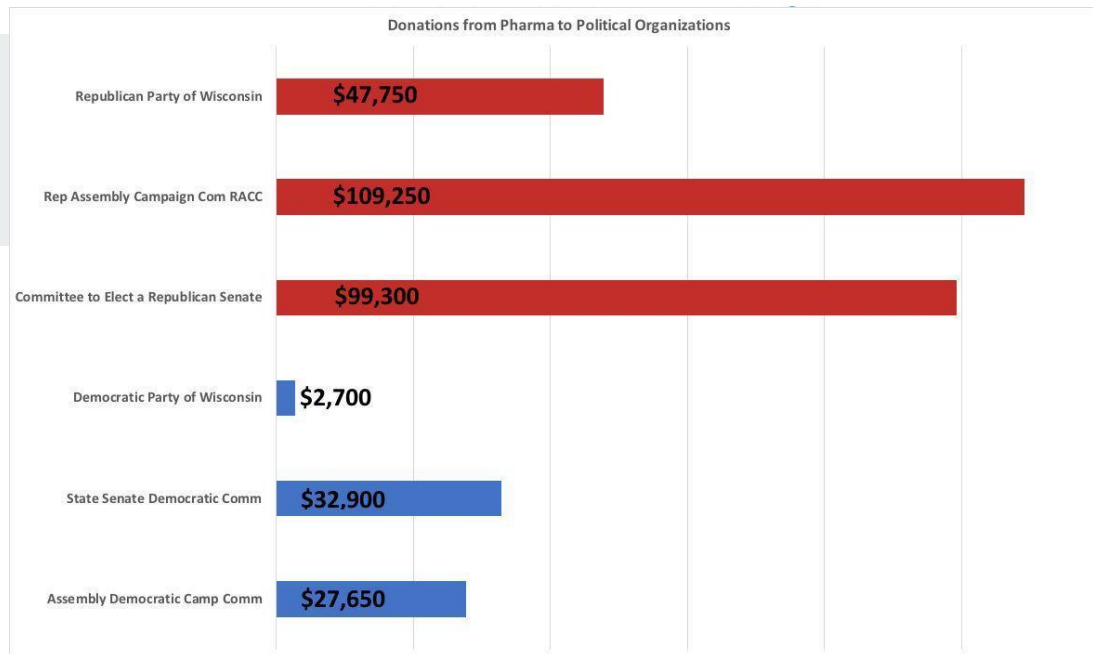By ANGIE WANG & JOHN MINCHILLO • JUL 19, 2019

Eddie Davis walks past tributes on his way to his son Jeremy's gravestone, who died from the abuse of opioids, Wednesday, July 17, 2019, in Coalton, Ohio.
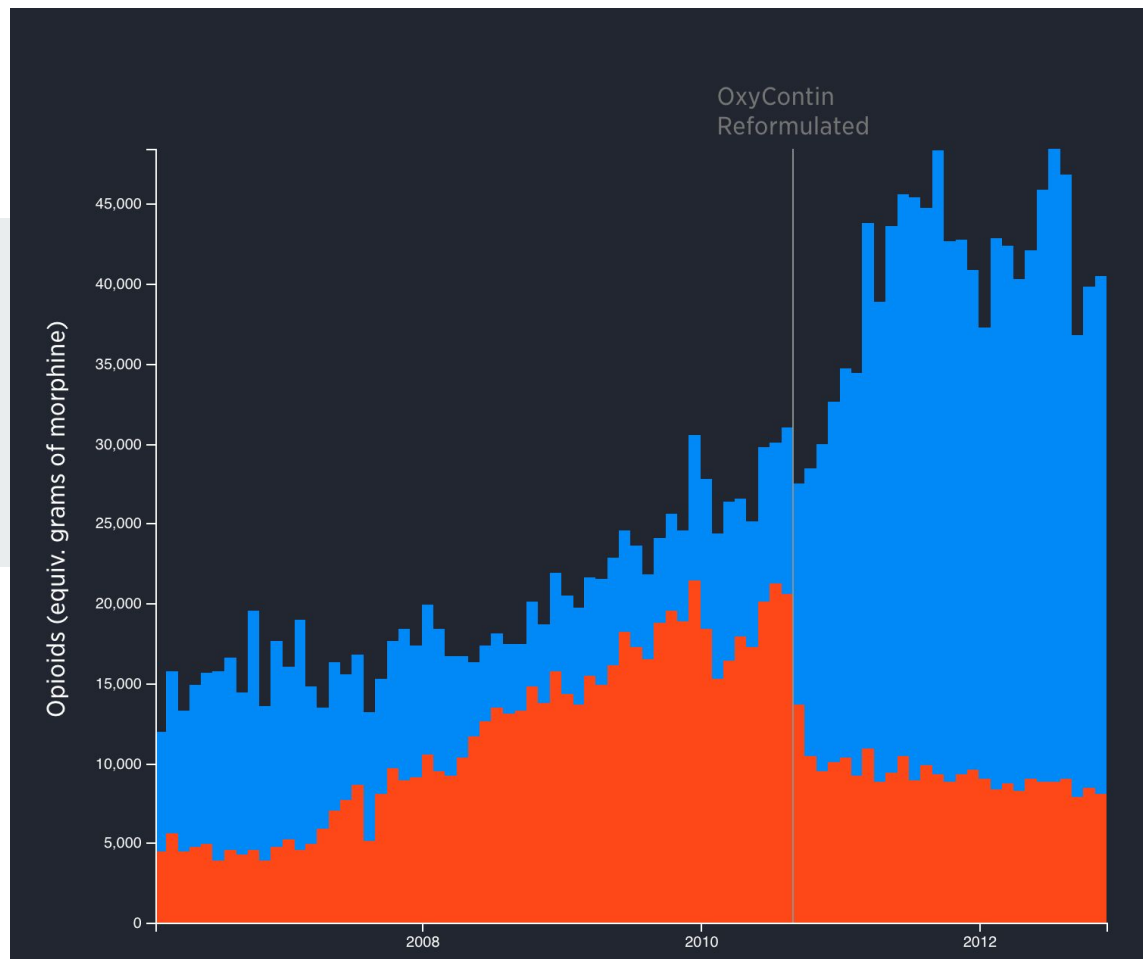
JOHN MINCHILLO / ASSOCIATED PRESS

story

More than $600k in pharma donations as opioids flooded into state

Donations from Pharma to Political Organizations

Organization	Amount
Republican Party of Wisconsin	$47,750
Rep Assembly Campaign Com RACC	$109,250
Committee to Elect a Republican Senate	$99,300
Democratic Party of Wisconsin	$2,700
State Senate Democratic Comm	$32,900
Assembly Democratic Camp Comm	$27,650

story

OxyContin
Reformulated

Opioids (equiv. grams of morphine)

45,000

40,000

35,000

30,000

25,000

20,000

15,000

10,000

5,000

0

2008   2010   2012

story

Pharmacies Owned by GOP Rep. Peddled Massive Number of Opioid Doses in Small Communities: Report

JERRY LAMBE | Aug 29th, 2019, 5:30 pm | 💬 38

Tweet Share reddit

Two Louisiana pharmacies owned by Republican Rep. **Ralph Abraham**, Clinic Pharmacy of Mangham and Adams Clinic Pharmacy of Winnsboro, sit just 12.5 miles apart and serve a combined community of approximately 6,000 people. Yet despite serving relatively sparse populations, the two pharmacies reportedly prescribed a total of 1,478,236 doses of opioid painkillers from 2006 to 2012, more than 35 doses per person, according to a report from the *Bayou Brief*.

Why A Tennessee Lawmaker Says His Company Tops The List Of Opioid Pharmacies

By **BLAKE FARMER** • AUG 12, 2019

f **Share**   **Tweet**   **Email**

State Senator Shane Reeves, R-Murfreesboro, is the founder and CEO of Twelve Stone Health Partner, which is registered with the state as a pharmacy but has very little resemblance to a retail storefront.

CREDIT BLAKE FARMER WPLN

State Senator Shane Reeves of Murfreesboro says he wasn't surprised to see his pharmacy as the top recipient of opioids in Tennessee — more than double the next highest pharmacy in the state according to a Washington Post database.

Over a six year period, more than 45 million pain pills passed through what is now named Twelve Stone Health Partners. But Reeves also rejects that his business contributed to the opioid epidemic.
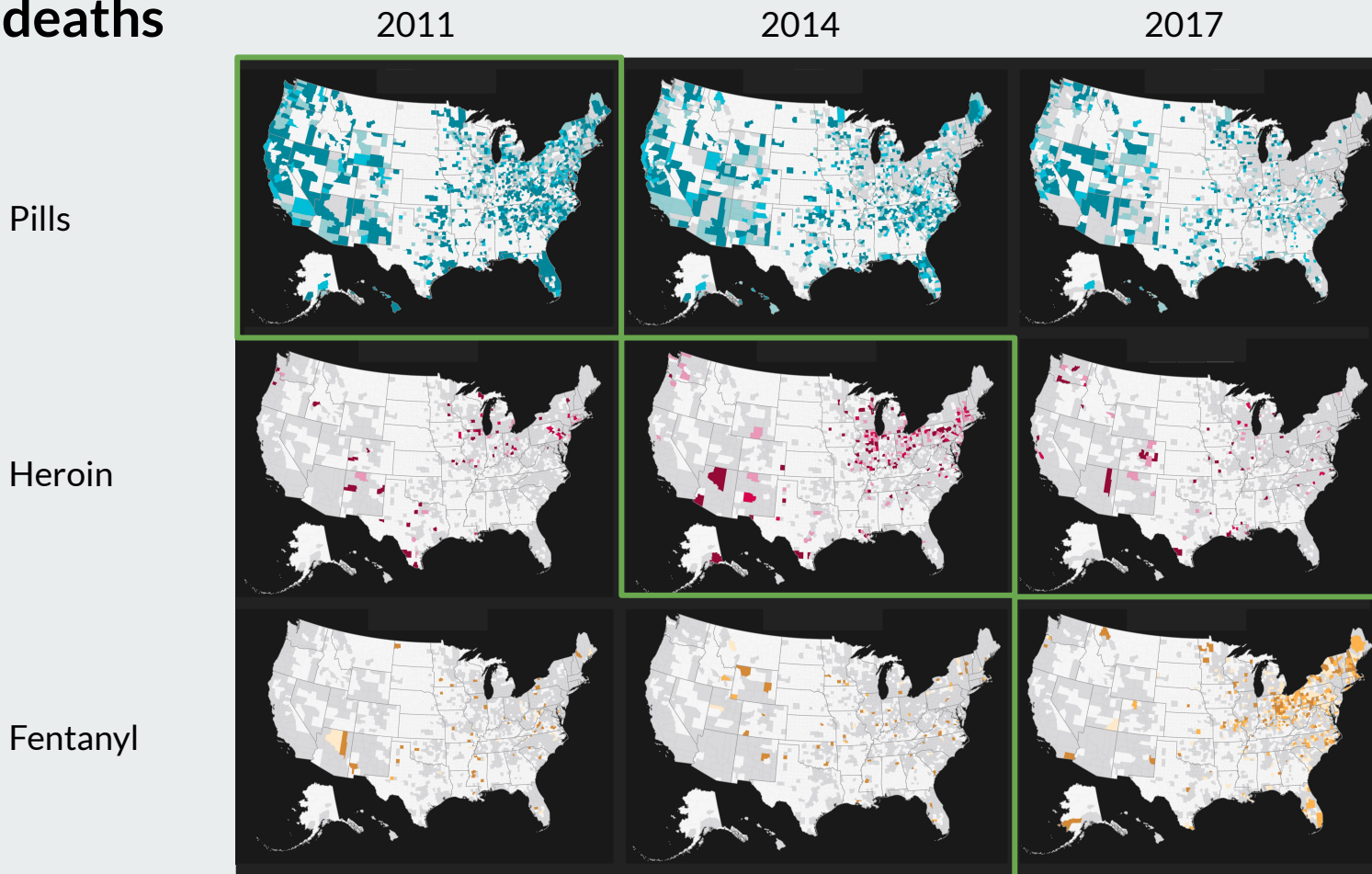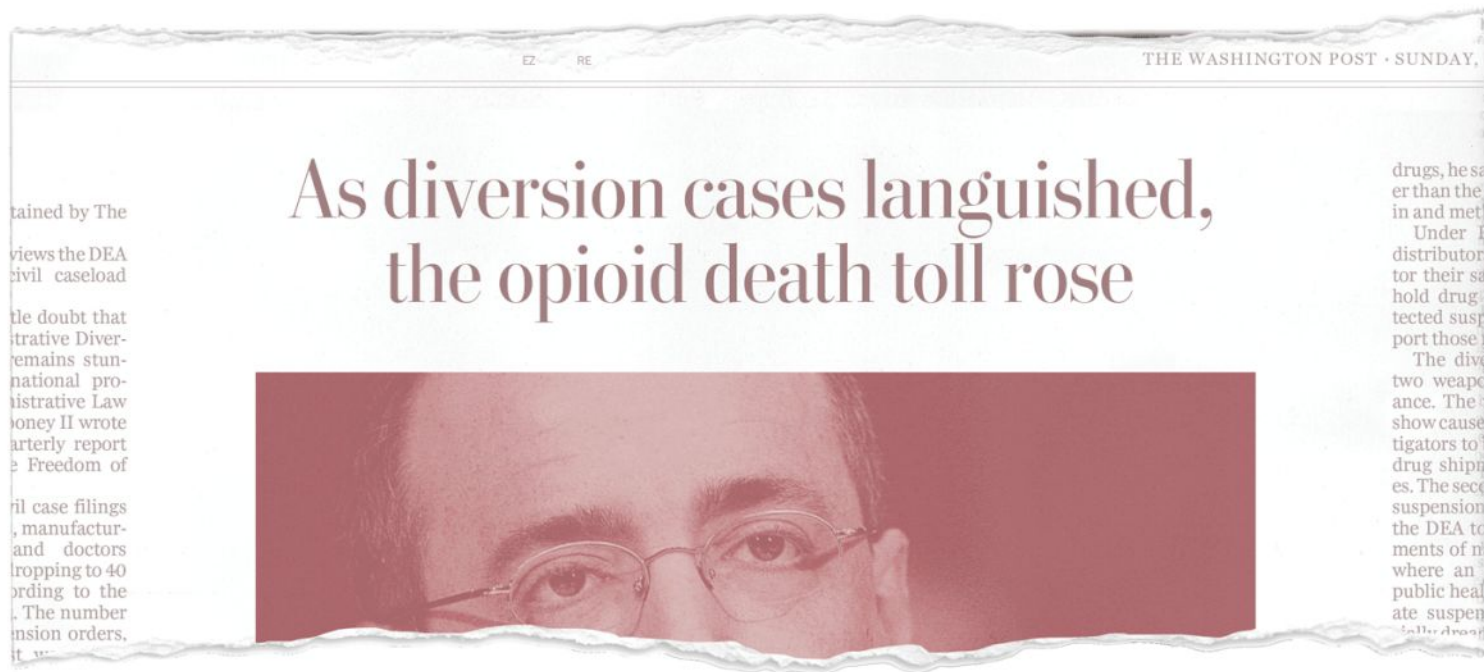
story

problematic given their cavalier attitude towards Mallinckrodt's compliance obligations. One of their most highly compensated NAMs, Victor Borelli, engaged in a telling email exchange with one of his distributor contacts at Key Source Medical, Steve Cochrane, after Mr. Cochrane had received an overnight shipment of 1200 bottles of oxycodone from Mallinckrodt. Mr. Cochrane wrote: "Keep'em comin'! Flyin' out of here. It's like people are addicted to these things or something. Oh, wait, people are . . ." Mr. Borelli responded: "Just like Doritos keep eating. We'll make more." Ex. 58, Email Chain

Overdose deaths

| | 2011 | 2014 | 2017 |

Pills

Heroin

Fentanyl

story

Thank you.

Florida's opioid crisis: billions of pills, millions in campaign cash

New data shows extent of Florida's opioid epidemic from 2006 to 2012 and the role that major grocery stores and chain pharmacies played in fueling the crisis.

story

pills. As addictions spiraled, it also fell prey to doctor shopping, even though surrounding counties in northwest Alabama, such as Marion and Franklin, had already high prescribing rates.

Pharmacies

Top five, from 2006 to 2012, in Walker County, Alabama.

DAVID'S DISCOUNT PHARMACY, SUMITON
9,017,650 pills

HOSPITAL DISCOUNT PHARMACY-JASPER, JASPER
5,225,710

ALABAMA CVS PHARMACY, L.L.C., JASPER
4,561,690

SON'S DISCOUNT PHARMACY INC, JASPER
4,135,700

ENGLISH PLAZA PHARMACY, JASPER
3,822,610

THE OPIOID FILES: New data gives an unprecedented look at the opioid epidemic. See it at wapo.st/dea-pain-pill-database.

The Washington Post

Walker County, in northwest Alabama, received a staggering number of opioid pills beginning in 2006. DEA data obtained and released by The Washington Post revealed more than 1.7 billion opioid pills flooded Alabama in a 6-year period. *The Washington Post*
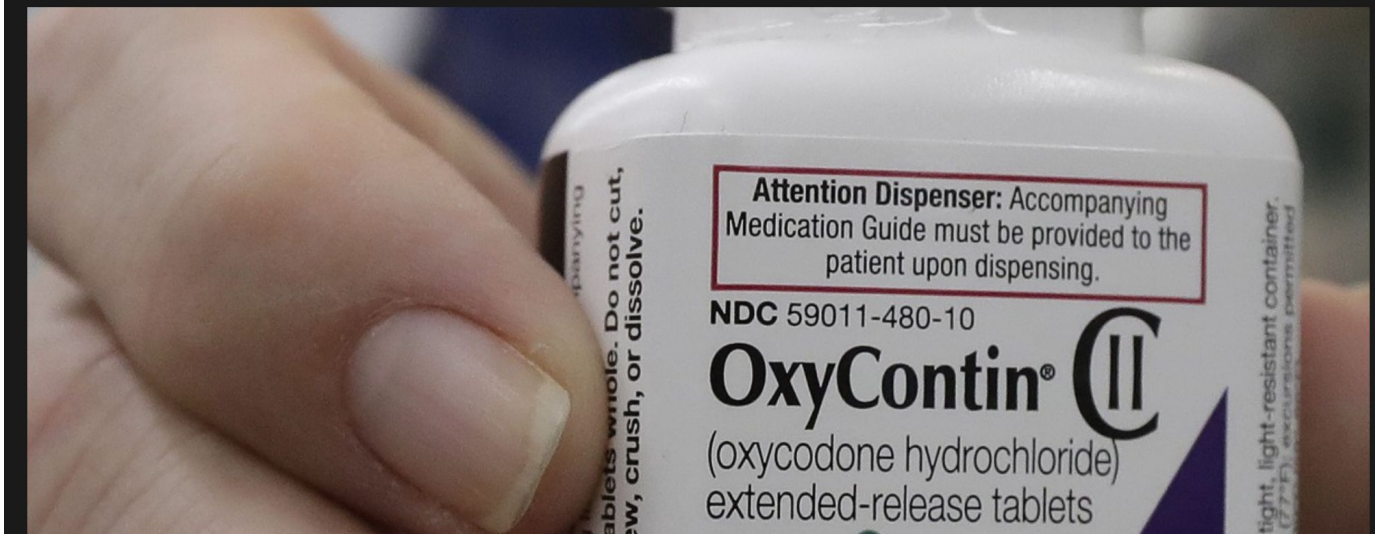
story

New Federal Data Confirms What We Already Know: Opioid Distributions Inundated Appalachia

BY **ASHTON MARRA** · JULY 19, 2019 · 🕓 5 MINUTE READ

story

Explaining two red flags techniques set by DEA

Andrew Ba Tran

Walgreens and other distributors had a statutory and regulatory obligation to maintain effective order monitoring systems to prevent the diversion of prescription opioid pills for non-medical use.

One sort of flag, as described by the DEA in a recent 2017 trial, is when a monthly order of oxycodone or hydrocodone exceeded the 12-month rolling average by double the amount.

Walgreen pharmacies exceeded that monthly criteria nearly 45,000 times—the most out of any other chain. That's more than five months per store, which is greater than any other chain plus independent stores.
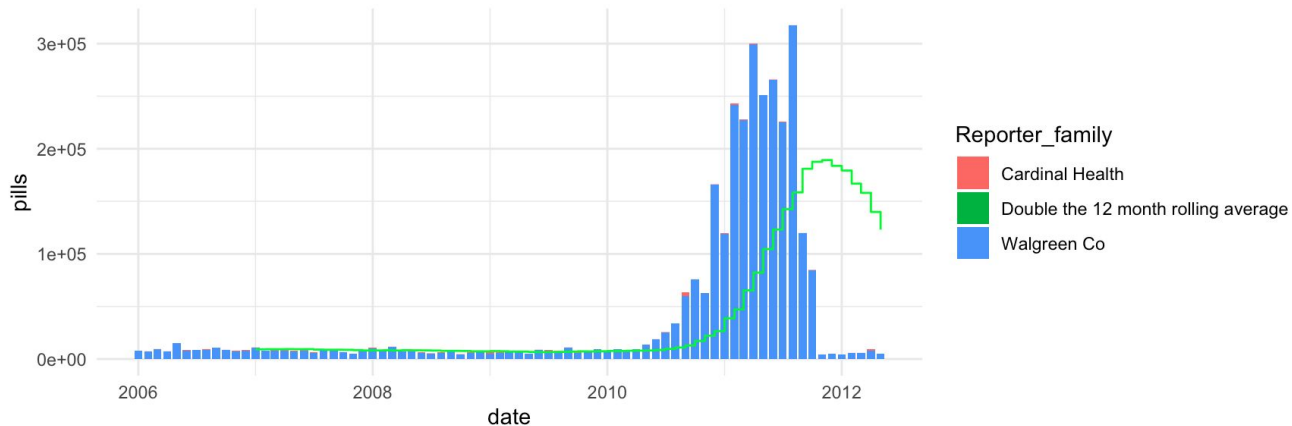
The purpose of such a system was to identify suspicious orders that should not be shipped unless the distributors' due diligence eliminated the suspicion of diversion, according to the DEA.

Within those flagged months, Walgreens distribution points shipped 160 million pills to more than 8,000 Walgreens pharmacies.

This particular Walgreens pharmacy in Oviedo was part of a half dozen pharmacies in Florida that were sanctioned by the DEA in 2011 for suspicious activity. In recent lawsuits, the DEA revealed five methods for detecting suspicious opioid ordering activity. This illustrates two of them.

Monthly oxycodone pill orders from a Walgreens pharmacy in Oviedo, FL
As compared to the DEA suspicious "double the 12-month rolling average" order criteria
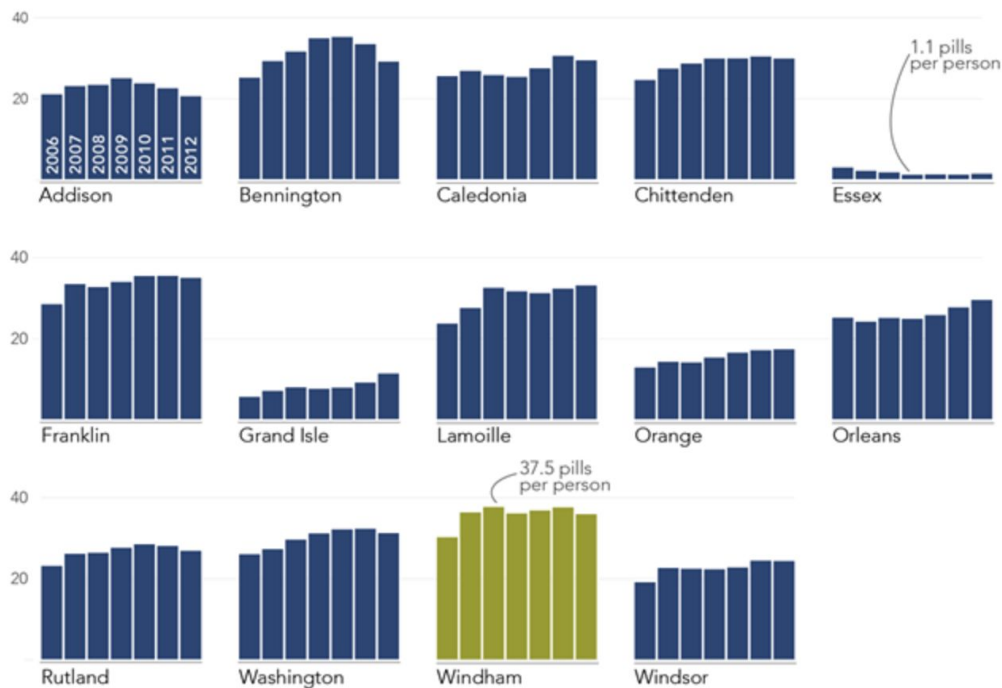
STEVEN G SMITH FOR THE BOSTON GLOBE

How Many Opioid Pills Per Person Flowed Into Vermont Counties

Addison [2006 2007 2008 2009 2010 2011 2012]   Bennington   Caledonia   Chittenden   Essex — 1.1 pills per person

Franklin   Grand Isle   Lamoille   Orange   Orleans

Rutland   Washington   Windham — 37.5 pills per person   Windsor

DEA database/Washington Post/U.S. Census Bureau

ANDREA SUOZZO