



## PDMP Brief – Q4 2018 – Boone County

The St. Louis County Prescription Drug Monitoring Program (PDMP) monitors the prescribing and dispensing of schedule II-IV controlled substances to assist in the identification and prevention of prescription drug misuse and abuse. The program's goals are to 1) improve controlled substance prescribing, 2) inform clinical practice, and 3) reduce the number of people who misuse, abuse, or overdose.

**The St. Louis County PDMP launched on April 25, 2017**, with 14 jurisdictions participating in the initial implementation. Saint Louis County Department of Public Health (DPH) operates the PDMP on behalf of all participating jurisdictions. As of December 31, 2018, 72 jurisdictions have enacted legislation to participate in the St. Louis County PDMP.

**As of 12/31/2018, there are over 13,950 approved users within the system.** Figure 1 represents approved user counts for the total PDMP by quarter as well as the average number of patient searches performed per day. System utilization has increased as both the number of approved users and participating jurisdictions have increased. In Q4 2018, over 6,000 patient searches were performed daily by healthcare providers. Increasing utilization of the PDMP is a continued focus of DPH.

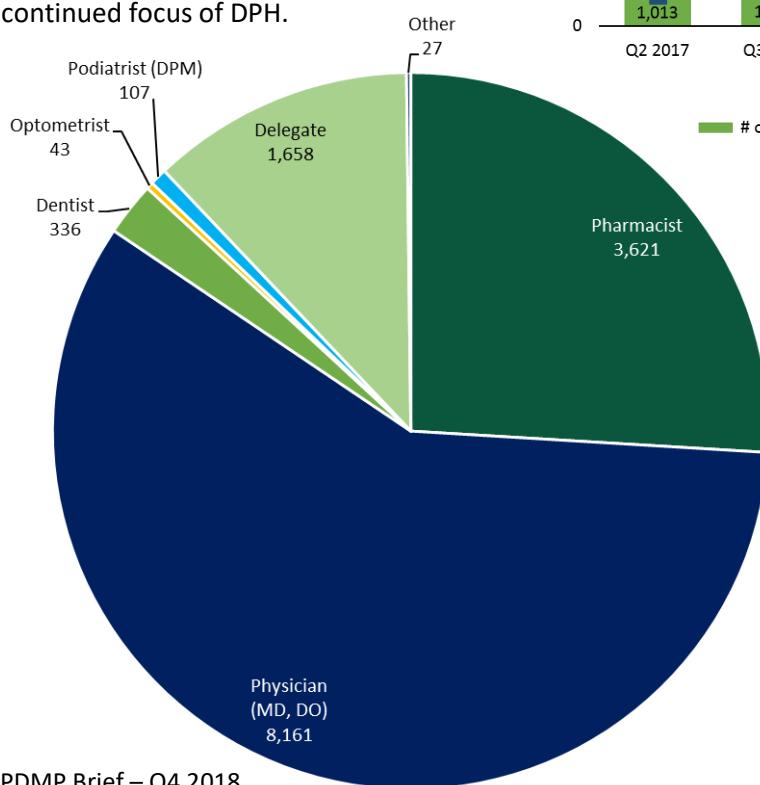


Figure 1. PDMP registration and utilization by quarter.

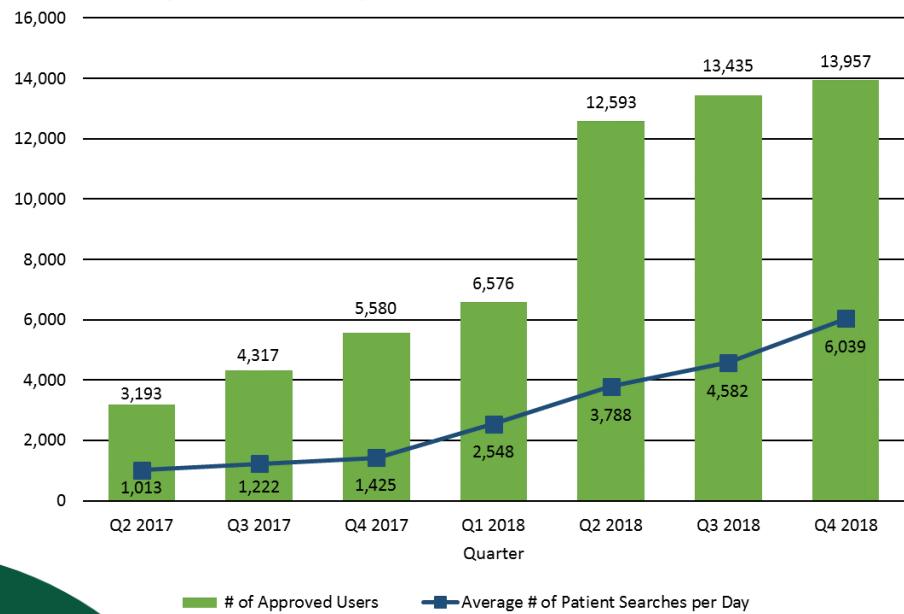


Figure 2. PDMP approved user counts by user role.

Figure 2 represents approved users by role. As of 12/31/18, there were more than 13,950 approved users in the PDMP. The increase in users in Q2 2018 was a result of mass provider registration; mass registration is where a health system, hospital, medical group, or healthcare practice can bulk register their healthcare providers in the PDMP.

**62% of PDMP users are prescribers (physicians, dentists, optometrists, and podiatrists).**

26% of users are pharmacists.

Additional information on the PDMP can be found at [www.stlouisco.com/PDMP](http://www.stlouisco.com/PDMP) or by contacting DPH at [PDMP.DPH@stlouisco.com](mailto:PDMP.DPH@stlouisco.com) or 314-615-0522.



## Opioid Dispensations

Across all age groups, opioids were the most frequently prescribed schedule II-IV controlled substance drug type.

Opioids comprise ~40% of all controlled substances dispensed. Hydrocodone, oxycodone, and tramadol were the three most frequently prescribed opioids (over 82% of opioid prescriptions).

Boone County's opioid dispensation rate was 547.2 opioid prescriptions per 1,000 population which is significantly lower than the total system (703.6 opioid prescriptions per 1,000 population).

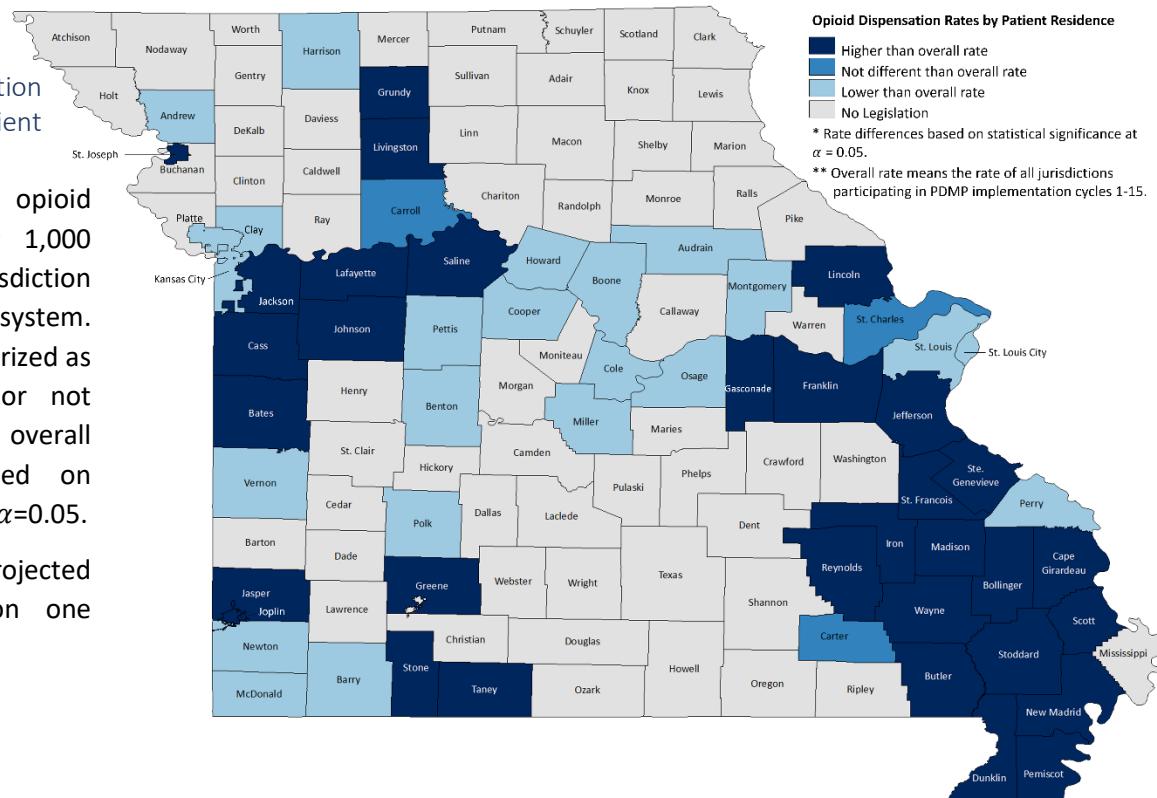
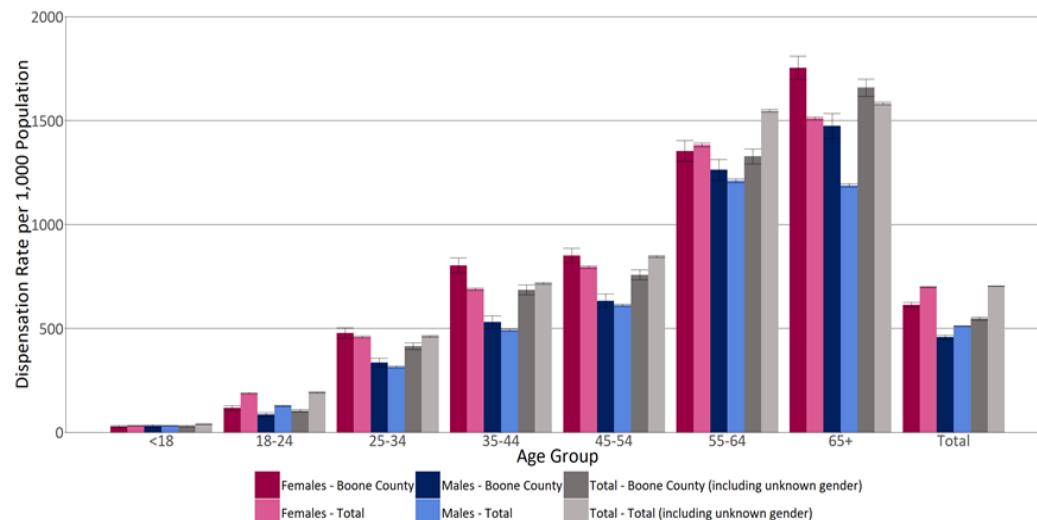


Figure 3. Opioid dispensation rates per 1,000 by patient location.

Figure 3 represents opioid dispensation rates per 1,000 population for each jurisdiction compared to the total system. Jurisdictions were categorized as either higher, lower, or not different than the overall dispensation rate based on statistical significance at  $\alpha=0.05$ .

\*Rates represent projected annual rates based on one quarter of data.

Figure 4. Opioid dispensation rates per 1,000 by age and gender.



Opioid dispensation rates increase as patient age increases.

Females received higher rates of opioid prescriptions than males across most age groups as displayed in Figure 4.

Across both genders, Boone County residents aged 65+ received the highest rates of opioids compared to all other age groups – **more than 1.6 opioid prescriptions per Boone County resident aged 65+**.



# ST. LOUIS COUNTY PRESCRIPTION DRUG MONITORING PROGRAM

Table 1a. Opioid dispensation rates per 1,000 population by jurisdiction, age, and gender; jurisdictions A-K.

| Opioids<br>Jurisdiction      | <18         |                       | 18-24        |                         | 25-34        |                         | 35-44         |                           | 45-54         |                           | 55-64         |                           | 65+           |                           | Total         |                           |
|------------------------------|-------------|-----------------------|--------------|-------------------------|--------------|-------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|
|                              | Rate        | 95% CI                | Rate         | 95% CI                  | Rate         | 95% CI                  | Rate          | 95% CI                    | Rate          | 95% CI                    | Rate          | 95% CI                    | Rate          | 95% CI                    | Rate          | 95% CI                    |
| <b>Andrew County</b>         | <b>45.1</b> | ( <b>32.2, 58.1</b> ) | <b>173.8</b> | ( <b>128.7, 218.9</b> ) | <b>349.3</b> | ( <b>296.2, 402.4</b> ) | <b>602.5</b>  | ( <b>537.7, 667.4</b> )   | <b>647.4</b>  | ( <b>586.6, 708.1</b> )   | <b>1170.0</b> | ( <b>1082.3, 1257.8</b> ) | <b>1465.1</b> | ( <b>1373.5, 1556.8</b> ) | <b>625.3</b>  | ( <b>617.1, 648.9</b> )   |
| Female                       | 27.8        | (13.2, 42.4)          | 163.4        | (101.8, 225.0)          | 285.1        | (217.8, 352.4)          | 494.1         | (411.1, 577.1)            | 565.5         | (485.5, 645.5)            | 1015.6        | (899.3, 1131.9)           | 1470.8        | (1349.0, 1592.6)          | 588.3         | (556.2, 620.4)            |
| Male                         | 52.1        | (32.8, 71.4)          | 116.7        | (64.2, 169.2)           | 244.4        | (180.9, 307.8)          | 496.8         | (413.6, 580.5)            | 482.0         | (407.6, 556.5)            | 958.5         | (846.8, 1070.2)           | 1129.5        | (1007.1, 1252.6)          | 475.5         | (446.2, 504.8)            |
| <b>Audrain County</b>        | <b>35.2</b> | ( <b>26.0, 44.4</b> ) | <b>192.6</b> | ( <b>154.8, 230.3</b> ) | <b>462.3</b> | ( <b>415.6, 509.1</b> ) | <b>631.2</b>  | ( <b>575.4, 686.9</b> )   | <b>746.7</b>  | ( <b>690.2, 803.3</b> )   | <b>1324.1</b> | ( <b>1242.3, 1405.9</b> ) | <b>1200.8</b> | ( <b>1133.6, 1268.0</b> ) | <b>615.1</b>  | ( <b>595.9, 634.4</b> )   |
| Female                       | 39.0        | (24.8, 53.2)          | 211.3        | (158.2, 264.3)          | 451.5        | (391.8, 511.2)          | 638.9         | (564.6, 713.2)            | 884.9         | (800.6, 969.3)            | 1428.4        | (1310.2, 1546.6)          | 1238.6        | (1149.4, 1327.8)          | 675.6         | (648.1, 703.0)            |
| Male                         | 31.8        | (19.8, 43.6)          | 169.2        | (116.1, 222.3)          | 438.7        | (366.8, 510.5)          | 620.9         | (536.5, 705.3)            | 589.1         | (515.7, 662.6)            | 1209.8        | (1097.3, 1322.3)          | 1144.9        | (1042.9, 1246.9)          | 539.8         | (513.2, 566.3)            |
| <b>Barry County</b>          | <b>25.0</b> | ( <b>18.3, 31.7</b> ) | <b>146.8</b> | ( <b>118.0, 175.6</b> ) | <b>417.8</b> | ( <b>379.9, 459.6</b> ) | <b>571.0</b>  | ( <b>525.3, 616.8</b> )   | <b>781.7</b>  | ( <b>734.2, 829.2</b> )   | <b>1392.8</b> | ( <b>1325.9, 1459.8</b> ) | <b>1306.3</b> | ( <b>1249.8, 1362.9</b> ) | <b>661.5</b>  | ( <b>644.6, 678.4</b> )   |
| Female                       | 22.7        | (13.6, 31.8)          | 178.6        | (132.6, 224.6)          | 469.8        | (407.5, 532.2)          | 629.1         | (561.4, 696.8)            | 910.1         | (830.9, 983.3)            | 1359.8        | (1266.8, 1452.9)          | 1402.3        | (1322.7, 1481.9)          | 723.2         | (698.3, 748.1)            |
| Male                         | 25.4        | (16.0, 34.8)          | 117.8        | (82.2, 153.4)           | 351.2        | (296.6, 405.8)          | 500.5         | (439.6, 561.3)            | 652.2         | (591.5, 712.9)            | 1040.6        | (930.9, 1500.3)           | 1168.8        | (1089.6, 1247.9)          | 588.1         | (565.5, 610.7)            |
| <b>Bates County</b>          | <b>35.7</b> | ( <b>24.4, 47.1</b> ) | <b>224.4</b> | ( <b>171.4, 277.3</b> ) | <b>624.0</b> | ( <b>552.2, 695.8</b> ) | <b>872.8</b>  | ( <b>790.0, 955.5</b> )   | <b>926.1</b>  | ( <b>852.3, 999.9</b> )   | <b>1861.1</b> | ( <b>1744.9, 1977.4</b> ) | <b>1730.4</b> | ( <b>1636.5, 1824.2</b> ) | <b>872.8</b>  | ( <b>844.7, 900.8</b> )   |
| Female                       | 46.6        | (27.9, 65.2)          | 198.7        | (127.6, 269.8)          | 509.8        | (417.4, 602.2)          | 953.0         | (829.3, 1076.7)           | 1116.7        | (1002.3, 1231.1)          | 1886.4        | (1723.5, 2049.4)          | 1868.1        | (1738.1, 1998.1)          | 959.5         | (918.2, 1000.8)           |
| Male                         | 23.7        | (10.8, 36.6)          | 230.0        | (154.9, 305.2)          | 633.4        | (531.7, 735.1)          | 672.0         | (570.4, 773.6)            | 654.4         | (566.5, 742.3)            | 1682.0        | (1523.2, 1840.7)          | 1441.3        | (1311.8, 1570.8)          | 707.0         | (671.1, 743.0)            |
| <b>Benton County</b>         | <b>29.1</b> | ( <b>17.7, 40.5</b> ) | <b>207.8</b> | ( <b>153.4, 262.2</b> ) | <b>554.7</b> | ( <b>475.9, 633.6</b> ) | <b>639.7</b>  | ( <b>567.5, 712.0</b> )   | <b>965.8</b>  | ( <b>894.1, 1037.4</b> )  | <b>1509.0</b> | ( <b>1421.7, 1590.8</b> ) | <b>1330.6</b> | ( <b>1266.3, 1395.0</b> ) | <b>885.4</b>  | ( <b>858.7, 912.1</b> )   |
| Female                       | 28.8        | (12.5, 45.1)          | 170.2        | (99.1, 241.3)           | 652.0        | (530.7, 773.3)          | 635.5         | (515.3, 755.7)            | 958.3         | (853.6, 1060.3)           | 1462.3        | (1349.8, 1574.7)          | 1523.3        | (1426.4, 1620.2)          | 942.0         | (903.9, 981.0)            |
| Male                         | 27.1        | (11.8, 42.5)          | 142.6        | (80.1, 205.1)           | 371.6        | (280.5, 462.6)          | 564.6         | (467.5, 661.7)            | 856.4         | (761.9, 950.8)            | 1429.9        | (1315.7, 1544.2)          | 1073.6        | (991.5, 1155.8)           | 754.4         | (719.5, 789.3)            |
| <b>Bollinger County</b>      | <b>46.6</b> | ( <b>31.0, 62.3</b> ) | <b>171.4</b> | ( <b>118.9, 228.3</b> ) | <b>439.6</b> | ( <b>366.7, 512.4</b> ) | <b>899.7</b>  | ( <b>804.2, 995.2</b> )   | <b>1003.3</b> | ( <b>941.3, 1123.5</b> )  | <b>1709.0</b> | ( <b>1704.0, 2001.4</b> ) | <b>1655.2</b> | ( <b>1544.0, 1766.3</b> ) | <b>874.2</b>  | ( <b>843.1, 907.2</b> )   |
| Female                       | 28.2        | (10.7, 45.7)          | 209.6        | (127.5, 291.8)          | 489.4        | (378.6, 600.2)          | 786.6         | (662.0, 911.3)            | 982.2         | (857.7, 1107.8)           | 1774.1        | (1594.0, 1954.1)          | 1745.2        | (1588.4, 1902.0)          | 872.4         | (825.8, 919.0)            |
| Male                         | 31.8        | (12.6, 37.1)          | 116.7        | (75.6, 177.8)           | 357.0        | (265.9, 448.1)          | 943.1         | (803.0, 1082.3)           | 953.7         | (832.3, 1075.1)           | 1820.8        | (1639.1, 2002.4)          | 1429.8        | (1279.1, 1580.4)          | 801.0         | (756.4, 845.6)            |
| <b>Boone County</b>          | <b>29.9</b> | ( <b>26.2, 33.6</b> ) | <b>104.3</b> | ( <b>97.4, 111.2</b> )  | <b>415.0</b> | ( <b>398.9, 431.0</b> ) | <b>685.7</b>  | ( <b>661.9, 709.5</b> )   | <b>757.7</b>  | ( <b>733.4, 781.9</b> )   | <b>1327.6</b> | ( <b>1292.0, 1363.2</b> ) | <b>1657.9</b> | ( <b>1616.8, 1699.0</b> ) | <b>547.2</b>  | ( <b>540.0, 554.4</b> )   |
| Female                       | 27.4        | (22.3, 32.4)          | 117.6        | (107.5, 127.6)          | 478.1        | (453.6, 502.6)          | 803.2         | (767.2, 839.3)            | 850.3         | (814.8, 885.8)            | 1353.0        | (1303.3, 1402.8)          | 1752.9        | (1697.1, 1808.7)          | 613.8         | (603.2, 624.4)            |
| Male                         | 31.8        | (26.6, 37.1)          | 117.6        | (76.2, 94.2)            | 335.3        | (315.0, 355.6)          | 531.2         | (501.2, 561.1)            | 632.8         | (600.7, 664.9)            | 1262.7        | (1212.6, 1312.9)          | 1474.2        | (1414.8, 1533.5)          | 458.1         | (448.6, 467.5)            |
| <b>Butler County</b>         | <b>47.3</b> | ( <b>38.8, 55.9</b> ) | <b>274.9</b> | ( <b>239.3, 354.4</b> ) | <b>782.9</b> | ( <b>733.9, 831.9</b> ) | <b>1215.0</b> | ( <b>1154.8, 1275.1</b> ) | <b>1206.2</b> | ( <b>1151.7, 1260.7</b> ) | <b>1880.8</b> | ( <b>1749.8, 1902.6</b> ) | <b>1519.6</b> | ( <b>1462.9, 1576.3</b> ) | <b>955.6</b>  | ( <b>937.1, 974.2</b> )   |
| Female                       | 48.6        | (36.2, 61.0)          | 332.4        | (278.7, 386.1)          | 854.7        | (784.3, 925.1)          | 1192.3        | (1108.9, 1275.6)          | 1184.2        | (1108.3, 1259.5)          | 1847.4        | (1749.1, 1945.7)          | 1501.7        | (1426.8, 1576.6)          | 975.9         | (949.9, 1000.1)           |
| Male                         | 31.8        | (26.6, 37.1)          | 117.6        | (76.2, 94.2)            | 335.3        | (315.0, 355.6)          | 531.2         | (501.2, 561.1)            | 632.8         | (600.7, 664.9)            | 1262.7        | (1212.6, 1312.9)          | 1474.2        | (1414.8, 1533.5)          | 458.1         | (448.6, 467.5)            |
| <b>Cape Girardeau County</b> | <b>45.5</b> | ( <b>39.1, 52.0</b> ) | <b>139.8</b> | ( <b>125.5, 154.0</b> ) | <b>559.8</b> | ( <b>529.7, 589.9</b> ) | <b>836.5</b>  | ( <b>798.4, 874.7</b> )   | <b>894.9</b>  | ( <b>856.8, 933.3</b> )   | <b>1497.0</b> | ( <b>1446.3, 1547.7</b> ) | <b>1504.0</b> | ( <b>1380.9, 1520.0</b> ) | <b>1825.5</b> | ( <b>1758.7, 1892.2</b> ) |
| Female                       | 42.8        | (33.8, 51.7)          | 149.9        | (129.5, 170.3)          | 582.4        | (538.9, 626.0)          | 787.0         | (735.0, 838.9)            | 906.1         | (854.7, 957.4)            | 1450.4        | (1380.9, 1520.0)          | 1825.5        | (1758.7, 1892.2)          | 779.1         | (761.6, 796.6)            |
| <b>Carroll County</b>        | <b>36.5</b> | ( <b>20.5, 52.5</b> ) | <b>366.5</b> | ( <b>273.0, 460.0</b> ) | <b>355.6</b> | ( <b>281.3, 429.8</b> ) | <b>719.2</b>  | ( <b>620.3, 818.2</b> )   | <b>826.7</b>  | ( <b>728.5, 925.0</b> )   | <b>1208.0</b> | ( <b>1085.9, 1301.0</b> ) | <b>1223.2</b> | ( <b>1120.4, 1325.9</b> ) | <b>672.2</b>  | ( <b>638.9, 705.5</b> )   |
| Female                       | 44.4        | (19.3, 69.5)          | 220.2        | (118.5, 321.9)          | 311.9        | (215.2, 408.5)          | 686.5         | (550.6, 822.4)            | 763.1         | (628.8, 897.4)            | 1021.1        | (861.4, 1180.9)           | 1022.0        | (896.8, 1147.1)           | 592.6         | (548.8, 636.3)            |
| Male                         | *           | *                     | 353.3        | (222.4, 484.2)          | 142.6        | (74.8, 210.3)           | 279.6         | (191.8, 367.3)            | 468.5         | (364.5, 527.4)            | 698.4         | (567.3, 828.9)            | 751.6         | (629.7, 873.5)            | 373.0         | (337.5, 408.6)            |
| <b>Carter County</b>         | <b>31.7</b> | ( <b>13.8, 49.6</b> ) | <b>159.1</b> | ( <b>91.0, 227.1</b> )  | <b>528.4</b> | ( <b>416.7, 640.1</b> ) | <b>734.6</b>  | ( <b>611.6, 857.6</b> )   | <b>948.9</b>  | ( <b>824.4, 1073.5</b> )  | <b>1472.2</b> | ( <b>1308.6, 1635.8</b> ) | <b>1303.8</b> | ( <b>1165.0, 1442.6</b> ) | <b>720.8</b>  | ( <b>678.8, 762.9</b> )   |
| Female                       | *           | *                     | 218.2        | (107.8, 326.6)          | 664.6        | (485.7, 843.5)          | 654.4         | (491.5, 817.2)            | 1087.0        | (895.4, 1277.5)           | 1249.4        | (1041.7, 1457.2)          | 1340.5        | (1148.4, 1532.6)          | 730.2         | (701.1, 789.3)            |
| Male                         | 37.8        | (9.8, 65.8)           | 94.9         | (19.0, 170.8)           | 385.5        | (252.0, 519.1)          | 730.2         | (555.4, 905.1)            | 683.3         | (535.4, 831.2)            | 1520.0        | (1278.4, 1761.6)          | 1103.7        | (916.2, 1291.3)           | 627.2         | (571.0, 683.3)            |
| <b>Cass County</b>           | <b>44.0</b> | ( <b>39.0, 49.1</b> ) | <b>251.4</b> | ( <b>228.8, 274.0</b> ) | <b>477.2</b> | ( <b>452.6, 501.9</b> ) | <b>718.5</b>  | ( <b>686.9, 747.4</b> )   | <b>893.4</b>  | ( <b>863.4, 923.5</b> )   | <b>1599.2</b> | ( <b>1565.5, 1923.8</b> ) | <b>1599.2</b> | ( <b>1565.5, 1642.0</b> ) | <b>744.7</b>  | ( <b>734.0, 755.5</b> )   |
| Female                       | 36.2        | (29.6, 42.7)          | 208.9        | (179.2, 238.5)          | 310.4        | (282.8, 338.1)          | 541.9         | (505.7, 577.1)            | 728.9         | (690.8, 767.0)            | 1376.2        | (1316.6, 1435.8)          | 1465.4        | (1410.8, 1520.0)          | 624.1         | (610.4, 637.9)            |
| Male                         | 24.5        | (19.2, 29.8)          | 114.4        | (93.2, 135.6)           | 254.1        | (228.2, 279.9)          | 349.7         | (321.0, 378.4)            | 491.6         | (459.9, 523.3)            | 1114.3        | (1081.8, 1170.5)          | 1013.3        | (962.0, 1064.6)           | 417.7         | (406.2, 429.2)            |
| <b>City of St. Joseph</b>    | <b>35.7</b> | ( <b>30.2, 41.2</b> ) | <b>171.3</b> | ( <b>154.1, 188.5</b> ) | <b>640.2</b> | ( <b>610.0, 670.4</b> ) | <b>838.9</b>  | ( <b>801.5, 876.3</b> )   | <b>1042.3</b> | ( <b>1003.6, 1081.0</b> ) | <b>1917.8</b> | ( <b>1858.7, 1976.9</b> ) | <b>1661.9</b> | ( <b>1612.8, 1710.9</b> ) | <b>804.4</b>  | ( <b>791.7, 817.1</b> )   |
| Female                       | 24.0        | (17.5, 30.4)          | 152.6        | (124.9, 175.8)          | 600.4        | (557.6, 643.2)          | 796.2         | (744.9, 851.4)            | 881.8         | (830.6, 932.9)            | 1495.3        | (1422.7, 1567.9)          | 1371.7        | (1280.6, 1393.6)          | 701.7         | (685.0, 718.5)            |
| Male                         | 27.5        | (20.8, 34.3)          | 85.3         | (58.3, 102.3)           | 352.9        | (322.2, 383.7)          | 464.4         | (426.2, 506.2)            | 667.2         | (619.7, 705.6)            | 1443.8        | (1370.1, 1517.6)          | 1318.0        | (1248.3, 1387.7)          | 522.6         | (508.1, 537.1)            |
| <b>Clay County</b>           | <b>45.1</b> | ( <b>40.2, 50.1</b> ) | <b>225.9</b> | ( <b>206.0, 245.8</b> ) | <b>327.9</b> | ( <b>309.9, 345.9</b> ) | <b>582.2</b>  | ( <b>558.2, 606.2</b> )   | <b>785.4</b>  | ( <b>758.0, 818.2</b> )   | <b>1383.9</b> | ( <b>1342.4, 1425.5</b> ) | <b>1569.3</b> | ( <b>1524.8, 1613.7</b> ) | <b>610.2</b>  | ( <b>601.9, 619.5</b> )   |
| Female                       | 33.3        | (27.2, 39.4)          | 168.2        | (144.0, 192.3)          | 250.2        | (228.2, 272.2)          | 459.0         | (429.1, 488.9)            | 567.0         | (534.3, 599.7)            | 977.8         | (926.9, 1026.1)           | 1198.9        | (1147.6, 1250.2)          | 470.4         | (459.0, 481.8)            |
| Male                         |             |                       |              |                         |              |                         |               |                           |               |                           |               |                           |               |                           |               |                           |



Table 1b. Opioid dispensation rates per 1,000 population by jurisdiction, age, and gender; jurisdictions L-Z.

| Opioids<br>Jurisdiction | <18  |              | 18-24 |                | 25-34 |                 | 35-44  |                  | 45-54  |                  | 55-64  |                  | 65+    |                  | Total  |                  |
|-------------------------|------|--------------|-------|----------------|-------|-----------------|--------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|------------------|
|                         | Rate | 95% CI       | Rate  | 95% CI         | Rate  | 95% CI          | Rate   | 95% CI           | Rate   | 95% CI           | Rate   | 95% CI           | Rate   | 95% CI           | Rate   | 95% CI           |
| Lafayette County        | 40.1 | (31.4, 48.7) | 275.8 | (235.7, 315.8) | 586.0 | (536.3, 635.6)  | 723.5  | (671.4, 775.5)   | 1048.8 | (993.1, 1104.6)  | 1795.1 | (1713.2, 1877.0) | 1175.6 | (1118.3, 1233.0) | 762.2  | (743.5, 781.0)   |
| Female                  | 29.2 | (18.6, 39.8) | 249.4 | (194.4, 304.4) | 527.5 | (460.7, 594.2)  | 650.5  | (581.7, 719.4)   | 966.4  | (890.1, 1042.6)  | 1395.9 | (1295.1, 1496.8) | 1030.7 | (958.8, 1102.5)  | 670.9  | (646.2, 695.6)   |
| Male                    | 31.3 | (20.6, 42.0) | 139.8 | (100.3, 179.4) | 321.9 | (270.1, 373.8)  | 452.2  | (393.3, 511.2)   | 650.7  | (589.0, 712.4)   | 1312.0 | (1211.6, 1412.5) | 782.2  | (711.9, 852.6)   | 488.6  | (467.3, 510.0)   |
| Lincoln County          | 41.8 | (35.2, 48.4) | 335.4 | (300.3, 370.1) | 664.7 | (626.3, 703.2)  | 934.3  | (888.9, 979.7)   | 1225.3 | (1177.7, 1272.9) | 2353.0 | (2273.0, 2433.0) | 2238.3 | (2160.7, 2315.9) | 940.2  | (923.6, 956.8)   |
| Female                  | 48.1 | (37.9, 58.3) | 394.8 | (341.8, 447.8) | 748.2 | (691.1, 805.2)  | 1153.6 | (1082.1, 1225.0) | 1335.0 | (1264.3, 1405.6) | 2398.6 | (2285.0, 2512.2) | 2392.2 | (2283.0, 2501.5) | 1045.0 | (1020.3, 1069.7) |
| Male                    | 35.4 | (26.9, 43.9) | 261.9 | (218.4, 305.4) | 497.3 | (449.8, 544.9)  | 628.8  | (576.2, 681.3)   | 1046.5 | (984.6, 1108.4)  | 2121.7 | (2013.7, 2229.7) | 1971.9 | (1864.7, 2079.2) | 771.7  | (750.4, 792.2)   |
| Livingston County       | 24.0 | (13.5, 34.6) | 286.0 | (224.8, 347.1) | 362.3 | (308.5, 416.1)  | 619.7  | (548.4, 689.9)   | 943.5  | (861.2, 1025.8)  | 1624.4 | (1510.8, 1738.1) | 1509.8 | (1418.2, 1601.3) | 766.3  | (738.5, 794.1)   |
| Female                  | 35.9 | (17.7, 54.1) | 339.9 | (247.5, 432.2) | 349.0 | (280.6, 417.5)  | 586.1  | (496.9, 675.2)   | 1024.1 | (909.7, 1138.5)  | 1664.1 | (1506.0, 1822.1) | 1696.1 | (1568.7, 1823.5) | 833.0  | (819.2, 872.0)   |
| Male                    | *    | *            | 198.9 | (125.2, 272.6) | 371.6 | (285.8, 457.5)  | 647.4  | (535.7, 759.2)   | 793.2  | (679.2, 907.2)   | 1557.8 | (1395.5, 1720.0) | 1206.9 | (1080.5, 1333.3) | 661.1  | (622.4, 699.7)   |
| Madison County          | 38.2 | (24.1, 52.4) | 208.7 | (153.0, 264.4) | 806.5 | (710.7, 902.4)  | 1063.0 | (954.9, 1171.2)  | 1430.0 | (1320.5, 1539.4) | 2397.9 | (2241.8, 2523.9) | 2047.1 | (1926.6, 2167.6) | 1111.4 | (1074.0, 1148.8) |
| Female                  | 45.2 | (23.1, 67.4) | 261.0 | (173.3, 348.8) | 859.7 | (719.3, 1000.1) | 1073.0 | (920.9, 1225.2)  | 1676.7 | (1510.1, 1843.4) | 2262.7 | (2050.0, 2475.3) | 2302.8 | (2131.2, 2474.4) | 1223.1 | (1168.1, 1278.1) |
| Male                    | 29.0 | (11.9, 46.2) | 124.5 | (63.5, 185.5)  | 712.8 | (585.8, 839.8)  | 1023.4 | (871.8, 1175.0)  | 1106.9 | (970.0, 1243.9)  | 2473.1 | (2247.1, 2699.1) | 1678.8 | (1515.3, 1842.3) | 957.9  | (908.4, 1007.4)  |
| McDonald County         | 30.9 | (22.3, 39.4) | 148.3 | (110.4, 182.6) | 325.2 | (282.5, 367.9)  | 483.4  | (433.8, 533.0)   | 764.2  | (705.3, 823.0)   | 1164.6 | (1082.0, 1247.2) | 1298.2 | (1215.1, 1381.4) | 530.1  | (513.3, 548.9)   |
| Female                  | 32.0 | (19.4, 44.5) | 192.6 | (135.7, 249.5) | 387.4 | (321.3, 453.5)  | 529.1  | (455.4, 602.8)   | 863.3  | (774.1, 952.5)   | 1198.5 | (1080.1, 1316.8) | 1346.4 | (1230.3, 1462.4) | 584.8  | (556.8, 612.9)   |
| Miller County           | 27.3 | (19.1, 35.6) | 140.7 | (107.0, 174.4) | 306.6 | (265.5, 347.7)  | 354.2  | (312.1, 396.4)   | 607.7  | (557.8, 657.7)   | 971.0  | (902.8, 1039.2)  | 985.4  | (923.0, 1047.7)  | 468.9  | (451.3, 485.9)   |
| Female                  | 32.4 | (19.5, 45.4) | 180.6 | (126.0, 235.3) | 349.8 | (287.7, 411.9)  | 407.8  | (343.8, 471.8)   | 652.1  | (578.9, 725.2)   | 1055.1 | (954.9, 1155.3)  | 1111.5 | (1022.1, 1201.0) | 536.6  | (510.8, 562.3)   |
| Male                    | 22.6 | (12.2, 33.0) | 90.3  | (52.5, 128.0)  | 252.0 | (199.3, 304.6)  | 298.0  | (243.3, 352.8)   | 559.2  | (491.5, 626.9)   | 873.0  | (781.1, 964.8)   | 819.1  | (734.6, 903.6)   | 393.7  | (371.5, 415.9)   |
| Montgomery County       | 30.8 | (18.0, 43.7) | 173.7 | (117.7, 229.7) | 386.1 | (318.4, 453.8)  | 593.0  | (511.6, 674.4)   | 750.4  | (673.5, 827.3)   | 1360.4 | (1247.0, 1473.9) | 1207.3 | (1117.3, 1297.4) | 652.5  | (623.9, 681.1)   |
| Female                  | 20.8 | (5.4, 36.3)  | 215.4 | (123.3, 307.5) | 491.8 | (385.3, 598.2)  | 704.1  | (576.0, 832.2)   | 808.9  | (696.5, 921.3)   | 1579.7 | (1404.5, 1755.0) | 1317.8 | (1192.2, 1443.3) | 758.4  | (714.8, 802.1)   |
| Male                    | 39.8 | (19.6, 59.9) | 103.9 | (45.1, 162.7)  | 267.5 | (186.6, 348.4)  | 463.0  | (363.4, 562.7)   | 645.3  | (544.0, 746.6)   | 1123.6 | (1080.9, 1220.5) | 1053.9 | (926.8, 1181.0)  | 527.0  | (490.6, 563.4)   |
| New Madrid County       | 30.1 | (20.0, 40.3) | 197.0 | (152.4, 241.6) | 529.5 | (468.3, 590.8)  | 743.1  | (673.3, 812.8)   | 971.5  | (899.0, 1044.0)  | 1661.6 | (1560.9, 1762.3) | 1577.7 | (1488.4, 1666.9) | 795.3  | (769.9, 820.7)   |
| Female                  | 16.3 | (9.7, 27.0)  | 247.7 | (176.9, 318.5) | 560.9 | (474.0, 647.8)  | 817.6  | (714.4, 920.9)   | 1119.8 | (1012.2, 1227.4) | 1703.4 | (1561.9, 1844.8) | 1600.5 | (1562.5, 1718.4) | 868.0  | (831.2, 904.8)   |
| Male                    | 38.2 | (22.2, 54.1) | 130.9 | (79.6, 182.2)  | 423.3 | (351.9, 512.8)  | 541.1  | (456.7, 625.5)   | 741.0  | (649.3, 832.6)   | 1474.4 | (1337.5, 1611.2) | 1367.8 | (1239.5, 1496.0) | 636.8  | (604.0, 669.6)   |
| Newton County           | 34.4 | (28.4, 40.4) | 175.7 | (152.7, 196.8) | 444.5 | (412.0, 477.0)  | 634.0  | (597.2, 670.8)   | 788.6  | (750.8, 826.4)   | 1489.9 | (1433.7, 1546.2) | 1545.0 | (1493.2, 1598.6) | 688.2  | (674.7, 701.7)   |
| Female                  | 37.1 | (28.1, 46.2) | 222.9 | (186.1, 259.7) | 422.8 | (378.1, 467.5)  | 689.5  | (635.4, 743.7)   | 869.1  | (813.4, 924.9)   | 1484.0 | (1404.5, 1563.0) | 1659.8 | (1588.0, 1731.6) | 753.0  | (733.1, 772.9)   |
| Male                    | 29.9 | (22.2, 37.6) | 106.4 | (81.3, 131.6)  | 406.7 | (362.6, 450.8)  | 500.8  | (454.5, 547.2)   | 636.3  | (587.9, 684.6)   | 1386.8 | (1308.9, 1463.8) | 1323.8 | (1251.6, 1395.5) | 569.6  | (552.2, 587.0)   |
| Osage County            | 45.4 | (31.2, 59.7) | 135.9 | (95.7, 176.1)  | 355.0 | (294.9, 415.1)  | 372.5  | (316.2, 428.8)   | 527.4  | (465.5, 589.3)   | 1144.2 | (1040.0, 1247.7) | 1092.0 | (1002.1, 1181.8) | 490.3  | (467.0, 513.6)   |
| Female                  | 33.6 | (16.0, 51.2) | 187.4 | (110.8, 263.9) | 531.1 | (423.7, 638.4)  | 610.9  | (507.8, 713.9)   | 524.9  | (434.3, 615.5)   | 1252.3 | (1096.3, 1410.1) | 1098.9 | (977.3, 1220.4)  | 573.1  | (536.7, 609.4)   |
| Male                    | 56.7 | (34.4, 78.9) | 99.5  | (55.9, 143.1)  | 199.5 | (137.7, 261.3)  | 126.1  | (80.2, 172.0)    | 508.4  | (425.3, 591.4)   | 1026.7 | (891.3, 1162.1)  | 1062.1 | (929.9, 1194.3)  | 402.8  | (373.5, 432.1)   |
| Pemiscot County         | 34.2 | (24.0, 44.4) | 213.7 | (168.5, 258.8) | 697.3 | (625.7, 769.0)  | 1097.0 | (1008.3, 1185.7) | 1447.3 | (1353.9, 1540.6) | 2419.1 | (2288.4, 2549.8) | 1489.9 | (1444.0, 1843.5) | 982.5  | (953.8, 1011.2)  |
| Female                  | 38.8 | (23.3, 54.3) | 257.1 | (188.6, 325.7) | 761.7 | (659.9, 863.6)  | 1310.5 | (1175.9, 1445.2) | 1583.7 | (1448.2, 1719.2) | 2546.1 | (2360.8, 2731.4) | 1789.6 | (1657.6, 1921.6) | 1088.8 | (1047.0, 1130.5) |
| Male                    | 28.2 | (15.1, 41.2) | 155.8 | (100.1, 211.6) | 613.1 | (510.4, 712.3)  | 840.3  | (728.5, 952.1)   | 1289.8 | (1162.6, 1417.0) | 2233.4 | (2054.1, 2415.3) | 1664.6 | (1513.1, 1816.0) | 851.0  | (812.2, 889.7)   |
| Perry County            | 48.7 | (36.2, 61.3) | 260.2 | (208.1, 312.2) | 374.7 | (324.4, 425.0)  | 560.6  | (500.4, 620.8)   | 656.0  | (501.9, 621.0)   | 1160.1 | (1073.0, 1247.3) | 1082.4 | (1007.5, 1157.4) | 542.7  | (521.8, 563.7)   |
| Female                  | 27.8 | (14.2, 41.4) | 234.3 | (162.6, 306.0) | 477.4 | (396.0, 558.8)  | 583.2  | (495.5, 670.9)   | 632.5  | (548.7, 716.3)   | 1349.4 | (1215.9, 1482.8) | 1119.4 | (1018.3, 1220.5) | 606.6  | (573.5, 637.9)   |
| Pettis County           | 34.5 | (27.5, 41.5) | 217.2 | (183.8, 246.2) | 501.2 | (463.2, 539.2)  | 564.0  | (522.2, 605.9)   | 743.5  | (703.3, 786.7)   | 1279.3 | (1219.3, 1445.6) | 1285.8 | (1229.4, 1342.3) | 613.4  | (598.4, 628.3)   |
| Female                  | 40.6 | (29.8, 51.5) | 211.4 | (171.1, 251.6) | 461.5 | (409.6, 513.4)  | 532.9  | (475.2, 590.6)   | 606.4  | (551.0, 661.7)   | 1198.2 | (1111.1, 1285.3) | 1216.0 | (1143.7, 1288.4) | 571.5  | (551.2, 591.7)   |
| Male                    | 16.1 | (9.4, 22.8)  | 111.6 | (82.1, 141.1)  | 253.0 | (215.0, 290.9)  | 286.2  | (244.1, 328.2)   | 533.9  | (482.3, 585.4)   | 974.5  | (895.4, 1053.6)  | 908.1  | (806.7, 980.9)   | 389.3  | (372.3, 406.2)   |
| Polk County             | 21.4 | (14.8, 27.9) | 85.3  | (66.2, 104.3)  | 333.5 | (294.3, 372.7)  | 457.3  | (412.9, 501.6)   | 614.7  | (568.3, 661.1)   | 1117.9 | (1048.3, 1187.5) | 912.2  | (859.4, 965.1)   | 464.4  | (449.3, 479.5)   |
| Female                  | 21.9 | (12.3, 31.4) | 83.8  | (56.8, 110.7)  | 404.8 | (343.9, 465.6)  | 592.1  | (521.5, 667.2)   | 662.4  | (594.6, 730.3)   | 1249.6 | (1174.7, 1351.6) | 1216.0 | (1143.7, 1288.4) | 571.5  | (551.2, 591.7)   |
| Male                    | 18.0 | (9.7, 26.3)  | 86.8  | (59.9, 113.7)  | 244.3 | (196.6, 291.9)  | 300.3  | (248.9, 351.7)   | 547.8  | (485.6, 610.0)   | 962.9  | (869.6, 1062.5)  | 793.6  | (719.8, 867.4)   | 375.2  | (355.9, 394.6)   |
| Reynolds County         | 52.2 | (29.3, 75.1) | 204.2 | (118.9, 289.5) | 666.7 | (536.6, 796.7)  | 730.0  | (612.4, 847.6)   | 921.0  | (803.5, 1038.5)  | 1270.0 | (1126.6, 1413.5) | 1304.5 | (1182.4, 1426.7) | 756.3  | (714.6, 797.9)   |
| Female                  | 52.0 | (28.0, 86.0) | 270.5 | (128.8, 412.2) | 866.9 | (668.3, 1070.0) | 574.3  | (423.2, 723.4)   | 776.0  | (621.6, 930.4)   | 1164.9 | (968.1, 1360.7)  | 1477.0 | (1296.4, 1653.7) | 780.0  | (719.6, 840.4)   |
| Male                    | 47.6 | (18.1, 77.1) | 142.9 | (93.4, 249.1)  | 395.8 | (249.2, 342.4)  | 811.6  | (638.0, 985.2)   | 899.0  | (736.3, 1061.3)  | 1305.6 | (1101.4, 1509.8) | 1106.6 | (944.5, 1268.8)  | 684.2  | (628.7, 739.7)   |
| Saline County           | 37.8 | (27.4, 48.2) | 147.5 | (117.8, 176.3) | 451.1 | (400.8, 504.1)  | 871.8  | (793.2, 854.1)   | 1547.2 | (1456.9, 1637.6) | 1520.2 | (1501.0, 1663.1) | 1705.3 | (1708.7, 1875.2) | 573.7  | (562.1, 611.3)   |
| Female                  | 19.8 | (9.0, 30.6)  | 140.6 | (99.0, 182.1)  | 456.7 | (385.3, 528.2)  | 626.3  | (541.0, 711.6)   | 607.0  | (531.2, 682.9)   | 1094.2 | (989.5, 1202.5)  | 1242.4 | (1131.0, 1317.5) | 583.7  | (562.1, 611.3)   |
| Male                    |      |              |       |                |       |                 |        |                  |        |                  |        |                  |        |                  |        |                  |