

Practitioner Diversion Awareness Conference

Drugs of Abuse and Trends

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Import/Export Section





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Course Objectives

- § **Discuss the Public Health Epidemic.**
- § **Review the common drugs of abuse.**
- § **Discuss the relationship between pharmaceutical controlled substances and heroin.**



Course Objectives

- § **Discuss the violence related to controlled substance prescribing and dispensing.**
- § **Review key research and studies involving the impact of indiscriminate prescribing of controlled substances.**



Questions to Discuss

At the completion of this block of instruction you will be able to answer the following questions:

- 1. Which country, per million population, has the largest amount of drug induced deaths ages 15-64?**
- 2. Where does Oklahoma rate in the United States in the amount of Hydrocodone dispensed?**



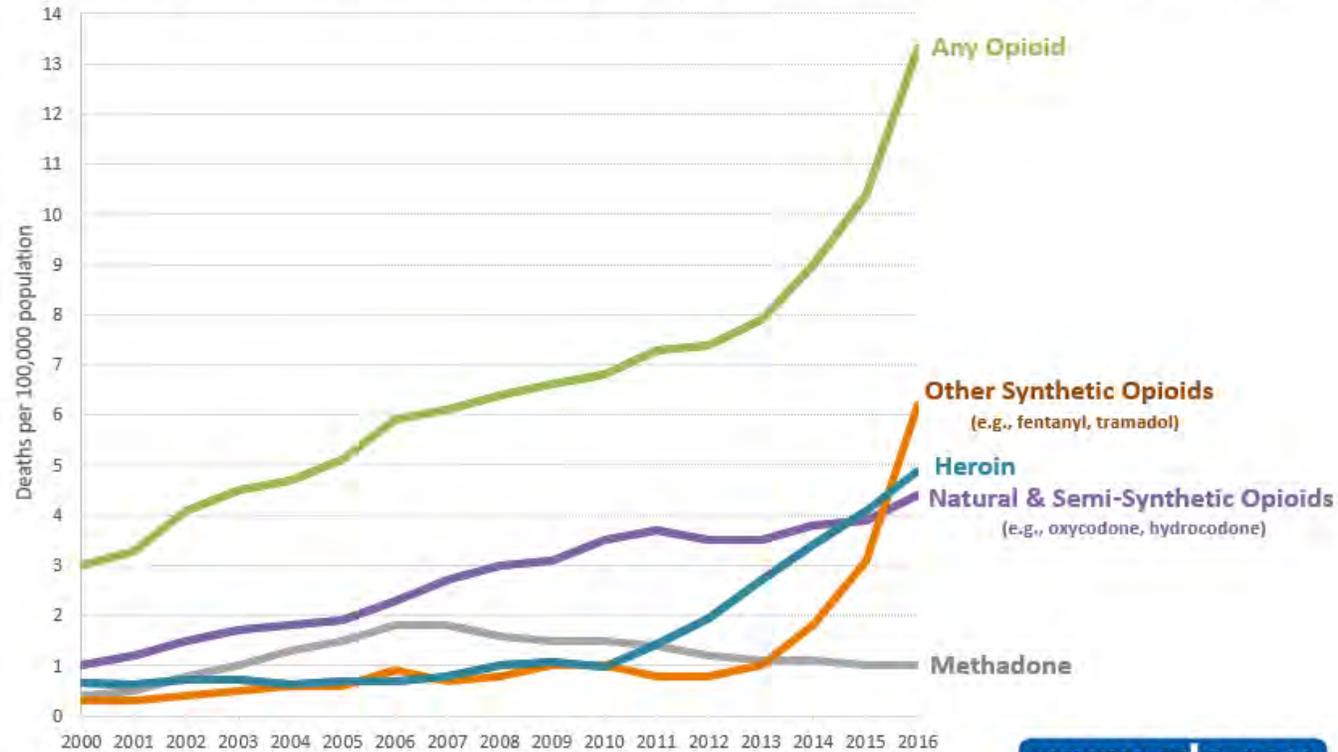
Questions to Discuss

- 3. What percentage of the world's hydrocodone production does the United States consume?**
- 4. What is the most misused prescription controlled substance pain reliever in the United States?**
- 5. What percent of heroin users began their addictions with prescribed pain relievers?**



The Problem – People Are Dying

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016

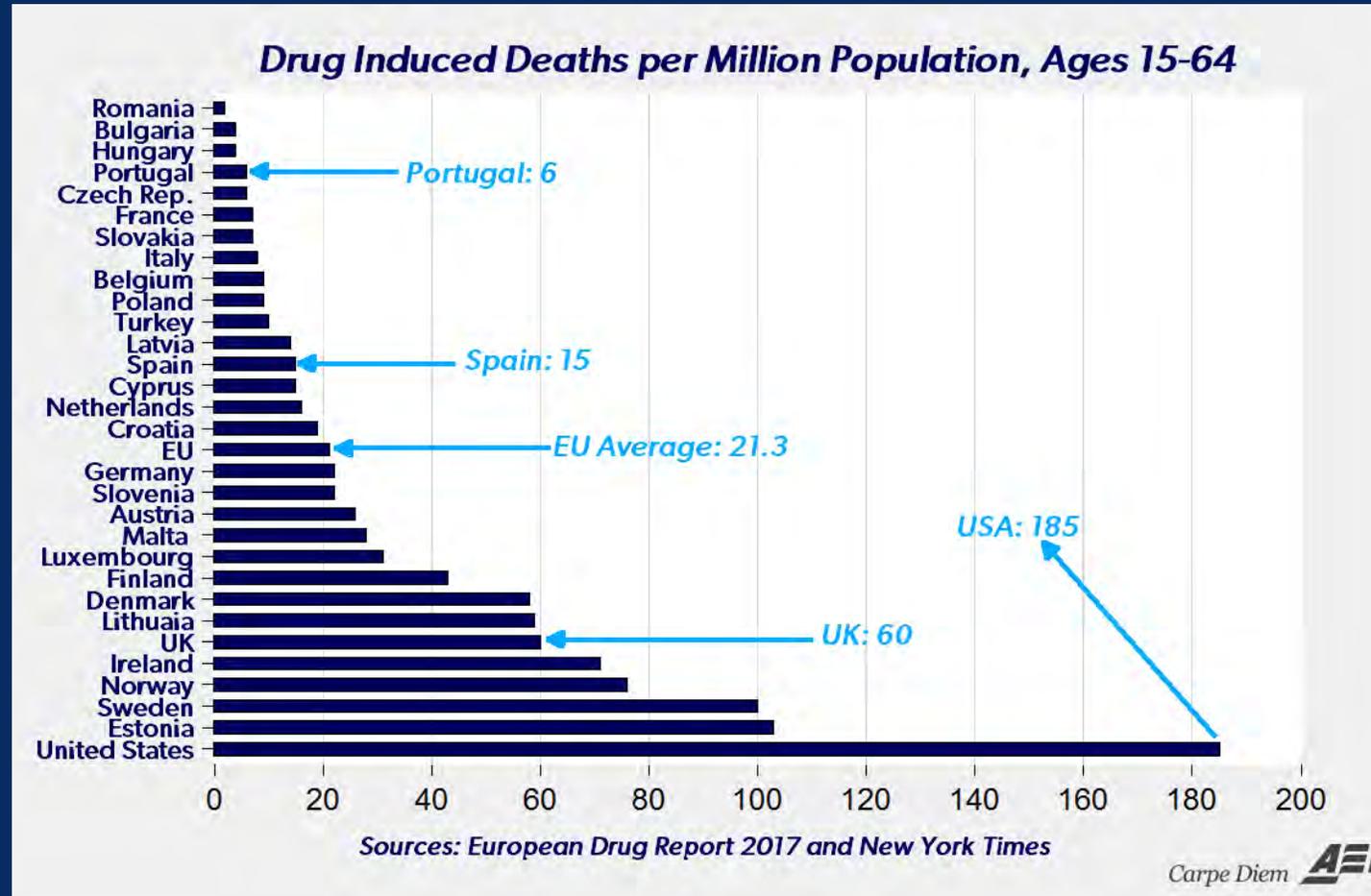


SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2017. <https://wonder.cdc.gov/>.

www.cdc.gov
Your Source for Credible Health Information



The Problem – People Are Dying





Drugs of Abuse

The top 5 distributed scheduled controlled substances in the United States:

- 1. Hydrocodone**
- 2. Oxycodone**
- 3. Codeine**
- 4. Buprenorphine**
- 5. Morphine**



Where Does the United States Rank In Consumption?

| Drug Name | United States (Pop. 320 Mil.) | | China (Pop. 1.37 Billion) | | World (7.3 Bil) |
|-------------|----------------------------------|------|------------------------------|-------|--------------------|
| | Percent | Tons | Percentage | Tons | Tons |
| Hydrocodone | | | 0.00% | 0.001 | 36.3 |
| Oxycodone | | | 1.08% | 0.9 | 83.2 |
| Morphine | | | 3.92% | 1.6 | 40.8 |
| Codeine | | | 2.66% | 7.6 | 285.5 |
| Methadone | | | 4.56% | 1.5 | 32.9 |
| Fentanyl | | | 0.32% | 0.006 | 1.85 |

Source (2017). INCB data, International Narcotics Board: Comments on Reported Statistics on Narcotic Drugs.



Hydrocodone

- § **Hydrocodone / Acetaminophen (toxicity)**
- § **Similarities:**
 - § **Structurally related to codeine**
 - § **Equal to morphine in producing opiate-like effects**
 - § **Brand Names: Vicodin[®], Lortab[®], Lorcet[®]**





Hydrocodone



§ **October 6, 2014 moved to SCHEDULE II**

§ **Street prices: \$2 to \$10 per tablet depending on strength & region**



The Trinity Cocktail



Opioid



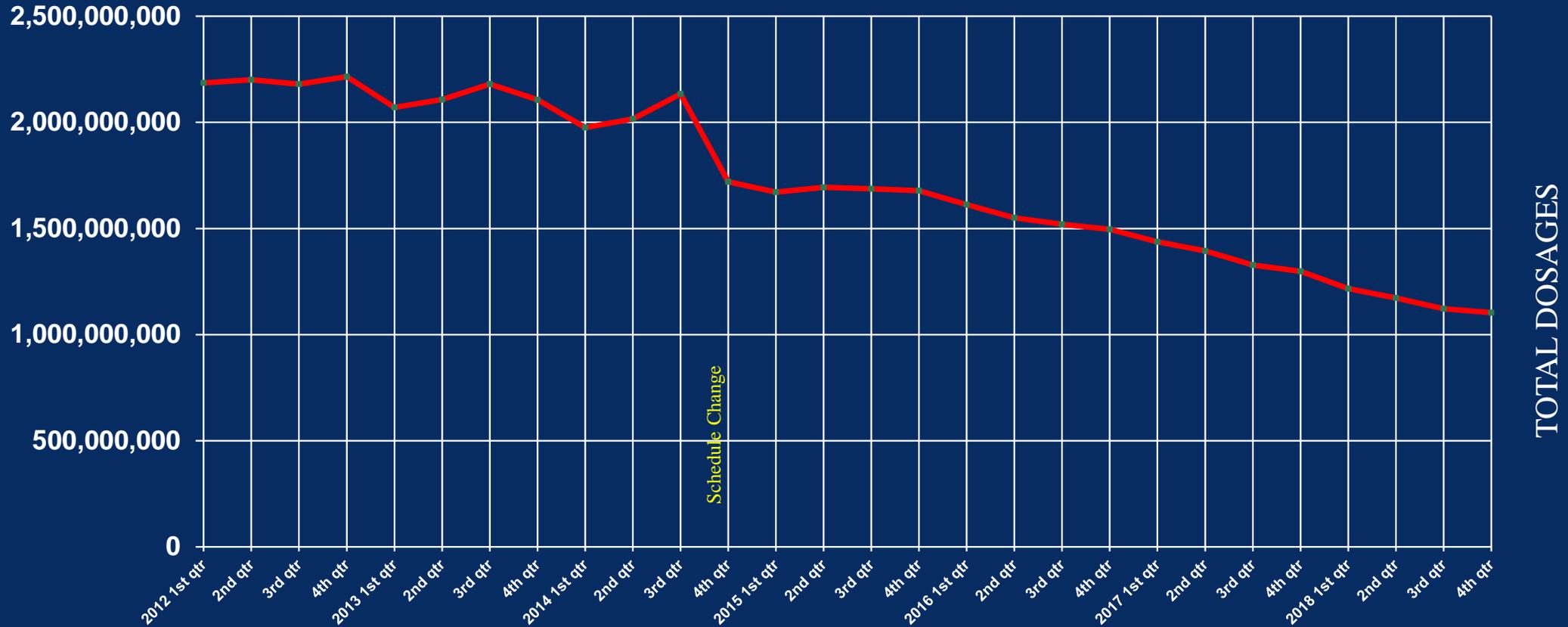
Muscle Relaxant



Benzodiazepine



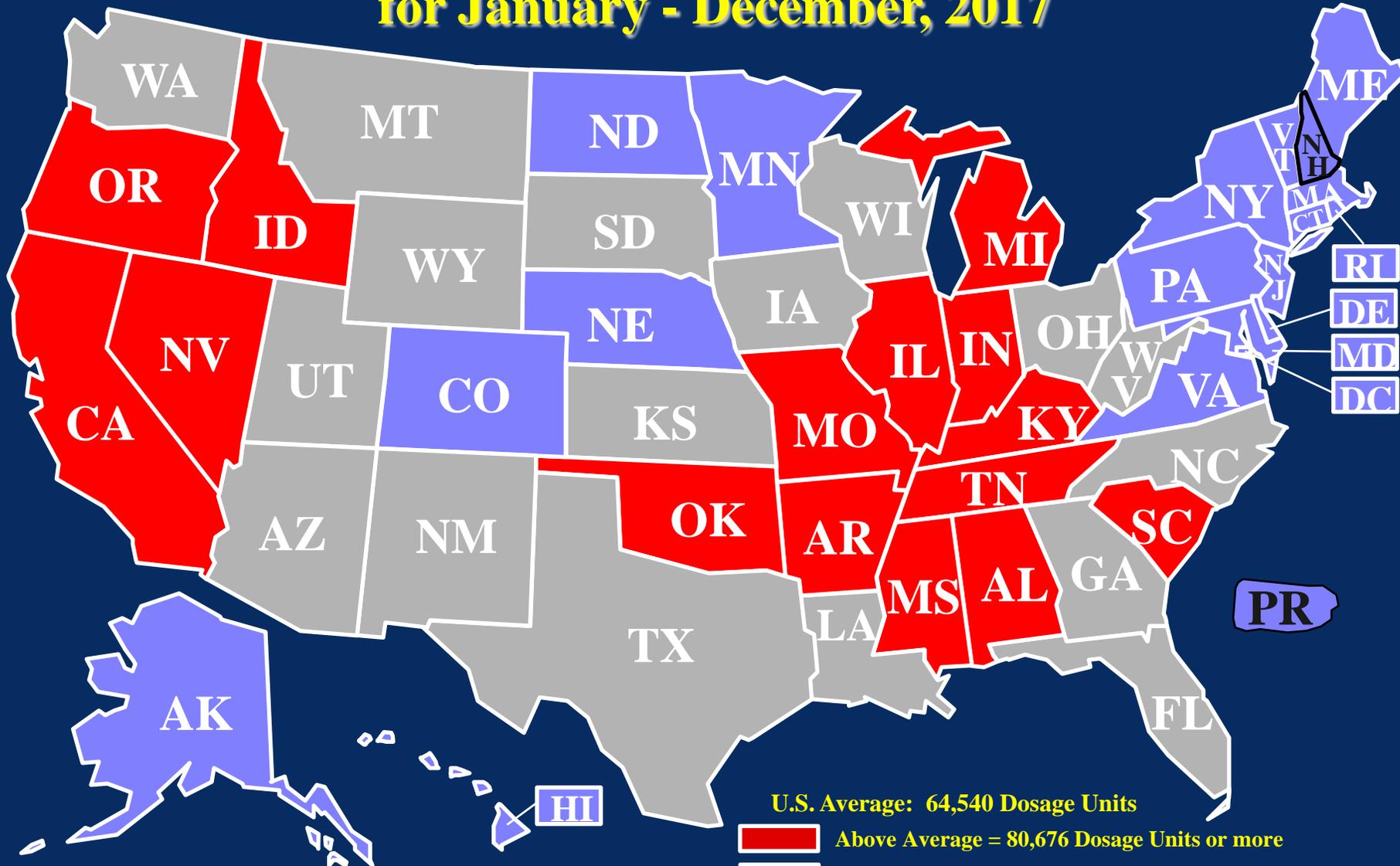
Hydrocodone Distribution 2012-2018 U.S. Totals



Drug Enforcement Administration, Diversion Control Division, Pharmaceutical Investigations Section, Targeting and Analysis Unit



Purchases of Hydrocodone for January - December, 2017



U.S. Average: 64,540 Dosage Units

- Above Average = 80,676 Dosage Units or more
- Average = 48,405 – 80,675 Dosage Units
- Below Average = 48,404 Dosage Units or less
- Zero Dosage Units



Hydrocodone Distribution

Retail Pharmacies



State Ranking Average Per 100K Population* Hydrocodone January – December 2018

| RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|---------|------|-------|---------|
| 1 | KY | 3,188,067 | 12 | NV | 1,945,054 | 23 | IA | 1,377,053 | 34 | ME | 968,733 | 45 | NH | 504,394 |
| 2 | AL | 3,170,657 | 13 | KS | 1,928,574 | 24 | UT | 1,374,397 | 35 | AK | 918,542 | 46 | DE | 456,158 |
| 3 | OK | 2,893,355 | 14 | WV | 1,901,637 | 25 | WY | 1,316,359 | 36 | ND | 886,377 | 47 | MD | 402,421 |
| 4 | AR | 2,861,115 | 15 | SC | 1,864,541 | 26 | NE | 1,284,863 | 37 | PA | 876,701 | 48 | CT | 385,228 |
| 5 | TN | 2,397,920 | 16 | OR | 1,766,073 | 27 | NC | 1,261,528 | 38 | VA | 847,729 | 49 | MA | 351,637 |
| 6 | IN | 2,396,883 | 17 | MT | 1,664,945 | 28 | FL | 1,192,959 | 39 | CO | 830,638 | 50 | NJ | 253,277 |
| 7 | MI | 2,370,022 | 18 | TX | 1,585,340 | 29 | OH | 1,168,451 | 40 | HI | 806,587 | 51 | VI | 181,725 |
| 8 | ID | 2,335,084 | 19 | GA | 1,584,913 | 30 | SD | 1,140,159 | 41 | RI | 724,803 | 52 | DC | 153,144 |
| 9 | MS | 2,146,729 | 20 | CA | 1,559,081 | 31 | NM | 1,139,457 | 42 | MN | 656,179 | 53 | GU | 46,909 |
| 10 | LA | 2,133,678 | 21 | IL | 1,540,258 | 32 | AZ | 1,103,984 | 43 | NY | 592,057 | 54 | PR | 5,740 |
| 11 | MO | 1,994,749 | 22 | WA | 1,392,248 | 33 | WI | 1,067,834 | 44 | VT | 545,467 | 55 | AS | 0 |

* *Business Activity – Retail Pharmacies*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Hydrocodone Distribution

Practitioner's Office



State Ranking

Average Per 100K Population*

Hydrocodone

January – December 2018

| RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|--------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | HI | 25,091 | 12 | NV | 4,893 | 23 | IA | 3,488 | 34 | LA | 2,482 | 45 | KS | 1,635 |
| 2 | GA | 8,376 | 13 | FL | 4,766 | 24 | NJ | 3,100 | 35 | SD | 2,456 | 46 | AR | 1,594 |
| 3 | MO | 7,351 | 14 | MT | 4,760 | 25 | WI | 3,053 | 36 | NY | 2,134 | 47 | SC | 1,028 |
| 4 | WY | 6,988 | 15 | WA | 4,593 | 26 | MN | 2,990 | 37 | OH | 2,082 | 48 | VT | 991 |
| 5 | CA | 6,775 | 16 | ID | 4,333 | 27 | UT | 2,951 | 38 | MA | 2,053 | 49 | DC | 897 |
| 6 | ND | 6,551 | 17 | AL | 4,114 | 28 | CT | 2,667 | 39 | GU | 2,018 | 50 | NM | 883 |
| 7 | MD | 6,484 | 18 | AZ | 4,089 | 29 | NE | 2,602 | 40 | TX | 2,015 | 51 | MS | 571 |
| 8 | IL | 6,041 | 19 | TN | 3,925 | 30 | MI | 2,576 | 41 | DE | 1,993 | 52 | NH | 135 |
| 9 | AK | 5,300 | 20 | VA | 3,815 | 31 | RI | 2,537 | 42 | ME | 1,882 | 53 | AS | 0 |
| 10 | CO | 5,219 | 21 | OK | 3,670 | 32 | IN | 2,528 | 43 | WV | 1,867 | 54 | PR | 0 |
| 11 | OR | 5,173 | 22 | KY | 3,511 | 33 | PA | 2,508 | 44 | NC | 1,718 | 55 | VI | 0 |

* *Business Activity – Retail Practitioners*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



OxyContin®

The 1990s





OxyContin®

- § **OxyContin® controlled release formulation of Schedule II oxycodone:**
 - § **The controlled release method of delivery allowed for a longer duration of drug action and contained much larger doses of oxycodone.**
 - § **Abusers easily compromised the controlled release formulation by crushing the tablets for a powerful morphine-like high.**
 - § **10, 20, 40, 80mg available.**



OxyContin®

§ Effects:

§ **Similar to morphine in effects and potential for abuse/dependence.**

§ **Sold in “Cocktails” such as:**

§ *Oxycodone, Soma ® and Xanax®*

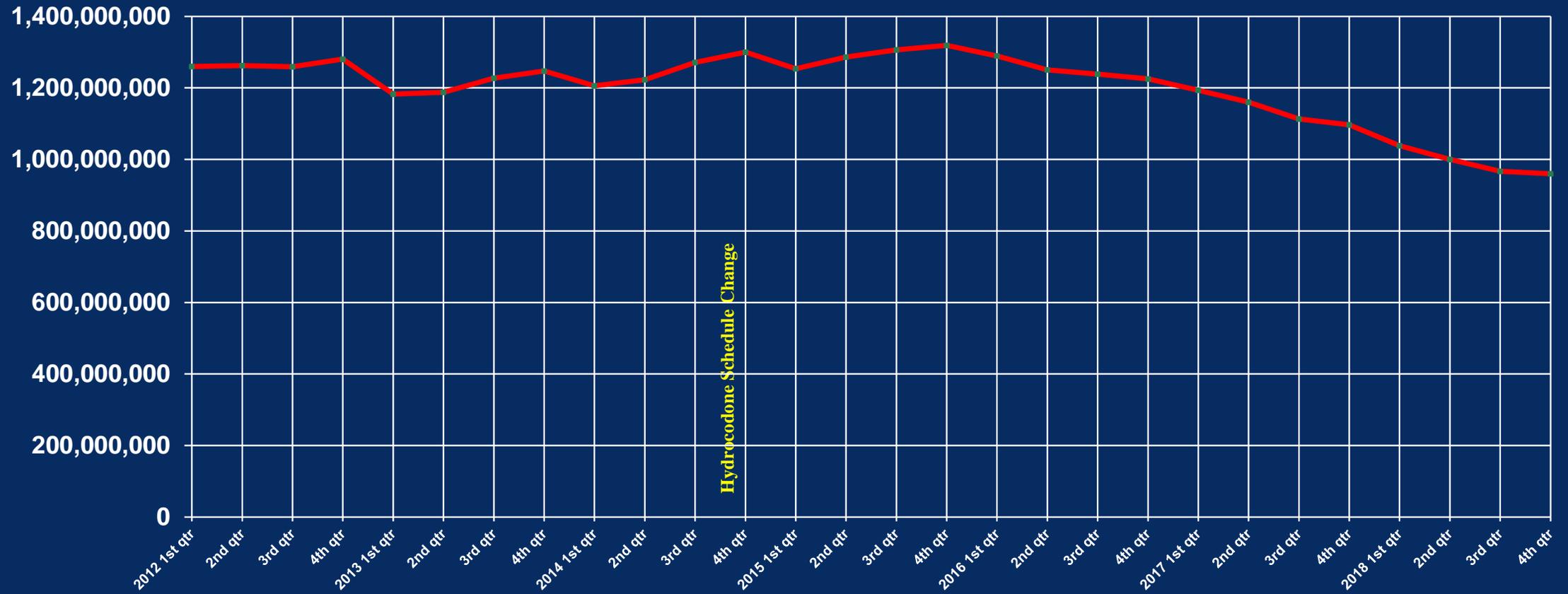


OxyContin®

- **Street price: Approx. \$80 per 80mg tablet**
- **90 tabs prescribed a month =**
- **\$7200 a month income.**
- **\$85,400 year.**

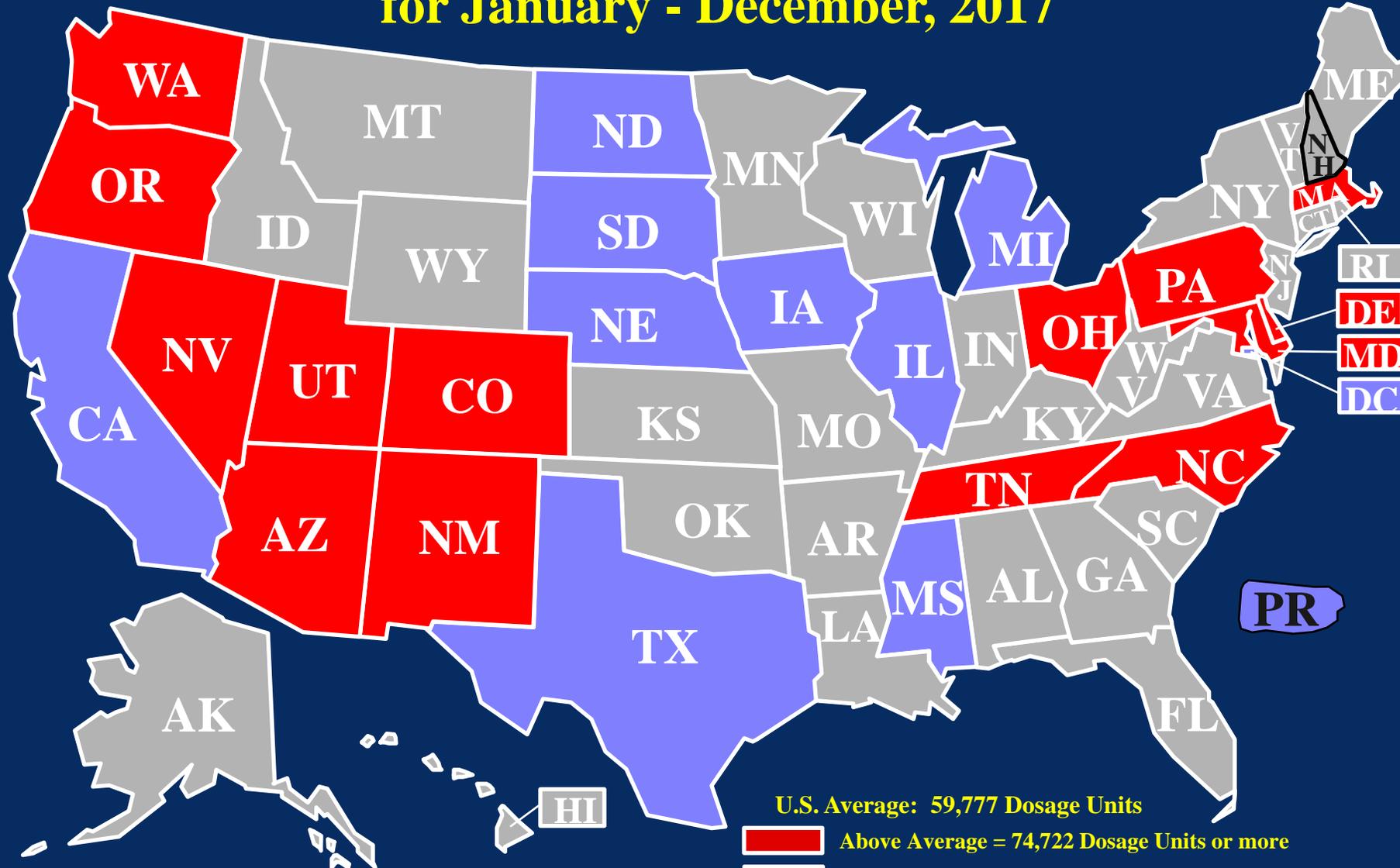


Oxycodone Distribution 2012-2018 U.S. Totals





Purchases of Oxycodone for January - December, 2017



U.S. Average: 59,777 Dosage Units

- Red:** Above Average = 74,722 Dosage Units or more
- Grey:** Average = 44,833 – 74,721 Dosage Units
- Blue:** Below Average = 44,832 Dosage Units or less
- Black:** Zero Dosage Units



Oxycodone Distribution

Retail Pharmacies



State Ranking

Average Per 100K Population*

Oxycodone

January – December 2018

| RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|---------|
| 1 | TN | 2,210,000 | 12 | OK | 1,612,469 | 23 | ME | 1,351,121 | 34 | VA | 1,154,898 | 45 | MI | 745,202 |
| 2 | DE | 2,184,853 | 13 | FL | 1,573,010 | 24 | CO | 1,340,700 | 35 | IN | 1,145,469 | 46 | ND | 719,122 |
| 3 | AZ | 1,981,541 | 14 | OH | 1,522,968 | 25 | KS | 1,339,171 | 36 | WI | 1,144,344 | 47 | SD | 657,859 |
| 4 | NC | 1,952,249 | 15 | SC | 1,522,007 | 26 | CT | 1,331,781 | 37 | RI | 1,109,030 | 48 | CA | 611,674 |
| 5 | OR | 1,815,155 | 16 | AL | 1,484,259 | 27 | AR | 1,306,212 | 38 | VT | 1,095,364 | 49 | IA | 604,770 |
| 6 | UT | 1,789,318 | 17 | NJ | 1,451,008 | 28 | WV | 1,290,420 | 39 | NY | 1,075,752 | 50 | IL | 345,035 |
| 7 | NV | 1,785,517 | 18 | MO | 1,421,093 | 29 | MA | 1,263,347 | 40 | MS | 1,070,969 | 51 | TX | 327,842 |
| 8 | MD | 1,713,608 | 19 | WY | 1,420,181 | 30 | AK | 1,260,635 | 41 | MN | 1,028,595 | 52 | PR | 194,453 |
| 9 | KY | 1,688,158 | 20 | GA | 1,383,768 | 31 | LA | 1,245,386 | 42 | HI | 914,721 | 53 | VI | 194,309 |
| 10 | PA | 1,659,693 | 21 | NH | 1,381,153 | 32 | ID | 1,231,659 | 43 | DC | 829,225 | 54 | GU | 186,292 |
| 11 | WA | 1,620,092 | 22 | NM | 1,372,984 | 33 | MT | 1,188,490 | 44 | NE | 795,049 | 55 | AS | 0 |

* *Business Activity – Retail Pharmacies*

Source: Drug Enforcement Administration, Office of Diversion Control,
Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Oxycodone Distribution Practitioner's Office



State Ranking

Average Per 100K Population*

Oxycodone

January – December 2018

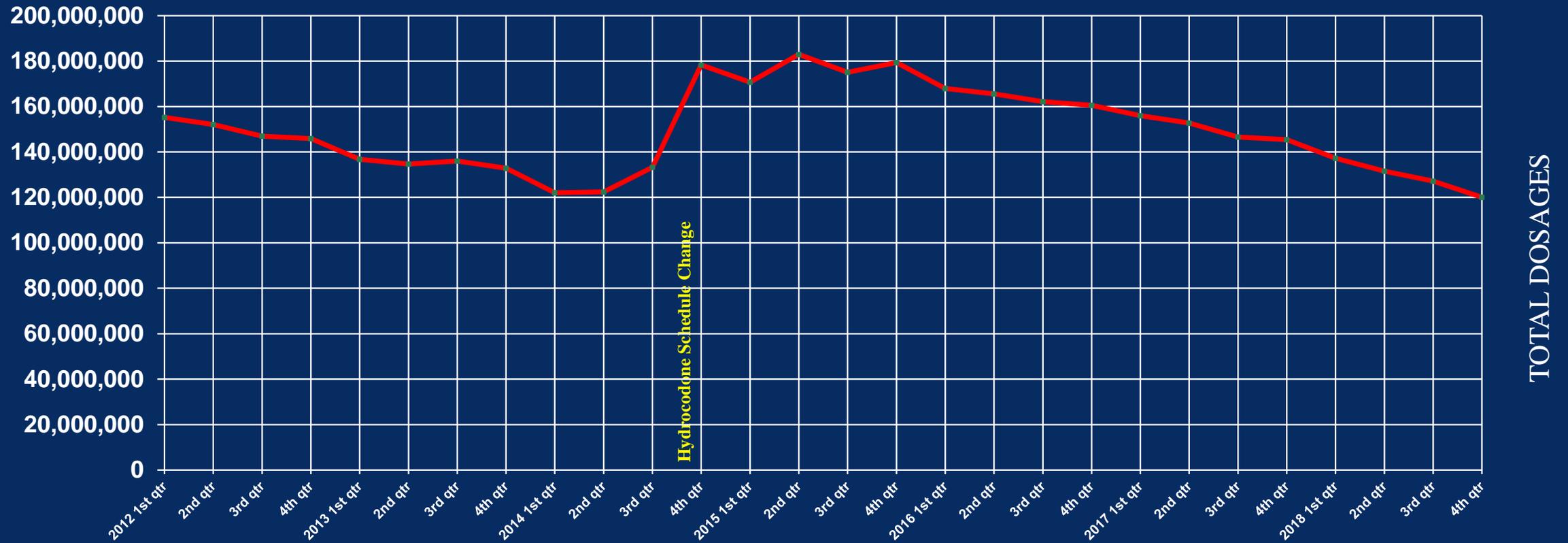
| RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|--------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | HI | 15,444 | 12 | OR | 916 | 23 | VA | 412 | 34 | IL | 170 | 45 | KY | 78 |
| 2 | KS | 10,236 | 13 | OK | 906 | 24 | MO | 355 | 35 | RI | 154 | 46 | SD | 74 |
| 3 | MD | 4,916 | 14 | NV | 879 | 25 | ME | 346 | 36 | NM | 151 | 47 | NC | 71 |
| 4 | GA | 2,808 | 15 | AZ | 849 | 26 | NJ | 342 | 37 | OH | 143 | 48 | DE | 56 |
| 5 | CT | 2,711 | 16 | ID | 825 | 27 | CA | 296 | 38 | MT | 142 | 49 | TX | 48 |
| 6 | CO | 2,623 | 17 | AK | 703 | 28 | PA | 294 | 39 | MS | 140 | 50 | WV | 5 |
| 7 | WI | 1,643 | 18 | IA | 685 | 29 | MI | 284 | 40 | IN | 131 | 51 | AS | 0 |
| 8 | TN | 1,366 | 19 | NY | 609 | 30 | AR | 216 | 41 | MA | 97 | 52 | GU | 0 |
| 9 | NE | 1,124 | 20 | WY | 463 | 31 | FL | 214 | 42 | SC | 90 | 53 | PR | 0 |
| 10 | AL | 1,065 | 21 | ND | 448 | 32 | NH | 198 | 43 | UT | 87 | 54 | VI | 0 |
| 11 | MN | 1,036 | 22 | DC | 432 | 33 | WA | 182 | 44 | LA | 86 | 55 | VT | 0 |

* *Business Activity – Retail Practitioners*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Codeine Distribution 2012-2018 U.S. Totals



TOTAL DOSAGES



Codeine Distribution

Retail Pharmacies



State Ranking Average Per 100K Population* Codeine January – December 2018

| RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|--------|------|-------|--------|
| 1 | TX | 505,219 | 12 | KY | 141,682 | 23 | LA | 113,768 | 34 | IN | 96,976 | 45 | VA | 83,520 |
| 2 | OK | 272,151 | 13 | AL | 139,516 | 24 | FL | 112,693 | 35 | OH | 95,253 | 46 | CT | 82,760 |
| 3 | AR | 271,241 | 14 | GA | 133,520 | 25 | OR | 111,626 | 36 | MN | 94,743 | 47 | RI | 81,878 |
| 4 | MI | 261,427 | 15 | DE | 132,170 | 26 | WA | 110,793 | 37 | NV | 94,691 | 48 | NH | 75,292 |
| 5 | WV | 242,176 | 16 | PA | 125,881 | 27 | MS | 109,319 | 38 | IA | 91,701 | 49 | UT | 69,372 |
| 6 | SC | 232,103 | 17 | MD | 125,457 | 28 | HI | 106,366 | 39 | ND | 91,272 | 50 | VT | 67,624 |
| 7 | DC | 231,075 | 18 | AZ | 124,883 | 29 | SD | 105,988 | 40 | NY | 91,233 | 51 | GU | 66,945 |
| 8 | IL | 169,563 | 19 | KS | 120,025 | 30 | NM | 100,164 | 41 | MA | 89,803 | 52 | NC | 63,091 |
| 9 | TN | 154,312 | 20 | NJ | 114,641 | 31 | VI | 99,158 | 42 | AK | 88,865 | 53 | CO | 53,869 |
| 10 | CA | 152,756 | 21 | WI | 114,520 | 32 | ID | 99,146 | 43 | WY | 85,560 | 54 | PR | 51,687 |
| 11 | MO | 149,003 | 22 | MT | 113,835 | 33 | ME | 98,277 | 44 | NE | 83,664 | 55 | AS | 0 |

* *Business Activity – Retail Pharmacies*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Codeine Distribution Practitioner's Office



State Ranking Average Per 100K Population* Codeine January – December 2018

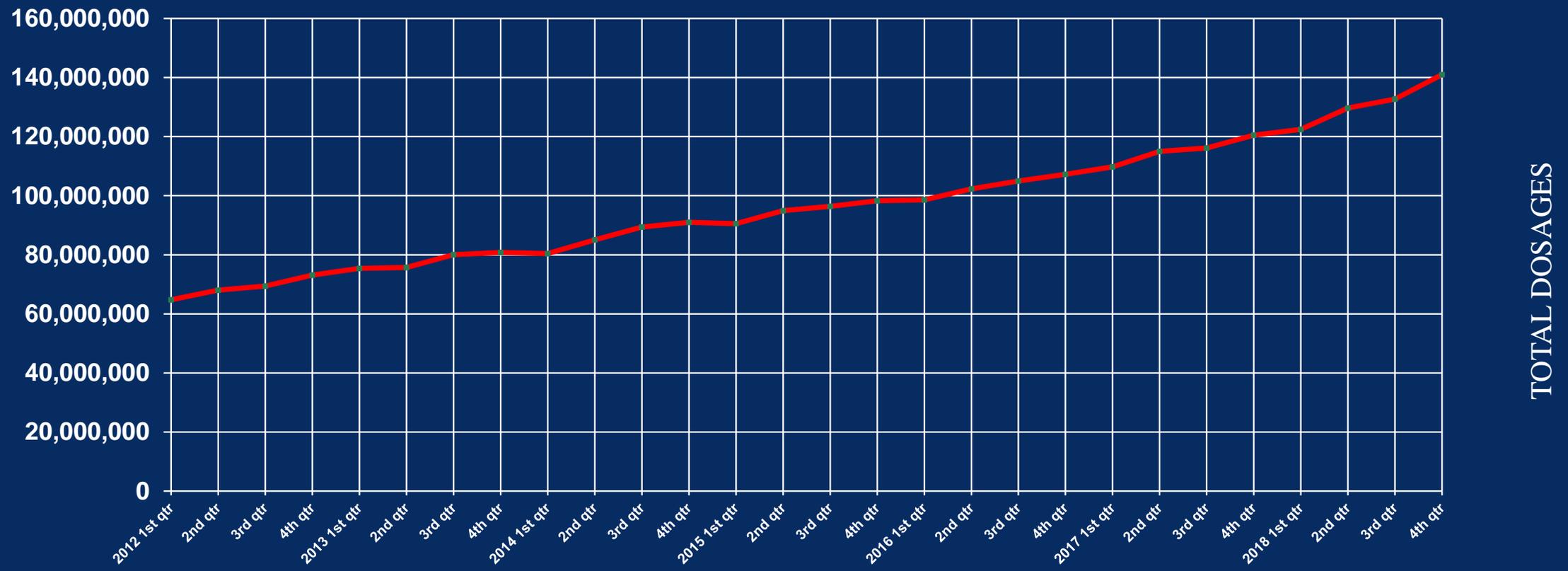
| RANK | STATE | TOTAL |
|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | OR | 5,055 | 12 | OK | 2,106 | 23 | ME | 950 | 34 | ND | 378 | 45 | DC | 166 |
| 2 | MD | 4,887 | 13 | HI | 1,802 | 24 | MI | 847 | 35 | IA | 365 | 46 | NV | 161 |
| 3 | WA | 4,624 | 14 | AZ | 1,558 | 25 | MT | 778 | 36 | AK | 341 | 47 | WV | 126 |
| 4 | PA | 4,168 | 15 | TN | 1,520 | 26 | AR | 737 | 37 | WI | 330 | 48 | GU | 112 |
| 5 | ID | 4,086 | 16 | KS | 1,387 | 27 | NM | 707 | 38 | KY | 324 | 49 | NC | 83 |
| 6 | NE | 3,604 | 17 | WY | 1,277 | 28 | MA | 667 | 39 | FL | 297 | 50 | VT | 32 |
| 7 | DE | 3,240 | 18 | MN | 1,214 | 29 | CO | 650 | 40 | IN | 273 | 51 | NH | 8 |
| 8 | CA | 2,353 | 19 | IL | 1,206 | 30 | TX | 608 | 41 | SD | 270 | 52 | AS | 0 |
| 9 | NJ | 2,236 | 20 | AL | 1,156 | 31 | UT | 590 | 42 | OH | 199 | 53 | PR | 0 |
| 10 | MO | 2,227 | 21 | NY | 1,116 | 32 | MS | 549 | 43 | SC | 188 | 54 | RI | 0 |
| 11 | VA | 2,192 | 22 | GA | 1,072 | 33 | LA | 523 | 44 | CT | 166 | 55 | VI | 0 |

* *Business Activity – Practitioners*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



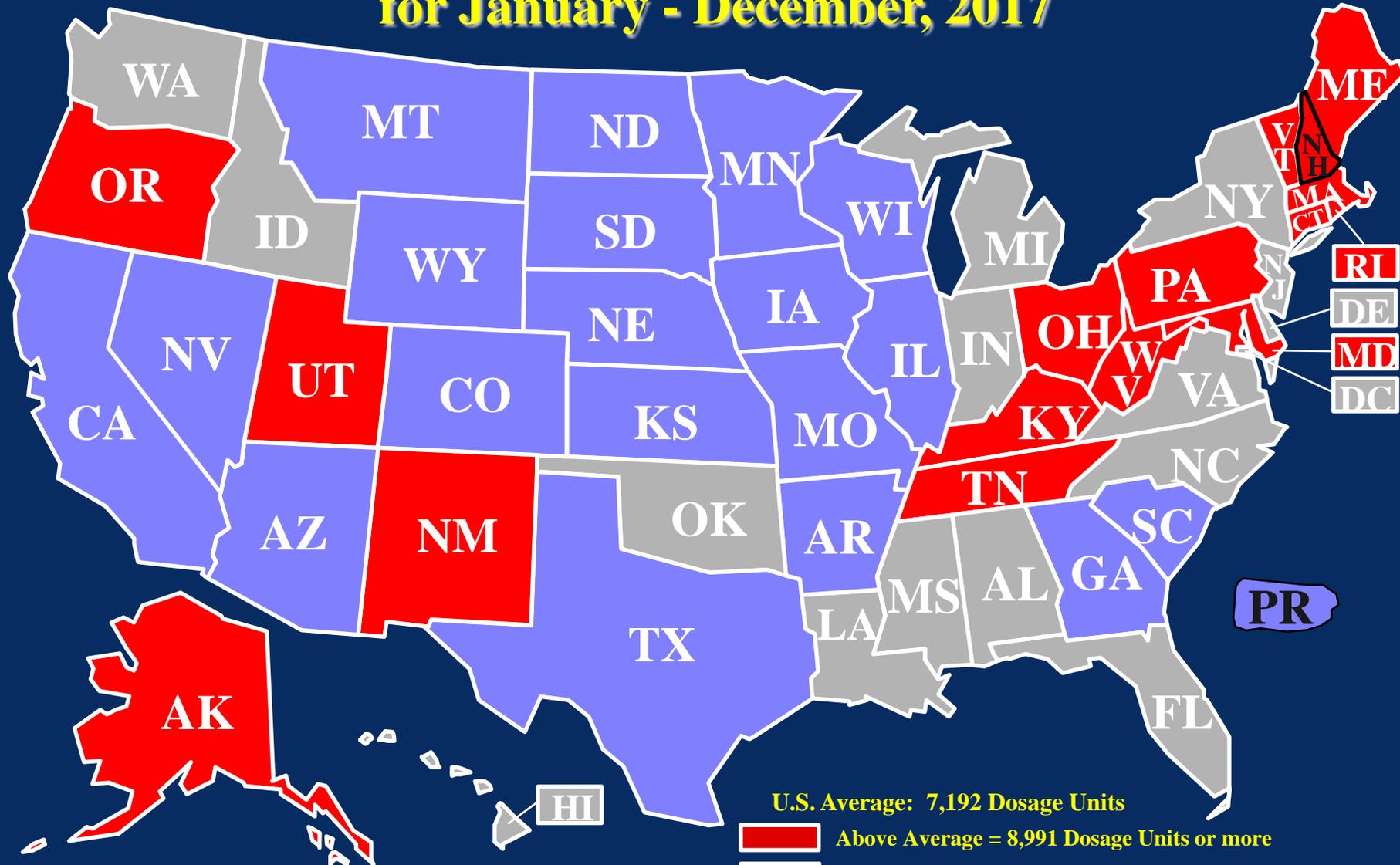
Buprenorphine Distribution 2012-2017 U.S. Totals



TOTAL DOSAGES



Purchases of Buprenorphine for January - December, 2017



U.S. Average: 7,192 Dosage Units

- Above Average = 8,991 Dosage Units or more
- Average = 5,394 – 8,990 Dosage Units
- Below Average = 5,393 Dosage Units or less
- Zero Dosage Units



Buprenorphine Distribution

Retail Pharmacies



State Ranking Average Per 100K Population* Buprenorphine January – December 2018

| RANK | STATE | TOTAL | RANK | STATE | TOTAL |
|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|--------|
| 1 | VT | 484,947 | 12 | DC | 242,437 | 23 | AK | 176,679 | 34 | WY | 129,534 | 45 | IL | 70,058 |
| 2 | KY | 460,434 | 13 | OH | 240,905 | 24 | MI | 171,800 | 35 | AR | 126,356 | 46 | CA | 68,624 |
| 3 | ME | 433,536 | 14 | LA | 240,307 | 25 | NJ | 171,447 | 36 | MO | 121,349 | 47 | TX | 64,770 |
| 4 | WV | 410,609 | 15 | MD | 234,745 | 26 | NY | 169,185 | 37 | WI | 107,414 | 48 | KS | 50,820 |
| 5 | RI | 399,457 | 16 | OK | 210,494 | 27 | OR | 168,248 | 38 | HI | 101,835 | 49 | NE | 44,275 |
| 6 | NH | 350,898 | 17 | UT | 204,999 | 28 | DE | 165,081 | 39 | GA | 95,134 | 50 | SD | 36,332 |
| 7 | MA | 341,614 | 18 | NM | 202,037 | 29 | FL | 143,015 | 40 | AZ | 92,584 | 51 | IA | 30,784 |
| 8 | TN | 308,847 | 19 | NC | 200,449 | 30 | SC | 140,671 | 41 | CO | 89,355 | 52 | PR | 27,014 |
| 9 | AL | 300,725 | 20 | IN | 196,758 | 31 | ID | 139,300 | 42 | MN | 88,826 | 53 | VI | 6,055 |
| 10 | PA | 289,959 | 21 | WA | 187,888 | 32 | MT | 138,149 | 43 | ND | 82,067 | 54 | GU | 151 |
| 11 | CT | 242,795 | 22 | MS | 182,902 | 33 | VA | 137,444 | 44 | NV | 78,500 | 55 | AS | 0 |

* *Business Activity – Retail Pharmacies*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Buprenorphine Distribution Practitioner's Office



State Ranking Average Per 100K Population* Buprenorphine January – December 2018

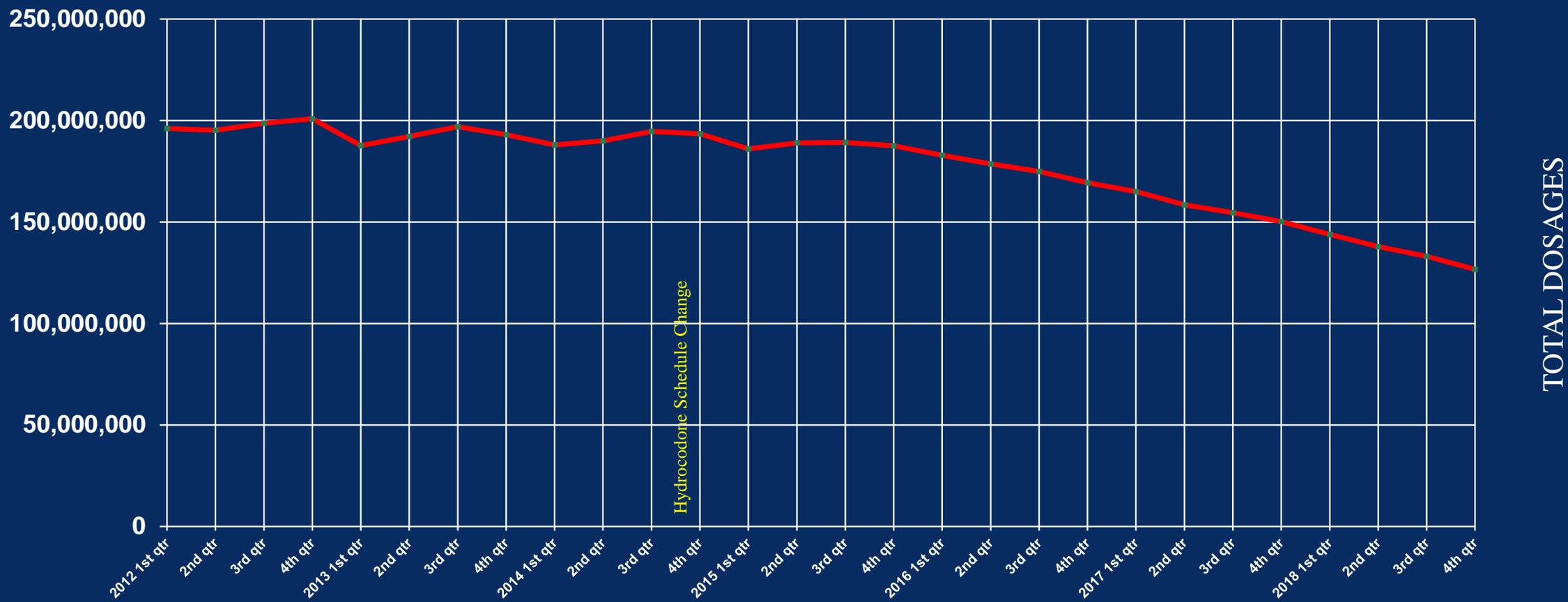
| RANK | STATE | TOTAL |
|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | OK | 1,681 | 12 | WA | 276 | 23 | OH | 99 | 34 | MN | 6 | 45 | HI | 0 |
| 2 | NJ | 1,319 | 13 | FL | 260 | 24 | NY | 89 | 35 | MS | 6 | 46 | IA | 0 |
| 3 | PA | 1,197 | 14 | KS | 223 | 25 | MO | 70 | 36 | AK | 4 | 47 | ID | 0 |
| 4 | OR | 819 | 15 | KY | 215 | 26 | TN | 44 | 37 | NE | 3 | 48 | MT | 0 |
| 5 | MD | 714 | 16 | NV | 209 | 27 | AL | 43 | 38 | AR | 1 | 49 | NH | 0 |
| 6 | MI | 697 | 17 | DE | 194 | 28 | RI | 24 | 39 | CT | 1 | 50 | PR | 0 |
| 7 | ND | 571 | 18 | WI | 193 | 29 | VA | 12 | 40 | UT | 1 | 51 | SD | 0 |
| 8 | GA | 345 | 19 | NC | 169 | 30 | IL | 10 | 41 | NM | <1 | 52 | VI | 0 |
| 9 | TX | 339 | 20 | AZ | 123 | 31 | ME | 10 | 42 | AS | 0 | 53 | VT | 0 |
| 10 | CO | 333 | 21 | SC | 119 | 32 | MA | 9 | 43 | DC | 0 | 54 | WV | 0 |
| 11 | CA | 310 | 22 | IN | 101 | 33 | LA | 7 | 44 | GU | 0 | 55 | WY | 0 |

* *Business Activity – Practitioners*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Morphine Distribution 2012-2018 U.S. Totals





Morphine Distribution

Retail Pharmacies



State Ranking

Average Per 100K Population*

Morphine

January – December 2018

| RANK | STATE | TOTAL |
|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|---------|
| 1 | DE | 309,560 | 12 | MI | 204,317 | 23 | MO | 174,440 | 34 | MS | 136,518 | 45 | MN | 110,865 |
| 2 | AZ | 309,248 | 13 | AR | 197,608 | 24 | CO | 174,310 | 35 | NE | 130,204 | 46 | NJ | 104,662 |
| 3 | OK | 288,281 | 14 | VT | 192,735 | 25 | MD | 169,992 | 36 | WV | 128,171 | 47 | ND | 101,041 |
| 4 | NV | 281,845 | 15 | AK | 188,841 | 26 | ME | 163,782 | 37 | IA | 127,287 | 48 | TX | 97,170 |
| 5 | TN | 277,809 | 16 | PA | 186,194 | 27 | NC | 161,881 | 38 | KY | 123,626 | 49 | IL | 90,079 |
| 6 | OR | 268,950 | 17 | WY | 182,632 | 28 | HI | 155,542 | 39 | MA | 123,362 | 50 | NY | 88,803 |
| 7 | FL | 251,780 | 18 | SC | 182,074 | 29 | IN | 151,025 | 40 | SD | 120,836 | 51 | DC | 52,246 |
| 8 | ID | 242,980 | 19 | NH | 180,023 | 30 | NM | 150,568 | 41 | OH | 120,709 | 52 | GU | 42,930 |
| 9 | UT | 231,859 | 20 | KS | 179,011 | 31 | GA | 144,684 | 42 | CT | 117,384 | 53 | VI | 12,930 |
| 10 | WA | 224,540 | 21 | WI | 178,761 | 32 | CA | 140,747 | 43 | VA | 114,819 | 54 | PR | 3,791 |
| 11 | MT | 219,208 | 22 | AL | 176,818 | 33 | LA | 137,337 | 44 | RI | 114,554 | 55 | AS | 0 |

* *Business Activity – Retail Pharmacies*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Morphine Distribution Practitioner's Office



State Ranking

Average Per 100K Population*

Morphine

January – December 2018

| RANK | STATE | TOTAL |
|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | HI | 1,117 | 12 | DE | 51 | 23 | PA | 11 | 34 | GU | 0 | 45 | NH | 0 |
| 2 | OK | 820 | 13 | UT | 51 | 24 | TX | 7 | 35 | IA | 0 | 46 | NM | 0 |
| 3 | MD | 802 | 14 | MI | 42 | 25 | NJ | 6 | 36 | IN | 0 | 47 | OH | 0 |
| 4 | GA | 270 | 15 | AR | 38 | 26 | MN | 3 | 37 | KS | 0 | 48 | PR | 0 |
| 5 | CT | 260 | 16 | MT | 30 | 27 | MO | 3 | 38 | KY | 0 | 49 | RI | 0 |
| 6 | ID | 249 | 17 | VA | 29 | 28 | SC | 2 | 39 | LA | 0 | 50 | SD | 0 |
| 7 | AL | 200 | 18 | CA | 20 | 29 | AZ | 1 | 40 | MA | 0 | 51 | TN | 0 |
| 8 | CO | 109 | 19 | WA | 19 | 30 | IL | 1 | 41 | ME | 0 | 52 | VI | 0 |
| 9 | WI | 85 | 20 | FL | 16 | 31 | AK | 0 | 42 | MS | 0 | 53 | VT | 0 |
| 10 | NY | 57 | 21 | OR | 13 | 32 | AS | 0 | 43 | NC | 0 | 54 | WV | 0 |
| 11 | NV | 56 | 22 | NE | 11 | 33 | DC | 0 | 44 | ND | 0 | 55 | WY | 0 |

* *Business Activity – Practitioners*

Source: Drug Enforcement Administration, Office of Diversion Control, Pharmaceutical Investigations Section, Targeting and Analysis Unit
Most current ARCOS information as of 08/27/2016



Drug Trends



Heroin and Fentanyl



Heroin

- **The raw material (opium) to manufacture heroin comes from the poppy plant.**
- **The raw material (opium) comes from outside of the U.S. – Asia, Pakistan, Afghanistan.**
- **Heroin comes in through different drug routes – primarily through Mexico.**
- **Heroin use has increased in the last 5 years.**



Fentanyl

§ Fentanyl is a synthetic opioid.

§ Fentanyl is very powerful (50-100 times more potent than heroin).

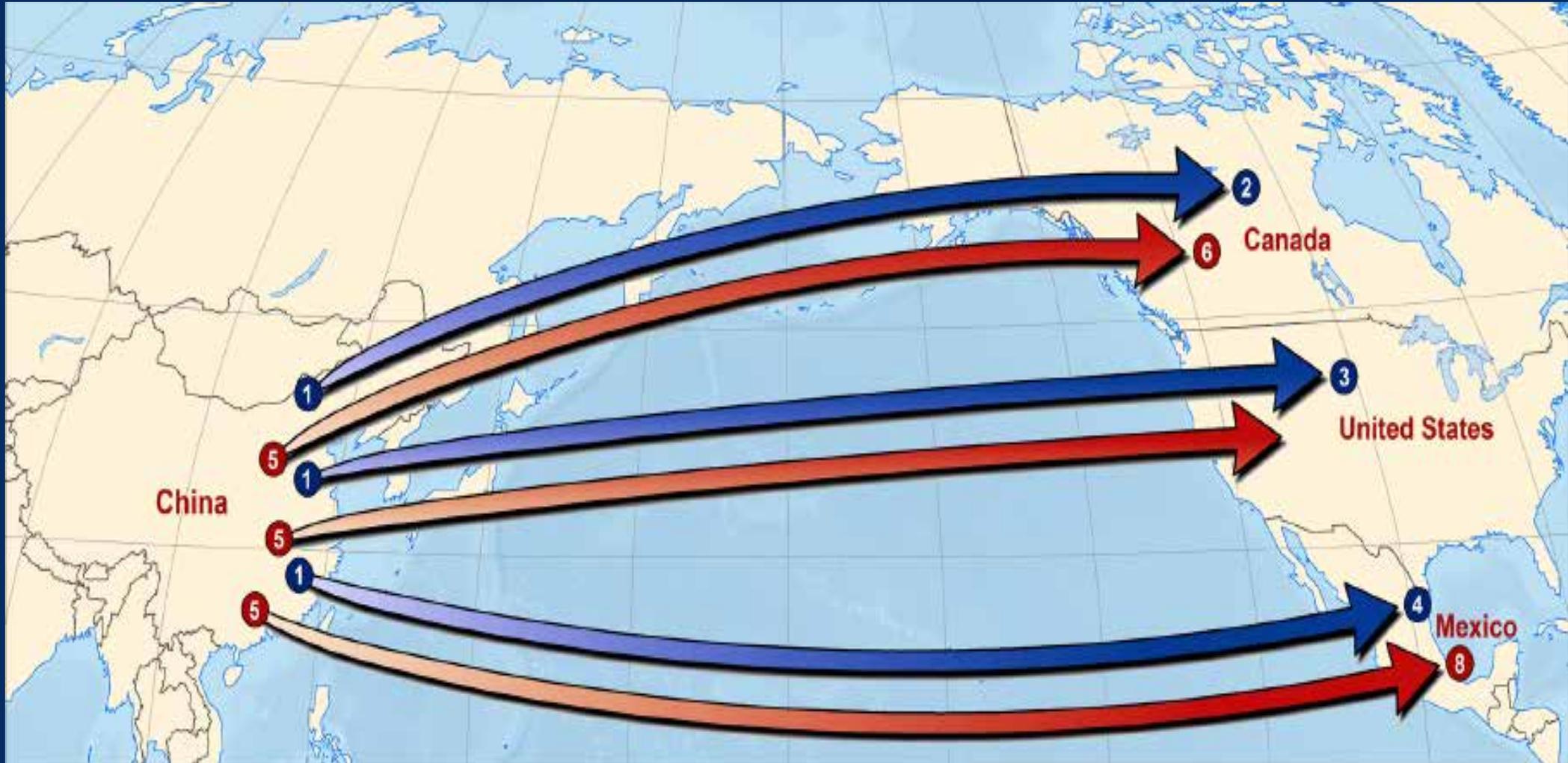
§ Dealers are combining Fentanyl with Heroin, pills, marijuana, counterfeit pills, etc.

§ Carfentanil (100 times more potent than Fentanyl).

§ Carfentanil is stolen or diverted from legitimate channels.



Fentanyl





Fentanyl

- § Is purchased from China and shipped directly to the United States or smuggled through Mexico.
- § May 2015 Chinese Customs seized 46 Kilos of Fentanyl and 26 Kilos of acetyl fentanyl.
- § 6 customs officers became ill
- § 1 in a coma after handling.





Fentanyl

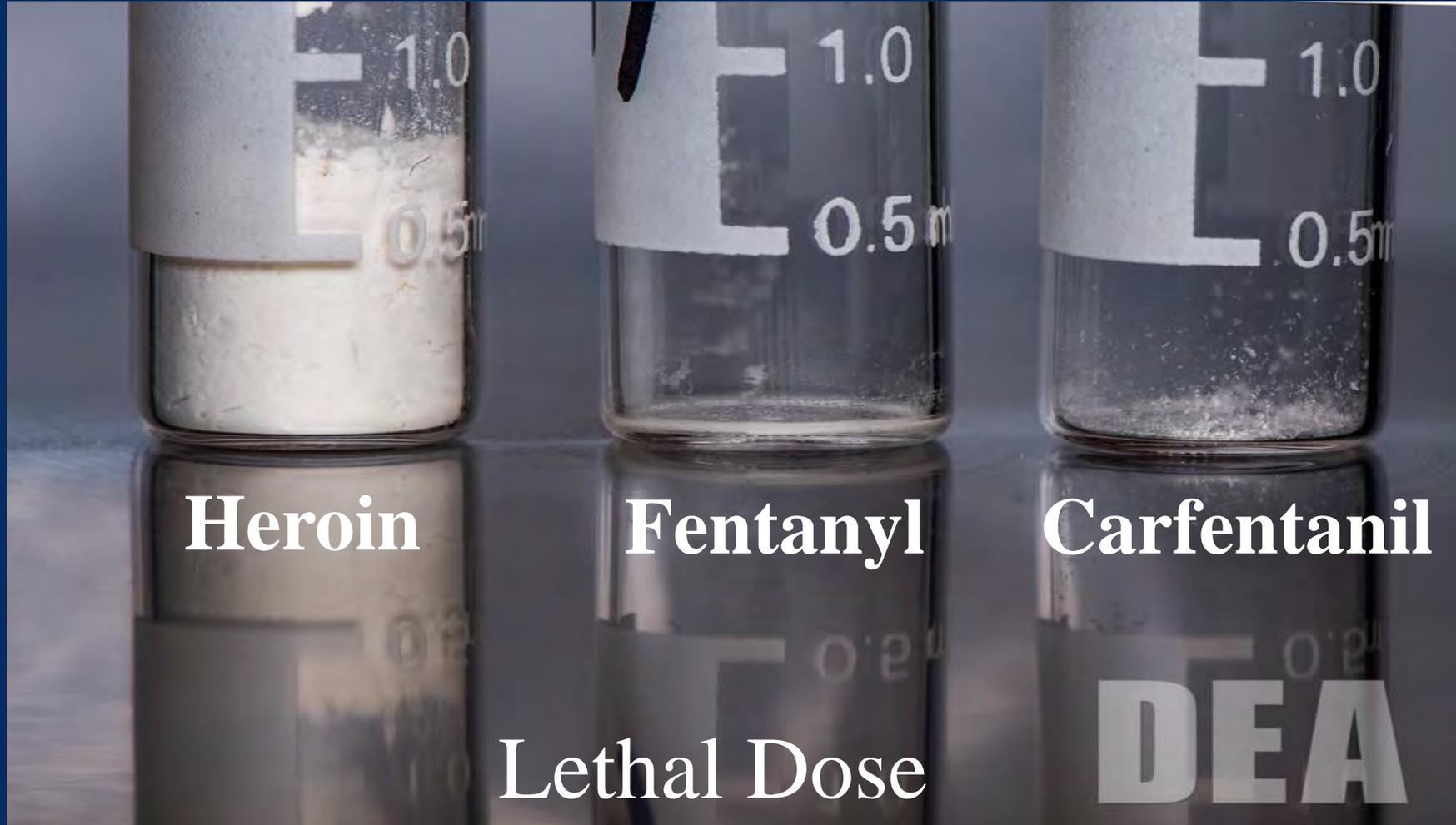
§ Produced in clandestine labs in the United States.

- § DEA LA Field Division
- § Residential location
- § 3 pill presses
- § Powder mixing equipment
- § Ventilation equipment





Fentanyl





Fentanyl Dangers to Practitioners

- § **Be cautious when inventorying personal items in ED or the hospital.**
- § **Be cautious when touching patients.**
- § **Be cautious when going through a patient's personal items.**
- § **Don't **ever** take back a patient's medications.**



From Pills to Heroin





From Pills to Heroin

§ 75% of heroin users switched after first using controlled substance prescription pain relievers.

§ Heroin is much cheaper than prescription drugs.

§ Deck: 1 small bag of heroin (\$8 to \$10)

§ Bundle: 10 bags of heroin



Prescription Drug Abuse Trends



Prescription Drug Abuse

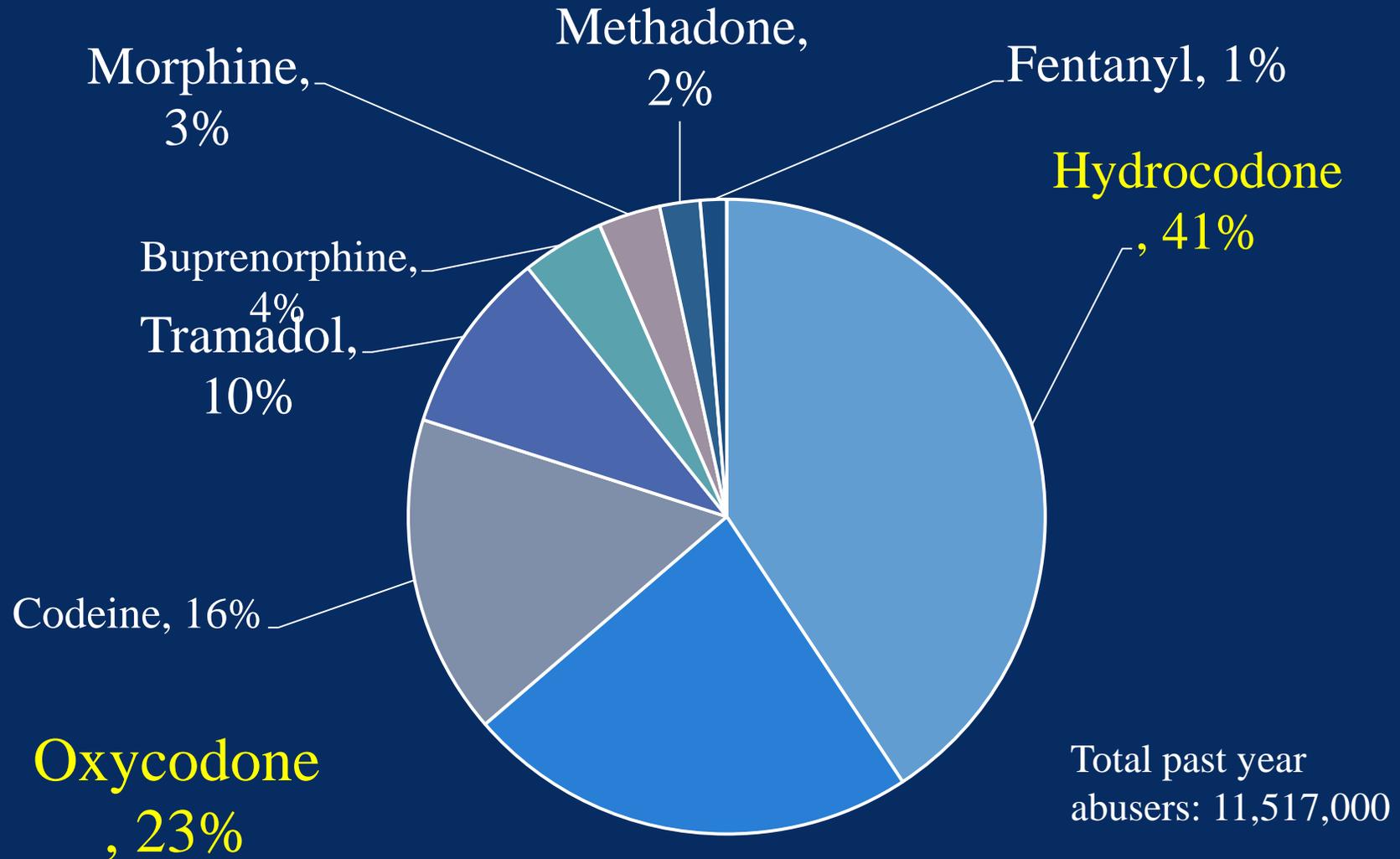
Is Driven By-

**Indiscriminate Prescribing And
Criminal Activity**



Prescription Pain Reliever Misuse

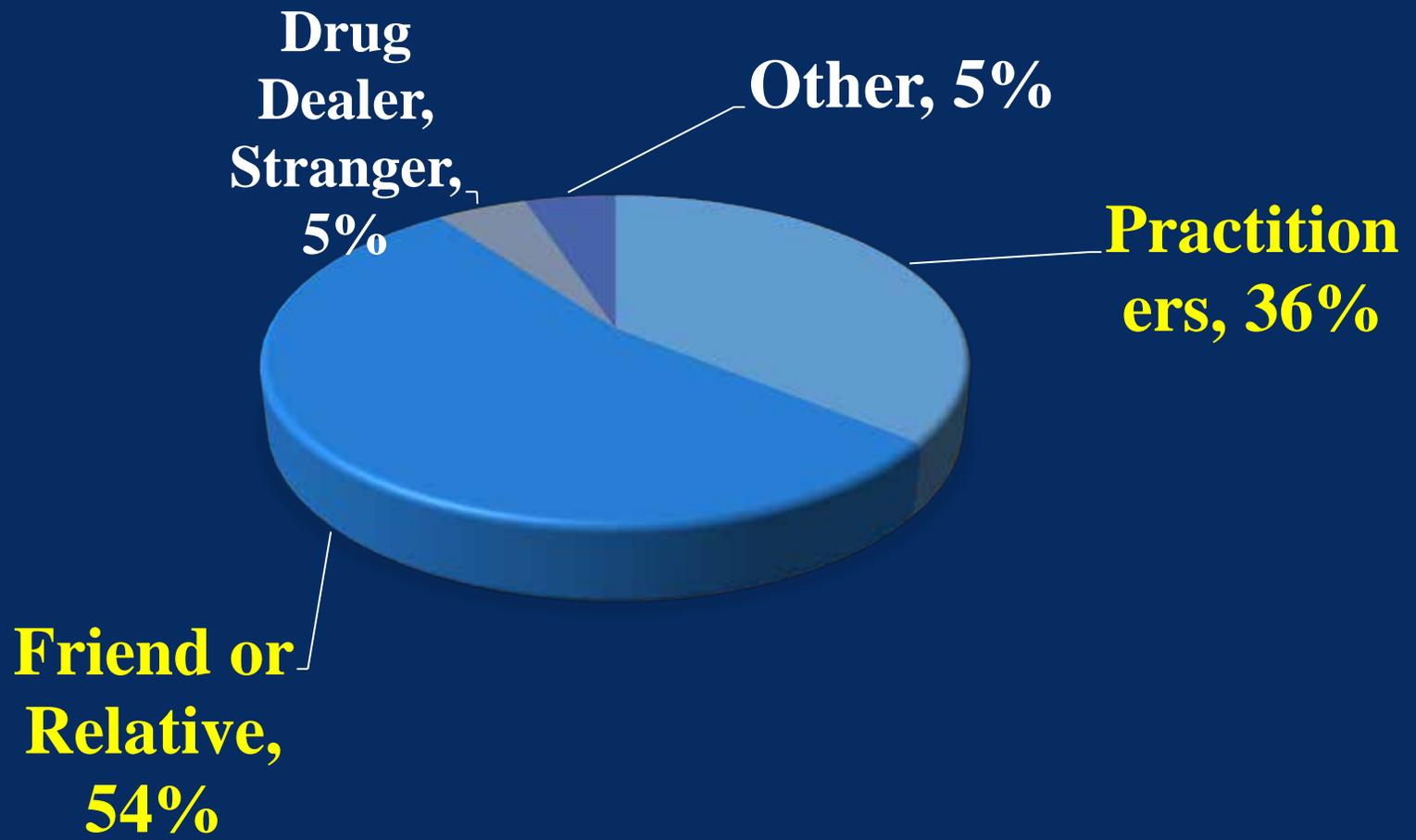
(Age 12 and Older)(2016)



Source: National Survey On Drug Use and Health (2016)



Where Do They Come From?



Source: Department of Health and Human Services



Many Patients Share Prescribed Controlled Substances

University of Pennsylvania Dental School Study:

- § ***More than half of the narcotics prescribed for wisdom teeth removal go unused...findings suggest that more than 100 million pills prescribed go unused... leaving the door open for possible misuse or abuse.**

Source: <https://www.pennmedicine.org/news/news-releases/2016/september/100-million-prescription-opioid>
https://www.nlm.nih.gov/medlineplus/news/fullstory_159336.html



Many Patients Share Prescribed Controlled Substances

John Hopkins Study:

- § **+60%** had leftover opioids they hung on for “future use”
- § **20%** shared their medications
- § **8%** likely will share w/ friend
- § **14%** likely will share w/ relative
- § **>10%** securely lock their medication



Many Patients Share Prescribed Controlled Substances

John Hopkins Study:

- § The study further explored adult attitudes towards controlled substances and found:
- § 73 percent of adults agreed that children can overdose on opioids more easily than adults.

Source: <https://www.pennmedicine.org/news/news-releases/2016/september/100-million-prescription-opioid>
https://www.nlm.nih.gov/medlineplus/news/fullstory_159336.html



Many Patients Share Prescribed Controlled Substances

John Hopkins Study:

- § Yet found that 13% of the respondents “worry” about their children accessing their opioid medications.
- § With parents of older children reporting that they were **significantly less** likely to worry about children accessing medications than parents of younger children.

Source: <https://www.pennmedicine.org/news/news-releases/2016/september/100-million-prescription-opioid>
https://www.nlm.nih.gov/medlineplus/news/fullstory_159336.html



Violence





Violence Associated With Opiates

Communities undergo:

- § **Drug related crimes**
 - a. **Robberies**
 - b. **Burglaries/break ins**
 - c. **Drug thefts**

- § **Abuse and neglect of children**

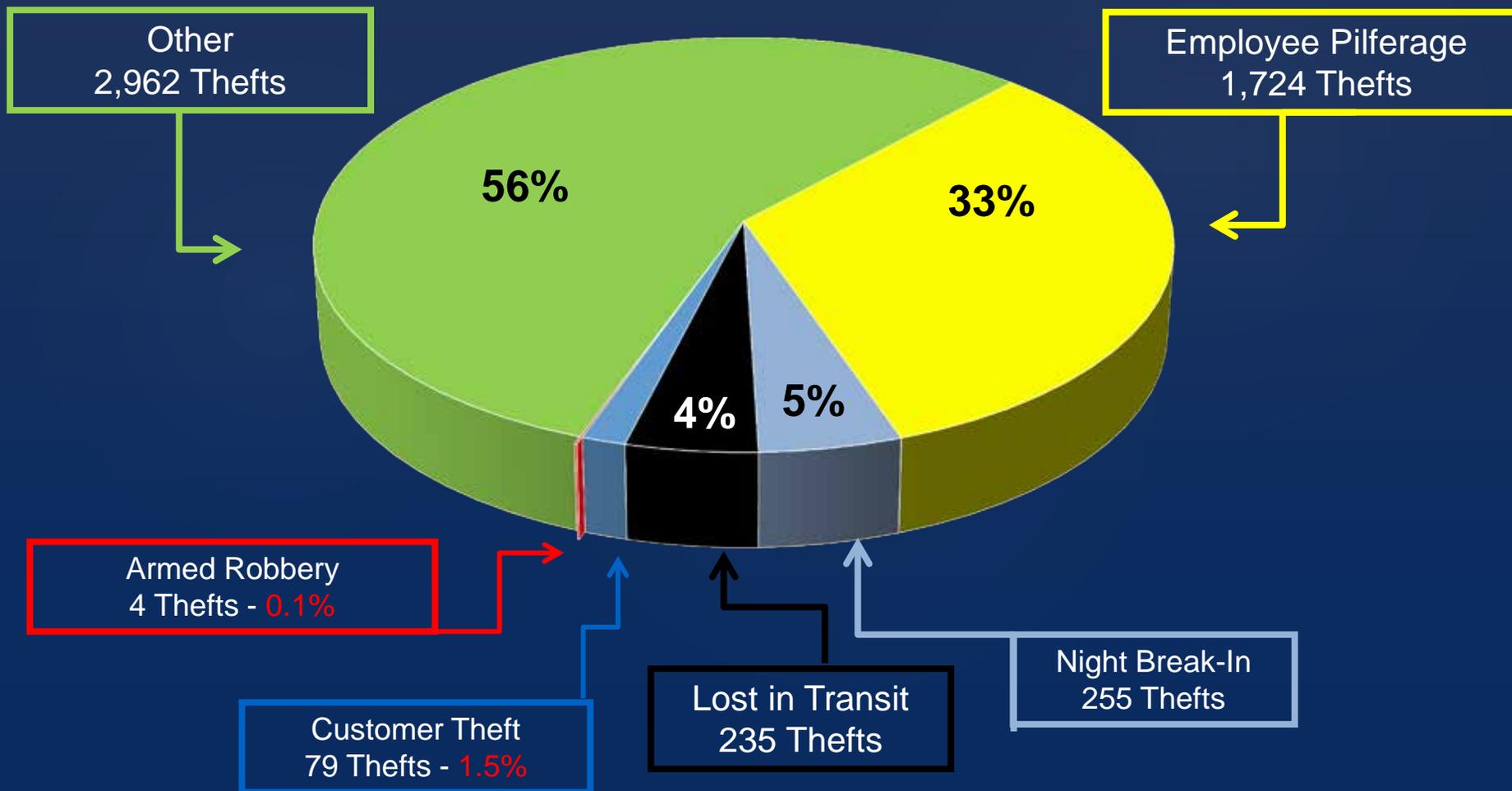
- § **Domestic violence in the home**

- § **Increase of arrests**



Nationwide Practitioner Thefts

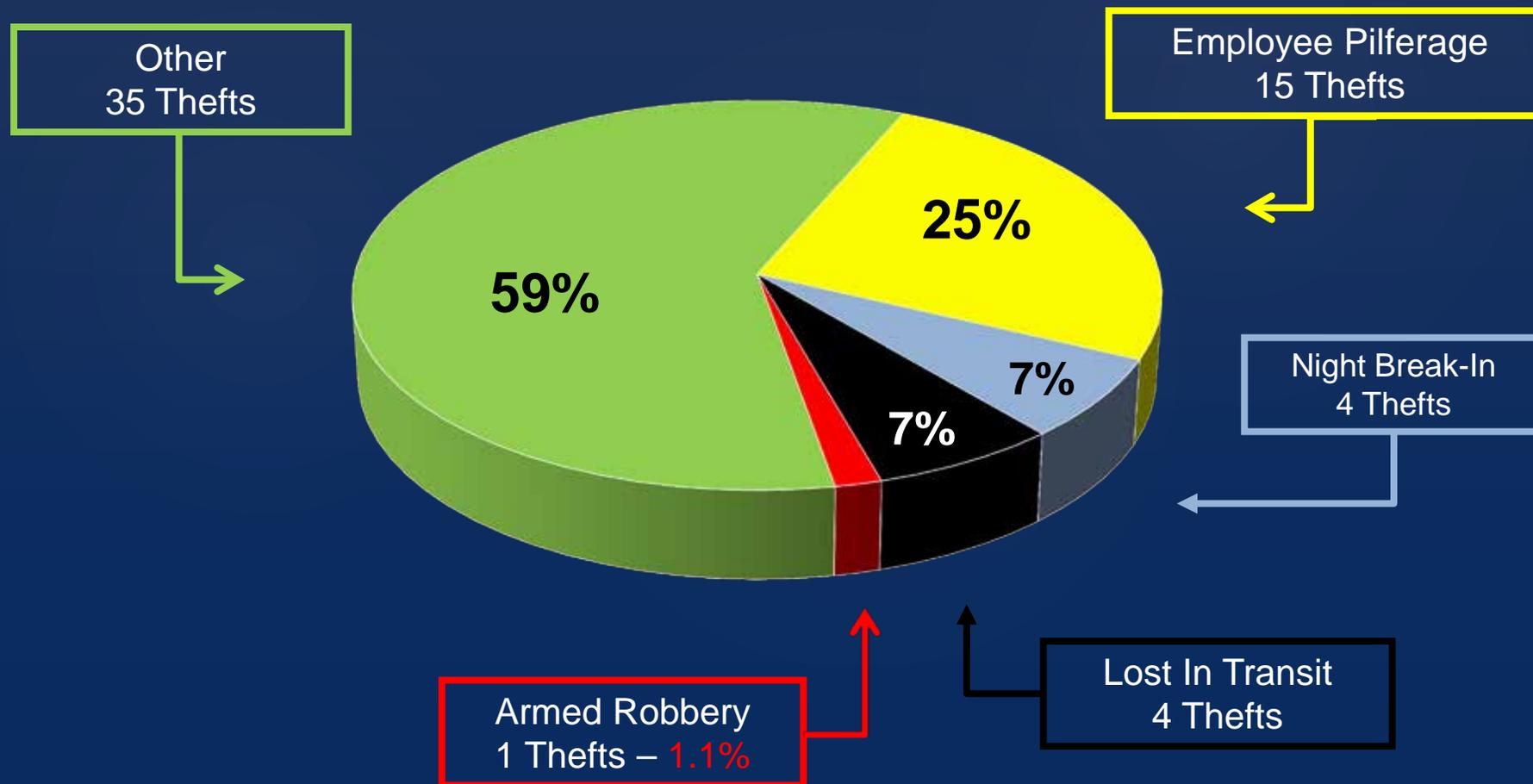
January 1, 2014 – December 31, 2018





Oklahoma Practitioner Thefts

January 1, 2014 – December 31, 2018





CDC Guidelines

Prescribing Opioids for Chronic Pain

Clinical Reminders:

- § **Opioids are not first-line or routine therapy for chronic pain.**
- § **Establish and measure goals for pain and function.**
- § **Discuss benefits, risks and availability of non opioid therapies with patients.**

Source: CDC Morbidity & Mortality Weekly Report **CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016, March 15, 2016**
www.cdc.gov/drugoverdose/prescribing/guideline.html



CDC Guidelines

Prescribing Opioids for Chronic Pain

Clinical Reminders:

- § **Use immediate-release opioids when starting.**
- § **Start low and go slow.**
- § **When opioids are needed for acute pain, prescribe no more than needed.**



CDC Guidelines

Prescribing Opioids for Chronic Pain

Clinical Reminders:

- § **Do not prescribe ER/LA opioids for acute pain.**
- § **Follow-up and re-evaluate risk of harm; reduce dose or taper and discontinue if needed.**
- § **Evaluate risk factors for opioid-related harms.**



CDC Guidelines

Prescribing Opioids for Chronic Pain

Clinical Reminders:

- § **Check PDMP for higher dosages and prescriptions from other providers.**
- § **Use urine drug testing to identify prescribed substances and undisclosed use.**
- § **Avoid concurrent benzodiazepine and opioid prescribing.**
- § **Arrange treatment for opioid use disorder if needed.**



Survey of Long-Term Painkiller Users

- § Majority say their doctor talked about possibility of addiction or dependence – **61% say there was no discussion about plan to get them off.**

- § Majority say they used the drugs to relieve pain. Other major reasons for taking them:
 - § **20%** - ‘for fun or get high’
 - § **14%** - “to deal with day-to-day stress”
 - § **10%** - “to relax or relieve tension”



Survey of Long-Term Painkiller Users

§ Other Findings:

- § **34% admit being dependent or addicted.**
- § **17% have taken painkillers that were not specifically prescribed for them.**
- § **14% have given their painkillers to a family member or friend.**
- § **20% know or suspect someone was using, taking or selling their painkillers.**



Post Questions

1. Which country, per million population, has the largest amount of drug induced deaths ages 15-64?
 - A. Sweden
 - B. Germany
 - C. United States
 - D. Russia
 - E. China



Post Questions

2. Where does Oklahoma rate in the United States in the amount of hydrocodone dispensed?

A. 15th

B. 48th

C. 3rd

D. 21st



Post Questions

- 3. What percentage of the world's hydrocodone production does the United States consume?**
- A. Less than 10%**
 - B. 34%**
 - C. 50%**
 - D. More than 70%**



Post Questions

- 4. What is the most misused prescription controlled substance pain reliever in the United States?**
- A. Oxycodone**
 - B. Morphine**
 - C. Hydrocodone**
 - D. Codeine**



Post Questions

- 5. What percent of heroin users began their addictions with prescribed pain relievers?**
- A. 15%**
 - B. 40%**
 - C. 75%**
 - D. 90%**
 - E. 99%**



*Thank-you for your time
and attention !*

