

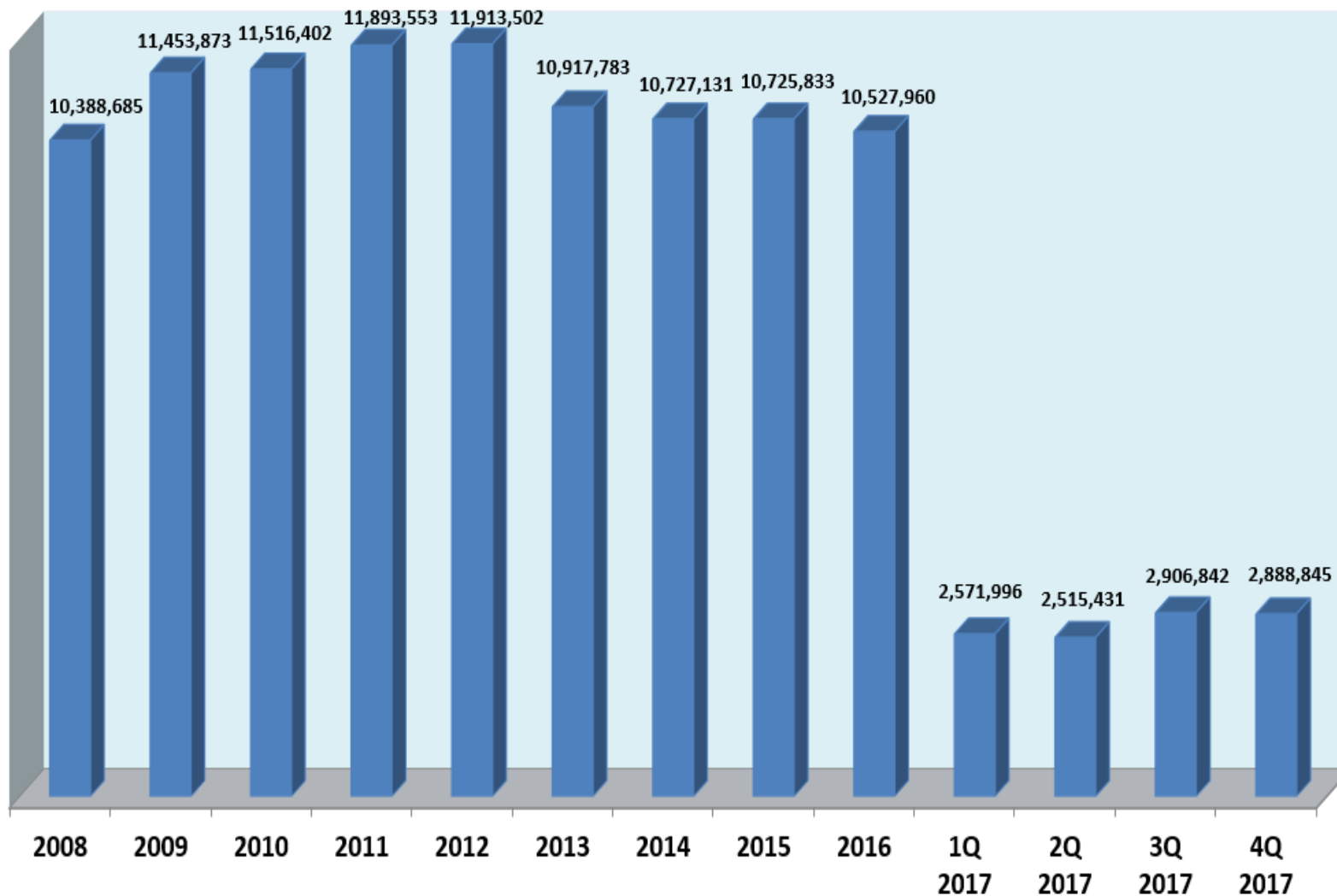
# Kentucky All Schedule Prescription Electronic Reporting

## Quarterly Trend Report 4th Quarter 2017

Cabinet for Health and Family Services  
Office of Inspector General  
275 E. Main Street  
Frankfort, KY 40621

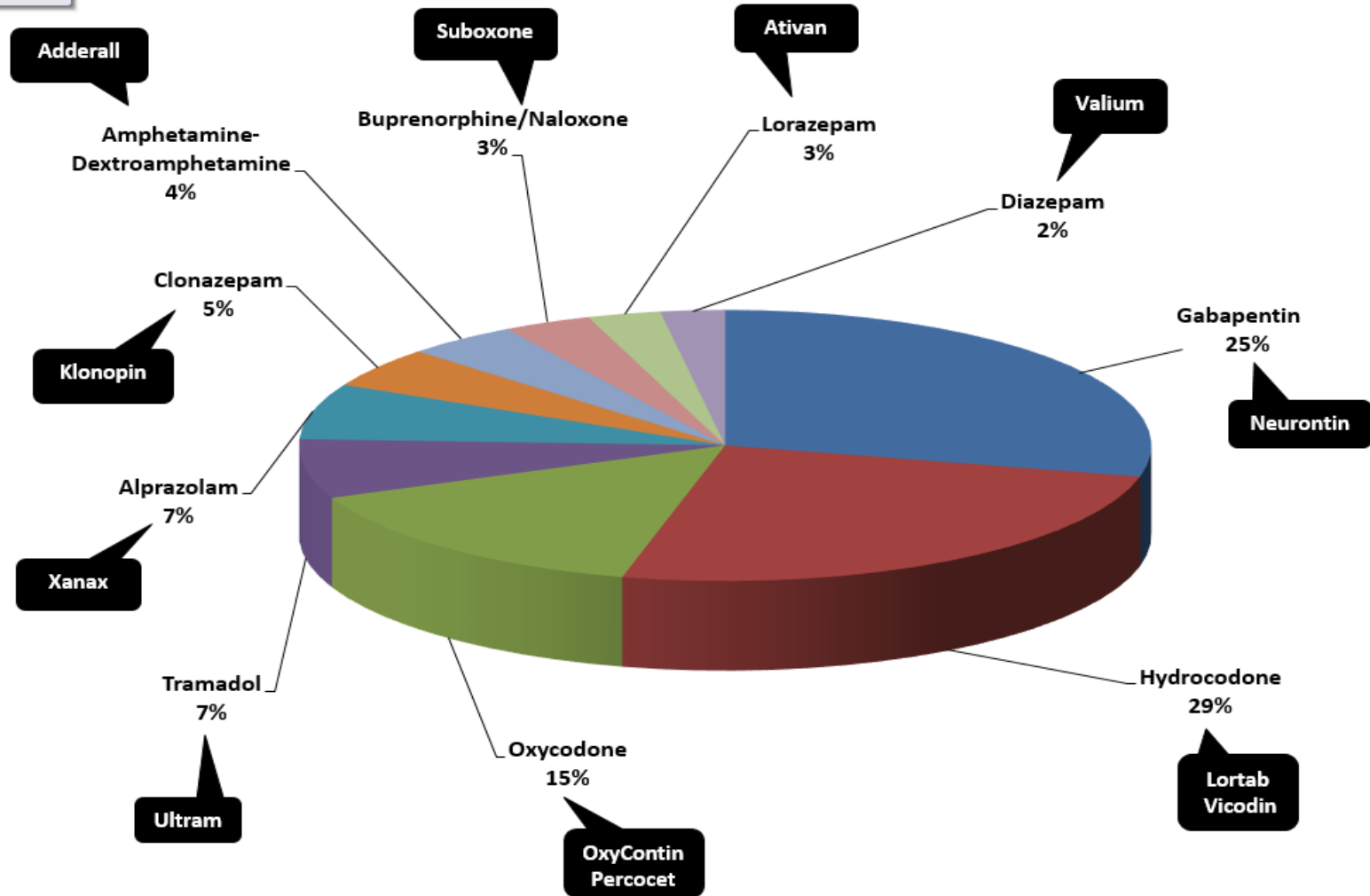


# KASPER Records Added 2008 – Q4 2017



# Top Prescribed Controlled Substances by Therapeutic Category by Doses – Q4 2017

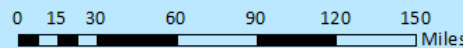
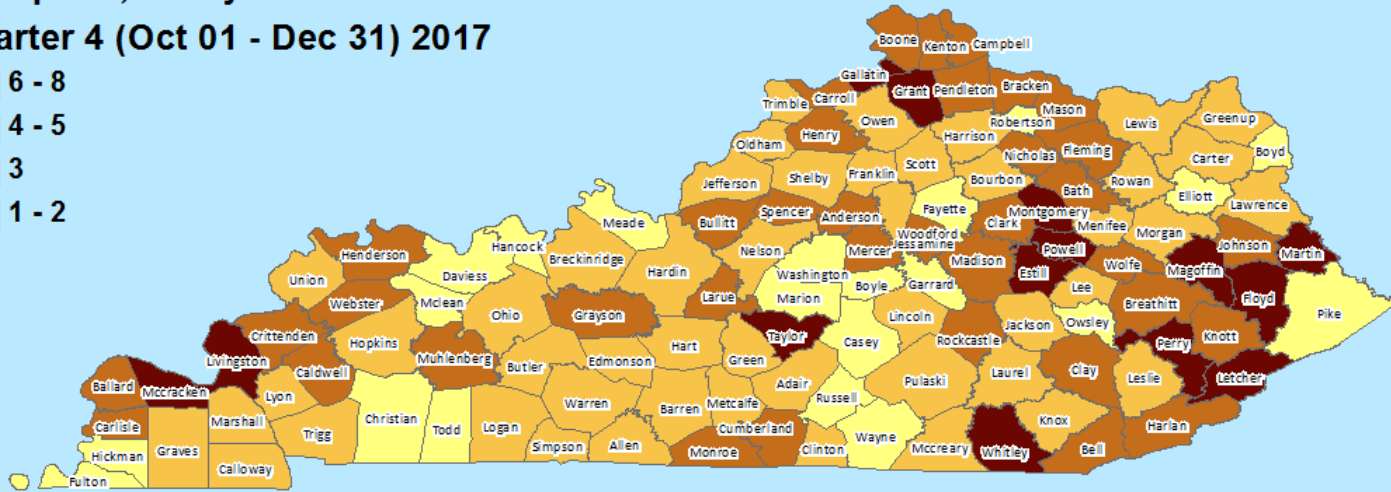
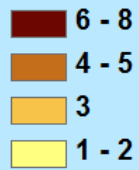
Chart Area



# Opioid Morphine Equivalent Dose (MED) Data Q4 2017

## Rate of Patients Receiving Daily MED $\geq 100$ per 1,000 Residents by Patient Address Patient Ages 18 - 65 (Data Excludes Buprenorphine/Naloxone)

Rate per 1,000 by Patient Address  
Quarter 4 (Oct 01 - Dec 31) 2017



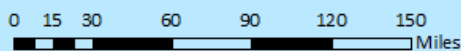
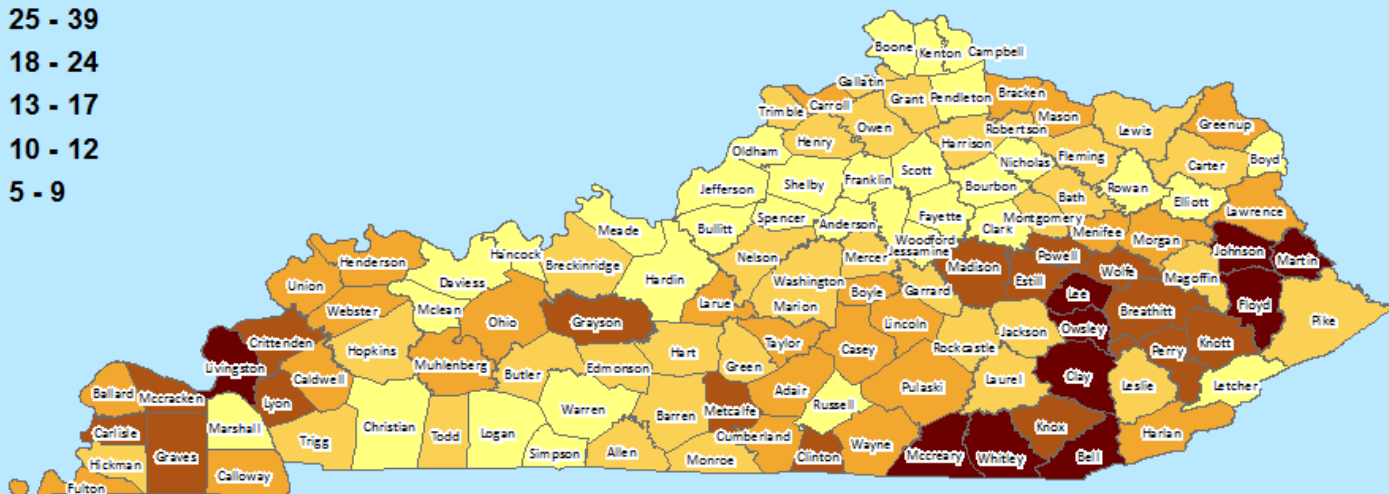
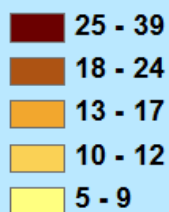
# Opioid Morphine Equivalent Dose (MED) Data Q4 2017

Rate of Patients Receiving Daily Morphine Equivalent Dosage $\geq$ 100 per 1,000 Residents for Quarter 4, 2017 Patient Ages 18 - 65 (Data Excludes Buprenorphine/Naloxone)							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	3	EDMONSON	3	KNOX	3	NICHOLAS	4
ALLEN	3	ELLIOTT	2	LARUE	4	OHIO	3
ANDERSON	4	ESTILL	5	LAUREL	3	OLDHAM	2
BALLARD	4	FAYETTE	2	LAWRENCE	3	OWEN	2
BARREN	3	FLEMING	4	LEE	3	OWSLEY	2
BATH	4	FLOYD	6	LESLIE	3	PENDLETON	4
BELL	4	FRANKLIN	3	LETCHER	6	PERRY	6
BOONE	4	FULTON	2	LEWIS	3	PIKE	2
BOURBON	3	GALLATIN	6	LINCOLN	3	POWELL	7
BOYD	1	GARRARD	2	LIVINGSTON	6	PULASKI	3
BOYLE	2	GRANT	5	LOGAN	3	ROBERTSON	1
BRACKEN	5	GRAVES	3	LYON	3	ROCKCASTLE	5
BREATHITT	4	GRAYSON	4	MADISON	4	ROWAN	3
BRECKINRIDGE	3	GREEN	3	MAGOFFIN	8	RUSSELL	1
BULLITT	4	GREENUP	3	MARION	2	SCOTT	3
BUTLER	3	HANCOCK	2	MARSHALL	3	SHELBY	3
CALDWELL	4	HARDIN	3	MARTIN	5	SIMPSON	3
CALLOWAY	3	HARLAN	4	MASON	4	SPENCER	5
CAMPBELL	4	HARRISON	3	MCCRACKEN	5	TAYLOR	6
CARLISLE	4	HART	2	MCCREARY	3	TODD	2
CARROLL	4	HENDERSON	4	MCLEAN	2	TRIGG	3
CARTER	3	HENRY	5	MEADE	2	TRIMBLE	3
CASEY	2	HICKMAN	2	MENIFEE	3	UNION	3
CHRISTIAN	2	HOPKINS	3	MERCER	4	WARREN	3
CLARK	4	JACKSON	3	METCALFE	3	WASHINGTON	2
CLAY	4	JEFFERSON	3	MONROE	4	WAYNE	2
CLINTON	3	JESSAMINE	4	MONTGOMERY	5	WEBSTER	4
CRITTENDEN	4	JOHNSON	4	MORGAN	2	WHITLEY	6
CUMBERLAND	4	KENTON	4	MUHLENBERG	4	WOLFE	4
DAVISS	2	KNOTT	4	NELSON	3	WOODFORD	3

# Patients with Seven or More Days of Overlapping Opioid and Benzodiazepine Prescriptions Q4 2017

## Opioid and Benzodiazepine 7-Day Overlap by Patient Address

Rate per 1,000 of 7-Day Overlap by Patient Address  
Quarter 4 (Oct 01 - Dec 31) 2017



# Patients with Seven or More Days of Overlapping Opioid and Benzodiazepine Prescriptions Q4 2017

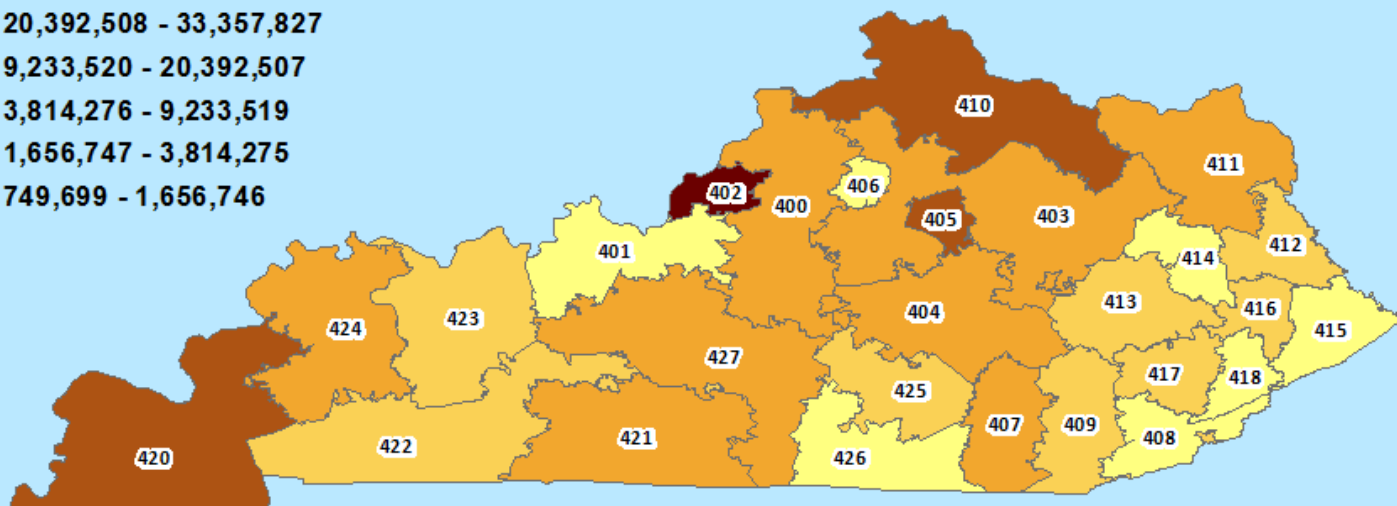
Rate of Patients With at Least a 7-Day Overlap of Opioids and Benzodiazepines per 1,000 for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	16	EDMONSON	12	KNOX	21	NICHOLAS	8
ALLEN	10	ELLIOTT	8	LARUE	16	OHIO	13
ANDERSON	8	ESTILL	21	LAUREL	11	OLDHAM	5
BALLARD	17	FAYETTE	5	LAWRENCE	17	OWEN	9
BARREN	12	FLEMING	12	LEE	26	OWSLEY	26
BATH	9	FLOYD	30	LESLIE	10	PENDLETON	8
BELL	39	FRANKLIN	7	LETCHER	8	PERRY	24
BOONE	8	FULTON	17	LEWIS	12	PIKE	10
BOURBON	8	GALLATIN	11	LINCOLN	14	POWELL	22
BOYD	6	GARRARD	10	LIVINGSTON	29	PULASKI	13
BOYLE	13	GRANT	9	LOGAN	8	ROBERTSON	10
BRACKEN	15	GRAVES	18	LYON	19	ROCKCASTLE	10
BREATHITT	22	GRAYSON	19	MADISON	19	ROWAN	7
BRECKINRIDGE	9	GREEN	11	MAGOFFIN	12	RUSSELL	5
BULLITT	8	GREENUP	13	MARION	11	SCOTT	6
BUTLER	9	HANCOCK	6	MARSHALL	6	SHELBY	7
CALDWELL	17	HARDIN	7	MARTIN	28	SIMPSON	7
CALLOWAY	16	HARLAN	17	MASON	13	SPENCER	9
CAMPBELL	8	HARRISON	10	MCCRACKEN	22	TAYLOR	15
CARLISLE	21	HART	9	MCCREARY	26	TODD	9
CARROLL	13	HENDERSON	15	MCLEAN	8	TRIGG	12
CARTER	9	HENRY	10	MEADE	5	TRIMBLE	9
CASEY	14	HICKMAN	9	MENIFEE	13	UNION	15
CHRISTIAN	7	HOPKINS	12	MERCER	10	WARREN	6
CLARK	8	JACKSON	9	METCALFE	19	WASHINGTON	9
CLAY	27	JEFFERSON	8	MONROE	11	WAYNE	17
CLINTON	24	JESSAMINE	6	MONTGOMERY	12	WEBSTER	14
CRITTENDEN	21	JOHNSON	30	MORGAN	14	WHITLEY	27
CUMBERLAND	16	KENTON	7	MUHLENBERG	16	WOLFE	23
DAVISS	6	KNOTT	22	NELSON	9	WOODFORD	6

# Controlled Substance Prescribing Q4 2017

## All Controlled Substances Doses by Prescriber Address

### Kentucky Three Digit Zip Code Areas

Number of Doses for Qtr 4 (Oct 01 - Dec 31) 2017



0 15 30 60 90 120 150 Miles





# Controlled Substance Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of all Controlled Substances for Quarter 4, 2017
400	5,141,267
401	1,626,715
402	33,357,827
403	8,294,403
404	6,062,817
405	20,392,507
406	1,656,746
407	4,750,650
408	1,010,083
409	3,655,097
410	14,130,686
411	4,790,823
412	2,493,565
413	2,284,342
414	749,699
415	1,332,220
416	2,877,921
417	3,814,275
418	818,963
420	11,417,119
421	9,233,519
422	2,798,186
423	2,891,814
424	5,598,175
425	2,538,434
426	1,548,809
427	6,389,856
<b>Totals</b>	<b>161,656,518</b>



# Controlled Substance Usage

## Q4 2017

Actual Number of All Controlled Substances Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	772,112	EDMONSON	440,451	KNOX	1,821,376	NICHOLAS	357,638
ALLEN	787,430	ELLIOTT	212,559	LARUE	645,073	OHIO	1,102,457
ANDERSON	843,169	ESTILL	1,041,744	LAUREL	2,502,177	OLDHAM	1,626,146
BALLARD	323,633	FAYETTE	7,909,027	LAWRENCE	802,721	OWEN	342,544
BARREN	1,658,614	FLEMING	535,202	LEE	548,452	OWSLEY	456,460
BATH	575,997	FLOYD	3,140,774	LESLIE	596,492	PENDLETON	511,932
BELL	2,089,087	FRANKLIN	1,784,418	LETCHER	1,434,926	PERRY	2,409,165
BOONE	3,693,986	FULTON	307,309	LEWIS	624,781	PIKE	2,720,148
BOURBON	832,610	GALLATIN	298,981	LINCOLN	1,063,834	POWELL	940,864
BOYD	1,223,270	GARRARD	609,552	LIVINGSTON	601,420	PULASKI	2,755,750
BOYLE	1,165,646	GRANT	786,283	LOGAN	1,062,590	ROBERTSON	91,421
BRACKEN	352,727	GRAVES	1,885,825	LYON	444,676	ROCKCASTLE	758,391
BREATHITT	905,411	GRAYSON	1,594,225	MADISON	3,192,510	ROWAN	808,643
BRECKINRIDGE	696,861	GREEN	420,876	MAGOFFIN	934,367	RUSSELL	250,173
BULLITT	2,630,622	GREENUP	2,003,321	MARION	816,954	SCOTT	1,707,322
BUTLER	552,980	HANCOCK	268,842	MARSHALL	1,704,697	SHELBY	1,524,172
CALDWELL	666,261	HARDIN	3,618,846	MARTIN	771,214	SIMPSON	566,445
CALLOWAY	1,501,743	HARLAN	1,630,044	MASON	592,001	SPENCER	705,673
CAMPBELL	2,791,390	HARRISON	762,225	MCCRACKEN	3,384,520	TAYLOR	1,120,282
CARLISLE	255,100	HART	655,597	MCCREARY	832,763	TODD	435,026
CARROLL	540,649	HENDERSON	2,399,880	MCLEAN	450,429	TRIGG	610,807
CARTER	975,494	HENRY	677,527	MEADE	713,431	TRIMBLE	285,336
CASEY	621,931	HICKMAN	147,812	MENIFEE	318,824	UNION	751,587
CHRISTIAN	1,923,546	HOPKINS	2,309,738	MERCER	922,344	WARREN	3,867,470
CLARK	1,559,236	JACKSON	696,813	METCALFE	495,275	WASHINGTON	413,932
CLAY	1,698,925	JEFFERSON	25,640,412	MONROE	494,794	WAYNE	929,048
CLINTON	564,658	JESSAMINE	1,848,727	MONTGOMERY	1,347,917	WEBSTER	786,182
CRITTENDEN	550,847	JOHNSON	1,512,252	MORGAN	626,454	WHITLEY	2,736,717
CUMBERLAND	354,479	KENTON	4,340,108	MUHLENBERG	1,834,151	WOLFE	445,383
DAVISS	2,390,685	KNOTT	1,155,181	NELSON	1,756,304	WOODFORD	869,437
<b>TOTAL</b>						<b>172,357,668</b>	

# Per 1000 Controlled Substance Usage Q4 2017

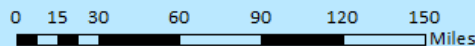
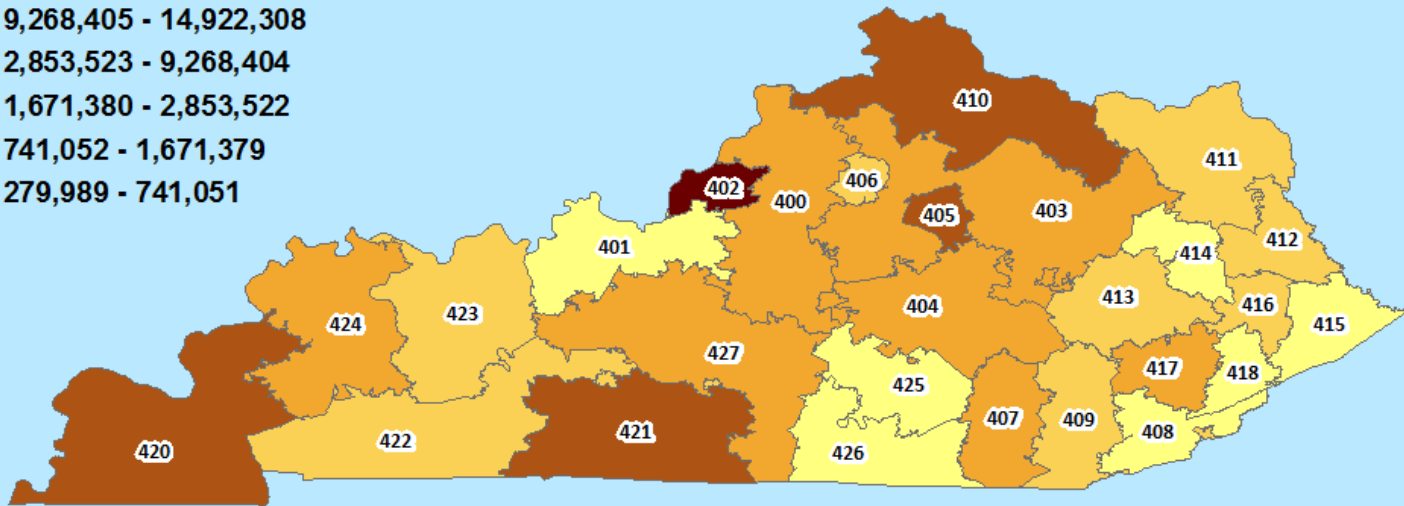
Actual Number of All Controlled Substances Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	40,047	EDMONSON	36,359	KNOX	57,480	NICHOLAS	50,485
ALLEN	38,167	ELLIOTT	28,013	LARUE	45,763	OHIO	45,223
ANDERSON	38,053	ESTILL	72,814	LAUREL	41,530	OLDHAM	24,804
BALLARD	40,183	FAYETTE	24,836	LAWRENCE	50,603	OWEN	32,188
BARREN	37,702	FLEMING	36,893	LEE	83,351	OWSLEY	101,639
BATH	46,726	FLOYD	84,634	LESLIE	56,604	PENDLETON	35,160
BELL	77,040	FRANKLIN	35,293	LETCHER	63,010	PERRY	88,109
BOONE	28,739	FULTON	49,734	LEWIS	46,480	PIKE	44,920
BOURBON	41,568	GALLATIN	34,729	LINCOLN	43,650	POWELL	76,443
BOYD	25,415	GARRARD	35,251	LIVINGSTON	64,885	PULASKI	43,088
BOYLE	38,832	GRANT	31,548	LOGAN	39,958	ROBERTSON	42,423
BRACKEN	41,991	GRAVES	50,719	LYON	55,109	ROCKCASTLE	45,008
BREATHITT	68,158	GRAYSON	60,885	MADISON	51,940	ROWAN	33,072
BRECKINRIDGE	34,911	GREEN	38,054	MAGOFFIN	47,557	RUSSELL	14,117
BULLITT	33,235	GREENUP	55,814	MARION	47,539	SCOTT	31,633
BUTLER	43,050	HANCOCK	30,516	MARSHALL	35,652	SHELBY	32,843
CALDWELL	53,012	HARDIN	33,721	MARTIN	73,665	SIMPSON	31,325
CALLOWAY	39,070	HARLAN	59,999	MASON	42,539	SPENCER	38,616
CAMPBELL	30,272	HARRISON	40,879	MCCRACKEN	54,350	TAYLOR	44,111
CARLISLE	52,544	HART	35,196	MCCREARY	64,257	TODD	35,382
CARROLL	50,627	HENDERSON	51,886	MCLEAN	34,439	TRIGG	42,822
CARTER	36,068	HENRY	42,833	MEADE	25,366	TRIMBLE	33,102
CASEY	39,325	HICKMAN	31,946	MENIFEE	49,754	UNION	50,510
CHRISTIAN	26,586	HOPKINS	50,317	MERCER	42,946	WARREN	30,809
CLARK	43,531	JACKSON	52,125	METCALFE	49,439	WASHINGTON	33,959
CLAY	81,813	JEFFERSON	33,501	MONROE	46,732	WAYNE	45,424
CLINTON	55,484	JESSAMINE	35,310	MONTGOMERY	48,537	WEBSTER	59,040
CRITTENDEN	59,953	JOHNSON	65,813	MORGAN	47,109	WHITLEY	75,818
CUMBERLAND	52,609	KENTON	26,312	MUHLENBERG	59,113	WOLFE	62,213
DAVISS	23,985	KNOTT	74,317	NELSON	38,550	WOODFORD	33,281

# Opioid Prescribing Q4 2017

## All Opioid Controlled Substances Doses by Prescriber Address

### Kentucky Three Digit Zip Code Areas

Number of Opioid Doses for Qtr 4 (Oct 01 - Dec 31) 2017



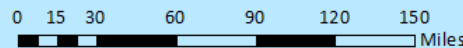
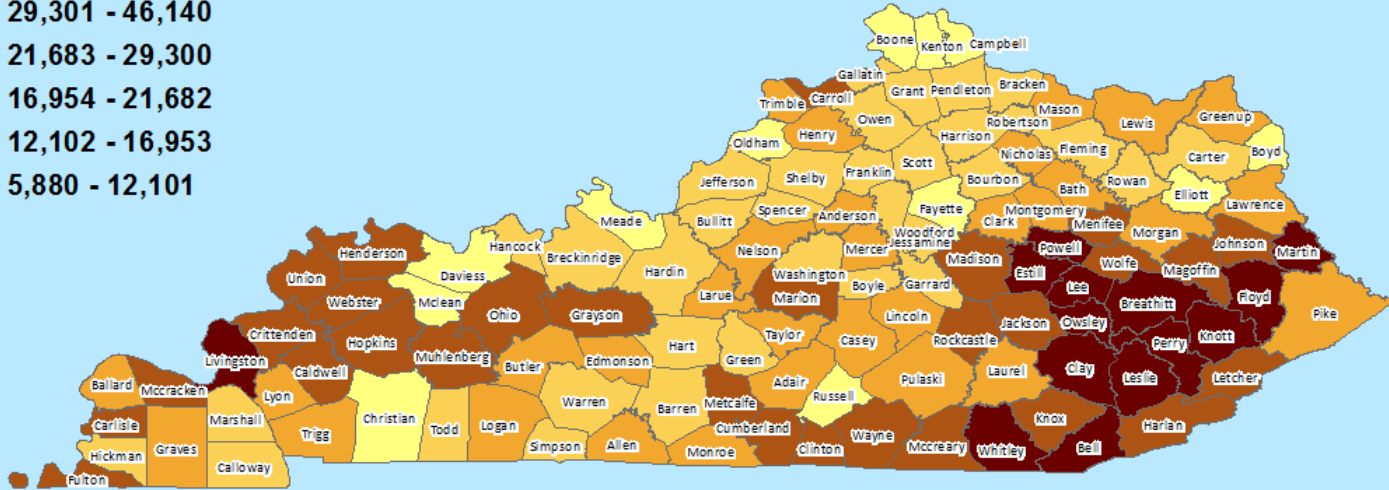
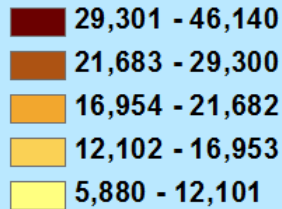
# Opioid Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of All Opioids for Quarter 4, 2017
400	1,969,531
401	499,604
402	14,922,308
403	2,853,522
404	2,738,362
405	9,268,404
406	876,860
407	1,897,047
408	449,448
409	1,541,532
410	5,155,506
411	1,671,379
412	1,012,124
413	1,165,025
414	279,989
415	499,837
416	1,238,821
417	1,837,096
418	333,558
420	5,071,036
421	4,380,277
422	897,889
423	1,247,338
424	2,452,265
425	741,051
426	673,540
427	2,466,769
<b>Totals</b>	<b>68,140,118</b>

# Opioid Usage Q4 2017

## All Opioid Controlled Substance Usage Dosage Rate per 1000 by Patient Address

Doses per 1000 by Patient Address  
Qtr 4 (Oct 01 - Dec 31) 2017



# Opioid Usage

## Q4 2017

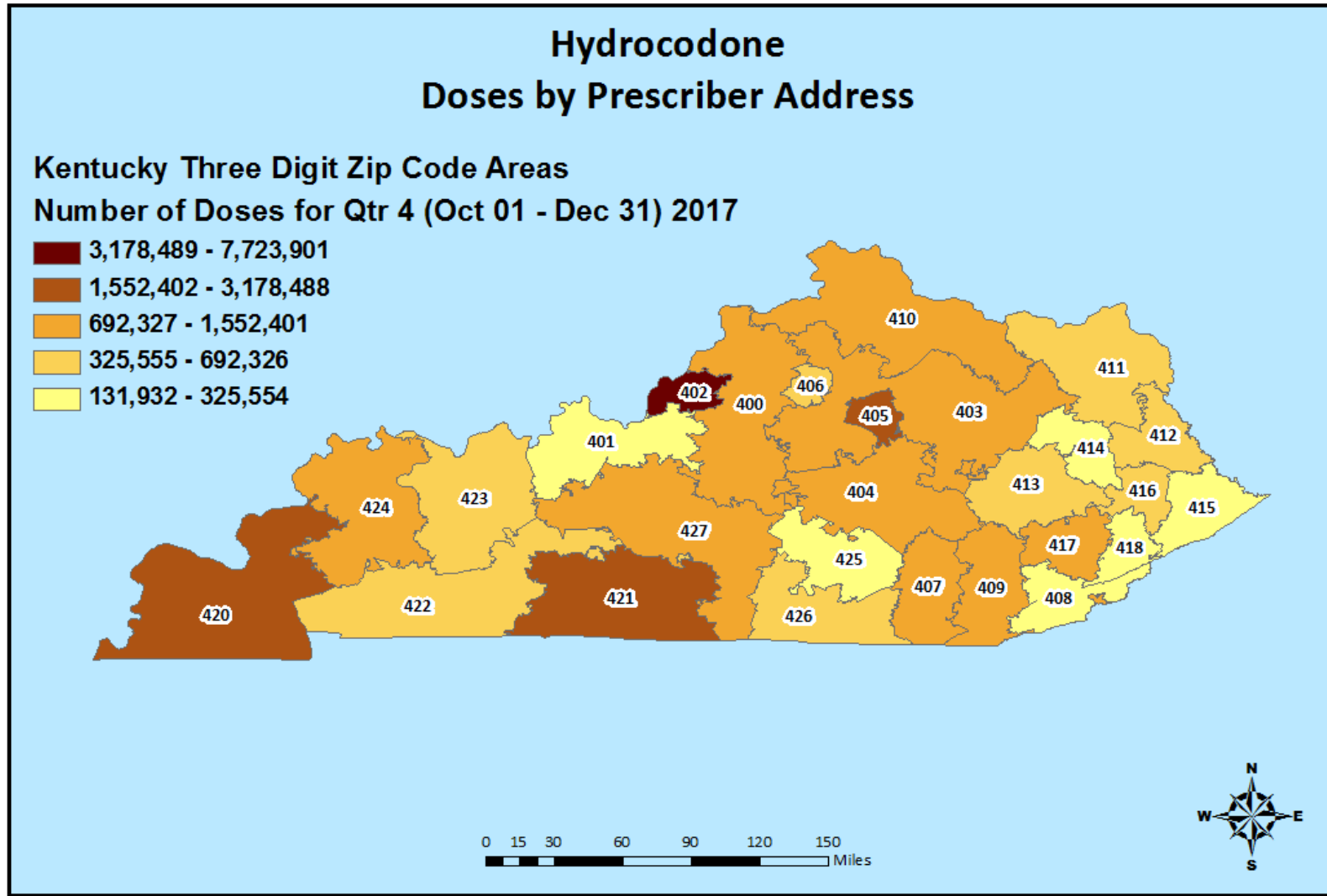
Actual Number of All Opioid Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	342,019	EDMONSON	218,473	KNOX	741,594	NICHOLAS	145,553
ALLEN	394,449	ELLIOTT	90,736	LARUE	269,784	OHIO	540,670
ANDERSON	381,988	ESTILL	453,554	LAUREL	1,091,439	OLDHAM	586,202
BALLARD	154,509	FAYETTE	2,818,949	LAWRENCE	330,948	OWEN	150,766
BARREN	705,404	FLEMING	206,812	LEE	240,372	OWSLEY	207,214
BATH	246,725	FLOYD	1,457,824	LESLIE	322,917	PENDLETON	216,606
BELL	955,888	FRANKLIN	748,954	LETCHER	638,218	PERRY	1,102,566
BOONE	1,411,963	FULTON	139,634	LEWIS	244,929	PIKE	1,217,011
BOURBON	316,750	GALLATIN	142,900	LINCOLN	491,880	POWELL	429,184
BOYD	439,676	GARRARD	270,671	LIVINGSTON	291,270	PULASKI	1,126,632
BOYLE	472,407	GRANT	367,353	LOGAN	478,530	ROBERTSON	31,622
BRACKEN	134,574	GRAVES	789,438	LYON	173,585	ROCKCASTLE	411,670
BREATHITT	422,827	GRAYSON	720,065	MADISON	1,371,807	ROWAN	339,875
BRECKINRIDGE	318,420	GREEN	179,831	MAGOFFIN	418,015	RUSSELL	104,197
BULLITT	1,211,517	GREENUP	734,316	MARION	363,710	SCOTT	680,697
BUTLER	256,696	HANCOCK	119,597	MARSHALL	750,720	SHELBY	629,659
CALDWELL	278,244	HARDIN	1,554,913	MARTIN	291,700	SIMPSON	254,730
CALLOWAY	616,412	HARLAN	784,457	MASON	177,375	SPENCER	309,808
CAMPBELL	1,115,856	HARRISON	290,794	MCCRACKEN	1,468,925	TAYLOR	487,627
CARLISLE	112,609	HART	291,628	MCCREARY	402,433	TODD	192,004
CARROLL	247,691	HENDERSON	1,042,878	MCLEAN	218,246	TRIGG	265,218
CARTER	387,278	HENRY	300,211	MEADE	316,606	TRIMBLE	148,063
CASEY	272,381	HICKMAN	65,688	MENIFEE	147,517	UNION	359,161
CHRISTIAN	801,055	HOPKINS	1,085,387	MERCER	381,343	WARREN	1,681,598
CLARK	662,836	JACKSON	295,781	METCALFE	222,361	WASHINGTON	171,793
CLAY	809,674	JEFFERSON	10,795,517	MONROE	220,886	WAYNE	452,785
CLINTON	275,451	JESSAMINE	739,619	MONTGOMERY	580,157	WEBSTER	377,984
CRITTENDEN	267,040	JOHNSON	661,299	MORGAN	288,322	WHITLEY	1,156,206
CUMBERLAND	173,083	KENTON	1,665,389	MUHLENBERG	901,555	WOLFE	209,758
DAVISS	1,016,159	KNOTT	532,275	NELSON	787,301	WOODFORD	337,405
<b>TOTAL</b>						<b>73,715,233</b>	



# Per 1000 Opioid Usage Q4 2017

Actual Number of All Opioid Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	17,740	EDMONSON	18,035	KNOX	23,404	NICHOLAS	20,547
ALLEN	19,119	ELLIOTT	11,958	LARUE	19,139	OHIO	22,179
ANDERSON	17,239	ESTILL	31,702	LAUREL	18,115	OLDHAM	8,941
BALLARD	19,184	FAYETTE	8,852	LAWRENCE	20,863	OWEN	14,167
BARREN	16,034	FLEMING	14,256	LEE	36,531	OWSLEY	46,140
BATH	20,015	FLOYD	39,284	LESLIE	30,643	PENDLETON	14,877
BELL	35,251	FRANKLIN	14,813	LETCHER	28,025	PERRY	40,324
BOONE	10,985	FULTON	22,598	LEWIS	18,221	PIKE	20,098
BOURBON	15,814	GALLATIN	16,599	LINCOLN	20,182	POWELL	34,870
BOYD	9,135	GARRARD	15,653	LIVINGSTON	31,424	PULASKI	17,616
BOYLE	15,737	GRANT	14,740	LOGAN	17,995	ROBERTSON	14,674
BRACKEN	16,021	GRAVES	21,232	LYON	21,513	ROCKCASTLE	24,431
BREATHITT	31,830	GRAYSON	27,500	MADISON	22,543	ROWAN	13,900
BRECKINRIDGE	15,952	GREEN	16,260	MAGOFFIN	22,982	RUSSELL	5,880
BULLITT	15,306	GREENUP	20,458	MARION	23,034	SCOTT	12,612
BUTLER	19,984	HANCOCK	13,575	MARSHALL	15,319	SHELBY	13,568
CALDWELL	22,139	HARDIN	14,489	MARTIN	32,956	SIMPSON	14,087
CALLOWAY	16,037	HARLAN	28,874	MASON	18,938	SPENCER	16,953
CAMPBELL	12,101	HARRISON	15,596	MCCRACKEN	23,935	TAYLOR	19,200
CARLISLE	23,194	HART	15,656	MCCREARY	24,304	TODD	15,616
CARROLL	23,194	HENDERSON	22,547	MCLEAN	10,318	TRIGG	18,594
CARTER	14,319	HENRY	18,979	MEADE	11,257	TRIMBLE	17,177
CASEY	17,223	HICKMAN	14,197	MENIFEE	23,021	UNION	24,137
CHRISTIAN	11,072	HOPKINS	23,645	MERCER	17,756	WARREN	13,396
CLARK	18,505	JACKSON	22,126	METCALFE	22,196	WASHINGTON	14,094
CLAY	38,990	JEFFERSON	14,105	MONROE	20,862	WAYNE	22,138
CLINTON	27,066	JESSAMINE	14,126	MONTGOMERY	20,891	WEBSTER	28,386
CRITTENDEN	29,064	JOHNSON	28,780	MORGAN	21,682	WHITLEY	32,031
CUMBERLAND	25,688	KENTON	10,097	MUHLENBERG	29,056	WOLFE	29,300
DAVISS	10,195	KNOTT	34,243	NELSON	17,281	WOODFORD	12,916

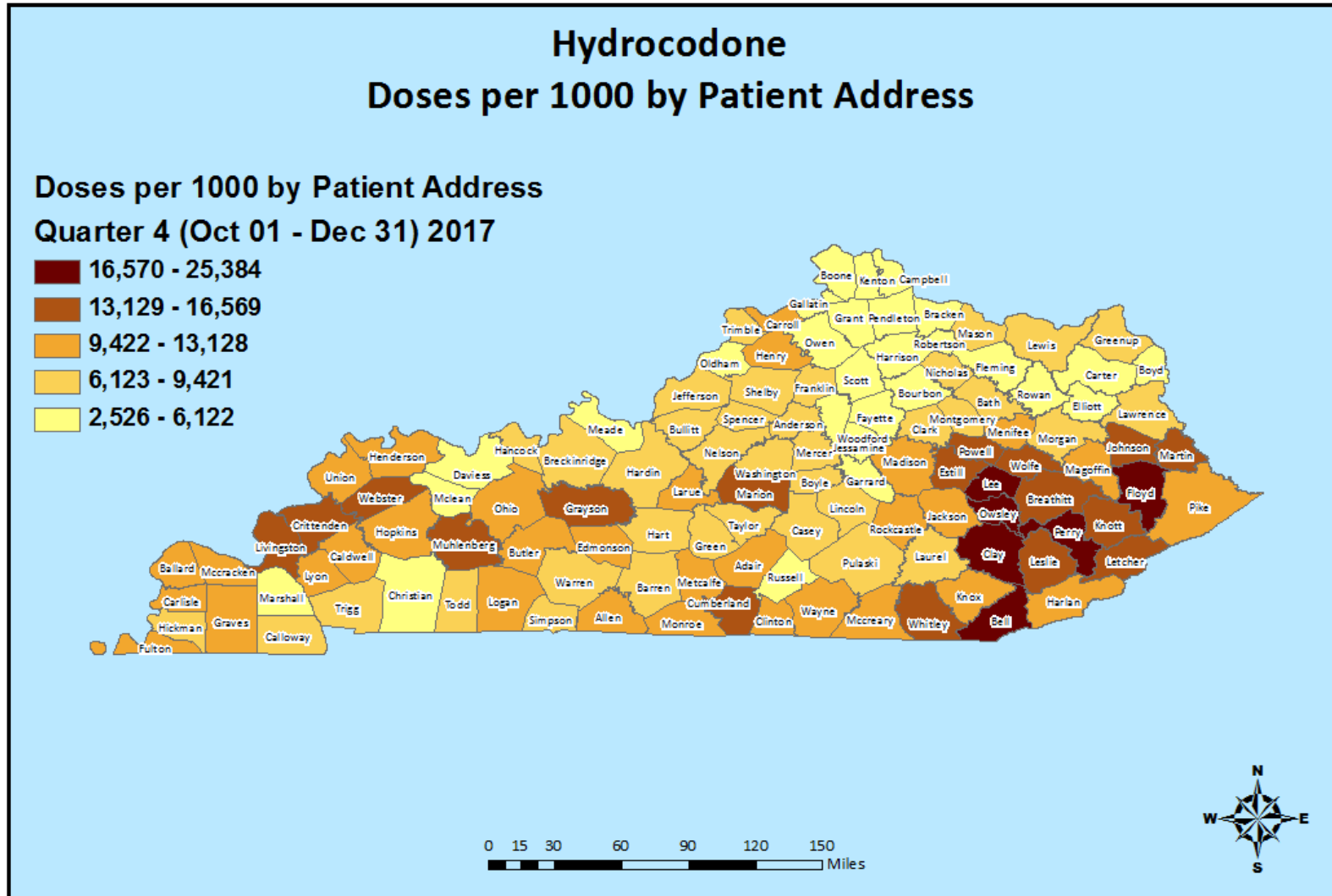
# Hydrocodone Prescribing Q4 2017



# Hydrocodone Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of all Hydrocodone Doses for Quarter 4, 2017
400	1,032,677
401	224,578
402	7,723,901
403	1,139,607
404	1,316,864
405	3,178,488
406	512,231
407	988,717
408	226,123
409	970,856
410	1,552,401
411	647,426
412	457,249
413	542,288
414	135,120
415	224,043
416	692,326
417	1,157,405
418	131,932
420	2,752,759
421	2,514,300
422	528,348
423	675,994
424	1,400,266
425	325,554
426	400,412
427	1,257,059
<b>Totals</b>	<b>32,708,924</b>

# Hydrocodone Usage Q4 2017



# Hydrocodone Usage

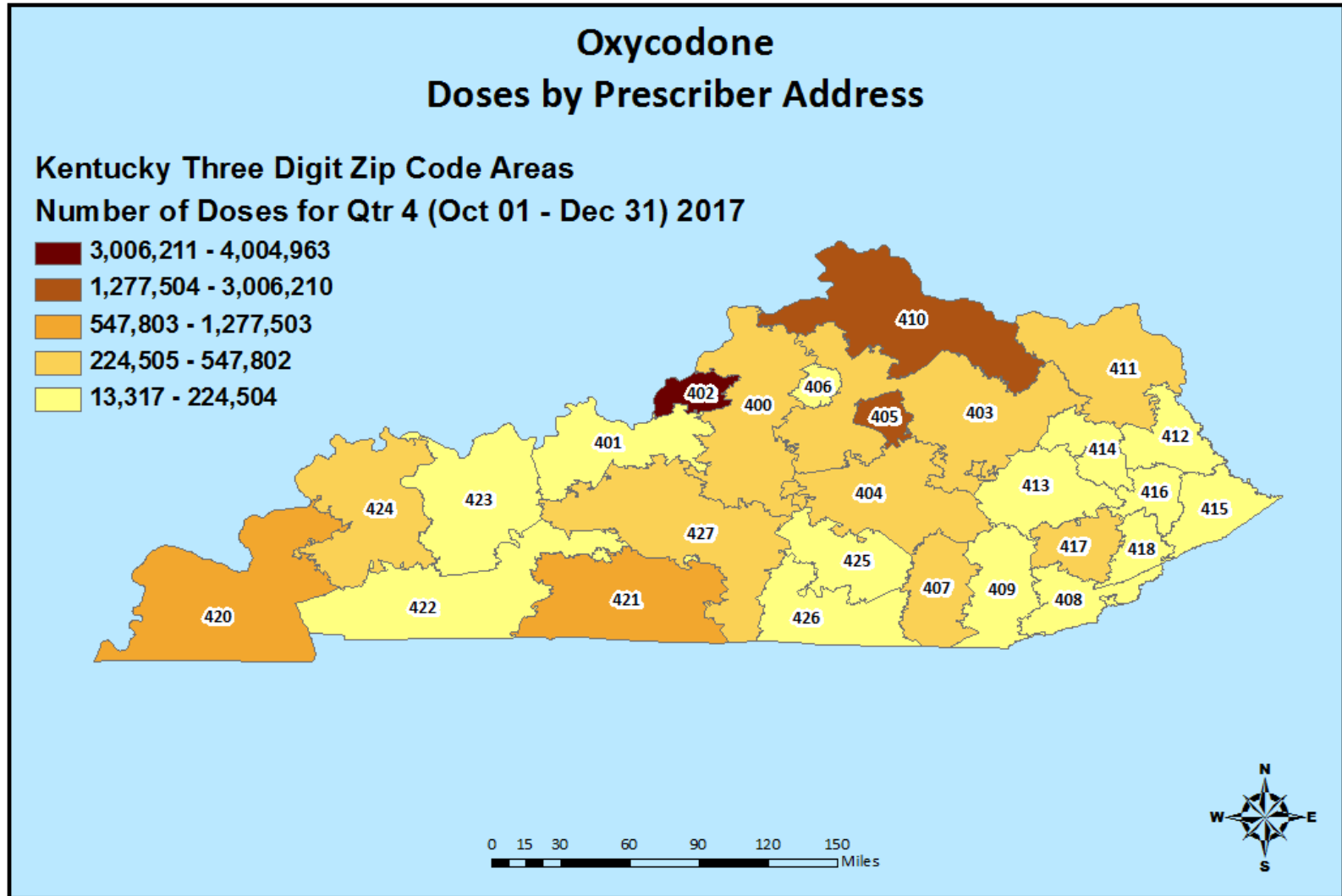
## Q4 2017

Actual Number of Hydrocodone Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	198,888	EDMONSON	118,928	KNOX	382,874	NICHOLAS	49,004
ALLEN	243,602	ELLIOTT	35,337	LARUE	140,107	OHIO	305,531
ANDERSON	192,083	ESTILL	202,232	LAUREL	506,895	OLDHAM	295,810
BALLARD	89,222	FAYETTE	1,050,696	LAWRENCE	136,597	OWEN	53,390
BARREN	409,648	FLEMING	79,590	LEE	123,451	OWSLEY	114,000
BATH	86,490	FLOYD	750,747	LESLIE	161,997	PENDLETON	66,669
BELL	571,320	FRANKLIN	359,312	LETCHER	330,555	PERRY	545,225
BOONE	417,777	FULTON	79,501	LEWIS	96,796	PIKE	614,074
BOURBON	110,915	GALLATIN	46,921	LINCOLN	223,584	POWELL	190,985
BOYD	156,131	GARRARD	105,864	LIVINGSTON	152,124	PULASKI	470,702
BOYLE	241,110	GRANT	98,612	LOGAN	262,223	ROBERTSON	12,030
BRACKEN	40,649	GRAVES	433,041	LYON	91,290	ROCKCASTLE	209,426
BREATHITT	211,550	GRAYSON	387,869	MADISON	536,853	ROWAN	110,112
BRECKINRIDGE	161,867	GREEN	76,237	MAGOFFIN	192,238	RUSSELL	58,780
BULLITT	617,865	GREENUP	267,459	MARION	180,929	SCOTT	260,985
BUTLER	158,277	HANCOCK	65,146	MARSHALL	373,000	SHELBY	313,127
CALDWELL	138,111	HARDIN	757,852	MARTIN	122,620	SIMPSON	127,949
CALLOWAY	339,273	HARLAN	355,006	MASON	64,029	SPENCER	156,334
CAMPBELL	321,021	HARRISON	108,981	MCCRACKEN	783,645	TAYLOR	221,902
CARLISLE	58,482	HART	157,183	MCCREARY	173,829	TODD	114,148
CARROLL	118,143	HENDERSON	514,802	MCLEAN	129,479	TRIGG	127,753
CARTER	134,258	HENRY	157,086	MEADE	155,086	TRIMBLE	77,737
CASEY	132,266	HICKMAN	36,869	MENIFEE	62,659	UNION	193,777
CHRISTIAN	435,757	HOPKINS	602,646	MERCER	171,152	WARREN	891,984
CLARK	230,810	JACKSON	132,413	METCALFE	130,192	WASHINGTON	83,240
CLAY	479,228	JEFFERSON	5,738,881	MONROE	124,553	WAYNE	231,819
CLINTON	122,262	JESSAMINE	256,153	MONTGOMERY	194,813	WEBSTER	195,831
CRITTENDEN	147,782	JOHNSON	316,968	MORGAN	116,046	WHITLEY	532,111
CUMBERLAND	99,036	KENTON	416,612	MUHLENBERG	499,339	WOLFE	114,573
DAVISS	545,115	KNOTT	257,547	NELSON	389,647	WOODFORD	135,690
						<b>TOTAL</b>	<b>35,058,729</b>

# Per 1000 Hydrocodone Usage Q4 2017

Actual Number of Hydrocodone Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	10,316	EDMONSON	9,817	KNOX	12,083	NICHOLAS	6,918
ALLEN	11,808	ELLIOTT	4,657	LARUE	9,939	OHIO	12,533
ANDERSON	8,669	ESTILL	14,135	LAUREL	8,413	OLDHAM	4,512
BALLARD	11,078	FAYETTE	3,299	LAWRENCE	8,611	OWEN	5,017
BARREN	9,312	FLEMING	5,486	LEE	18,762	OWSLEY	25,384
BATH	7,016	FLOYD	20,230	LESLIE	15,373	PENDLETON	4,579
BELL	21,069	FRANKLIN	7,107	LETCHER	14,515	PERRY	19,940
BOONE	3,250	FULTON	12,866	LEWIS	7,201	PIKE	10,141
BOURBON	5,537	GALLATIN	5,450	LINCOLN	9,174	POWELL	15,517
BOYD	3,244	GARRARD	6,122	LIVINGSTON	16,412	PULASKI	7,360
BOYLE	8,032	GRANT	3,957	LOGAN	9,861	ROBERTSON	5,582
BRACKEN	4,839	GRAVES	11,647	LYON	11,314	ROCKCASTLE	12,429
BREATHITT	15,925	GRAYSON	14,813	MADISON	12,026	ROWAN	4,503
BRECKINRIDGE	8,109	GREEN	6,893	MAGOFFIN	9,927	RUSSELL	3,317
BULLITT	7,806	GREENUP	7,452	MARION	13,665	SCOTT	4,836
BUTLER	12,322	HANCOCK	7,395	MARSHALL	5,995	SHELBY	6,747
CALDWELL	10,989	HARDIN	7,062	MARTIN	15,156	SIMPSON	7,076
CALLOWAY	8,827	HARLAN	13,067	MASON	9,421	SPENCER	8,555
CAMPBELL	3,481	HARRISON	5,845	MCCRACKEN	11,892	TAYLOR	8,737
CARLISLE	12,046	HART	8,438	MCCREARY	10,217	TODD	9,284
CARROLL	11,063	HENDERSON	11,130	MCLEAN	3,725	TRIGG	8,956
CARTER	4,964	HENRY	9,931	MEADE	5,514	TRIMBLE	9,018
CASEY	8,363	HICKMAN	7,968	MENIFEE	9,778	UNION	13,023
CHRISTIAN	6,023	HOPKINS	13,128	MERCER	7,969	WARREN	7,106
CLARK	6,444	JACKSON	9,905	METCALFE	12,996	WASHINGTON	6,829
CLAY	23,078	JEFFERSON	7,498	MONROE	11,764	WAYNE	11,334
CLINTON	12,014	JESSAMINE	4,892	MONTGOMERY	7,015	WEBSTER	14,706
CRITTENDEN	16,084	JOHNSON	13,794	MORGAN	8,727	WHITLEY	14,742
CUMBERLAND	14,698	KENTON	2,526	MUHLENBERG	16,093	WOLFE	16,004
DAVISS	5,469	KNOTT	16,569	NELSON	8,553	WOODFORD	5,194

# Oxycodone Prescribing Q4 2017

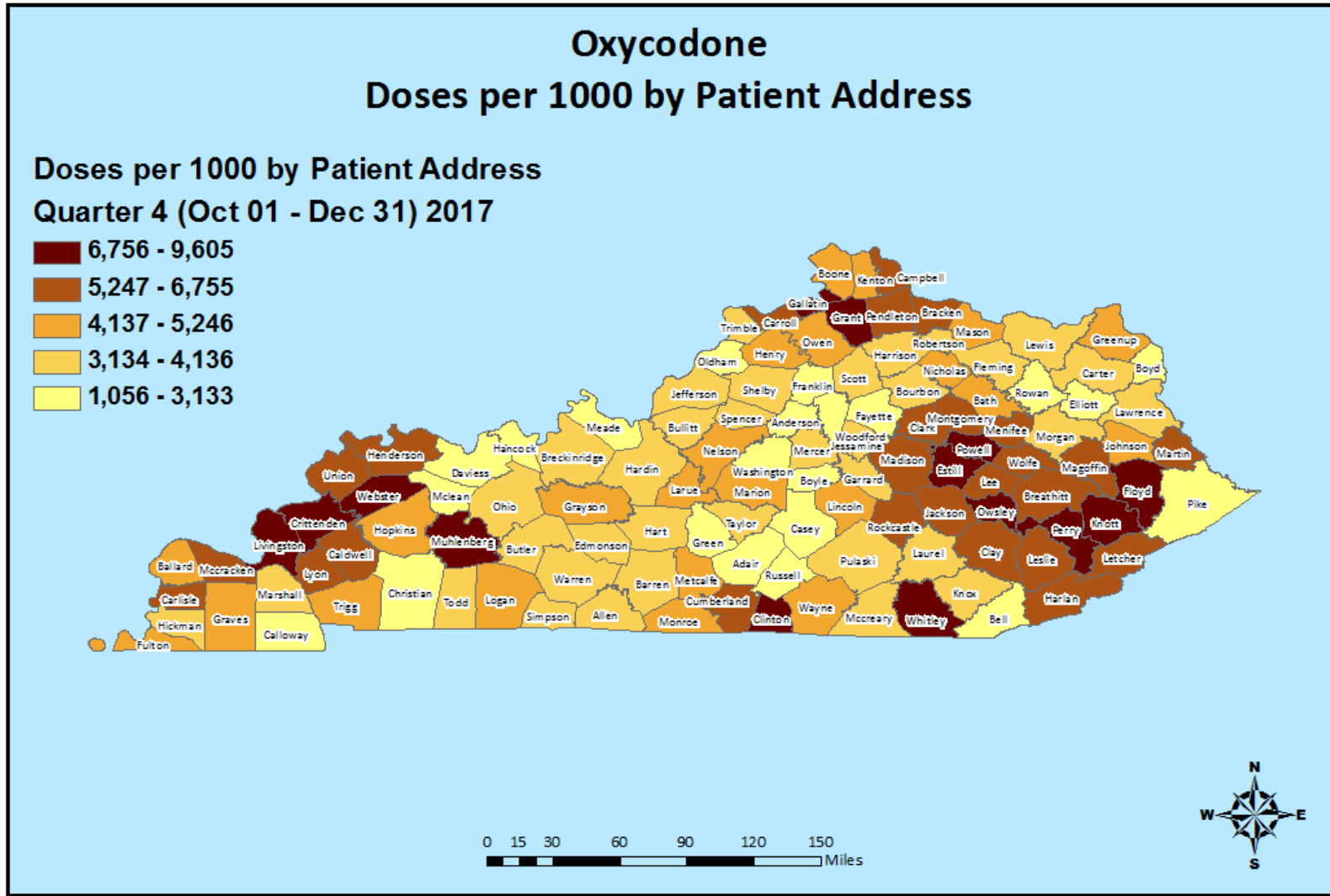


# Oxycodone Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Oxycodone Doses for Quarter 4, 2017
400	423,086
401	59,702
402	4,004,963
403	501,051
404	536,952
405	3,006,210
406	128,936
407	300,797
408	63,667
409	90,510
410	2,255,052
411	327,551
412	146,062
413	166,759
414	13,317
415	27,829
416	158,216
417	376,247
418	82,641
420	1,277,503
421	1,029,723
422	138,476
423	224,504
424	547,802
425	88,232
426	95,096
427	406,385
<b>Totals</b>	<b>16,477,269</b>



# Oxycodone Usage Q4 2017



# Oxycodone Usage

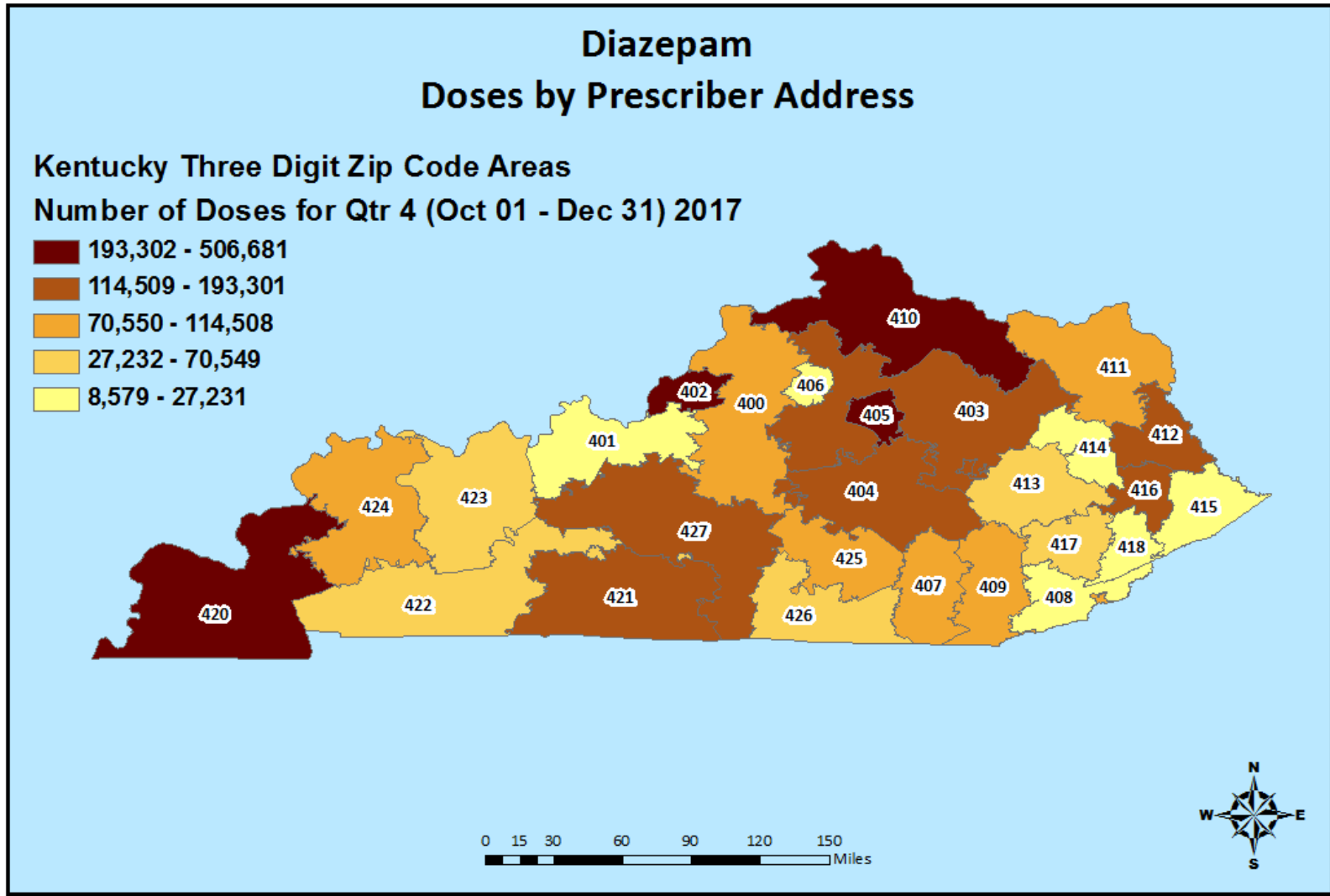
## Q4 2017

Actual Number of Oxycodone Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	49,074	EDMONSON	48,213	KNOX	125,476	NICHOLAS	31,573
ALLEN	77,599	ELLIOTT	21,834	LARUE	65,915	OHIO	96,568
ANDERSON	66,032	ESTILL	115,427	LAUREL	198,541	OLDHAM	143,432
BALLARD	39,532	FAYETTE	709,014	LAWRENCE	65,318	OWEN	48,371
BARREN	141,302	FLEMING	54,161	LEE	36,153	OWSLEY	32,441
BATH	60,376	FLOYD	274,929	LESLIE	71,189	PENDLETON	93,207
BELL	74,924	FRANKLIN	148,492	LETCHER	124,008	PERRY	248,251
BOONE	608,351	FULTON	30,378	LEWIS	51,416	PIKE	163,622
BOURBON	77,423	GALLATIN	60,741	LINCOLN	112,604	POWELL	114,694
BOYD	100,612	GARRARD	71,233	LIVINGSTON	76,462	PULASKI	253,511
BOYLE	85,539	GRANT	180,095	LOGAN	121,281	ROBERTSON	7,563
BRACKEN	51,609	GRAVES	181,331	LYON	42,779	ROCKCASTLE	90,275
BREATHITT	74,385	GRAYSON	124,980	MADISON	336,232	ROWAN	70,567
BRECKINRIDGE	66,494	GREEN	30,827	MAGOFFIN	67,210	RUSSELL	18,720
BULLITT	327,360	GREENUP	161,729	MARION	89,009	SCOTT	170,288
BUTLER	51,556	HANCOCK	23,476	MARSHALL	206,291	SHELBY	156,075
CALDWELL	69,102	HARDIN	384,191	MARTIN	41,555	SIMPSON	69,468
CALLOWAY	120,433	HARLAN	144,245	MASON	44,910	SPENCER	69,618
CAMPBELL	527,122	HARRISON	71,196	MCCRACKEN	396,578	TAYLOR	89,601
CARLISLE	30,374	HART	67,077	MCCREARY	108,963	TODD	39,245
CARROLL	71,291	HENDERSON	302,136	MCLEAN	45,904	TRIGG	68,176
CARTER	86,119	HENRY	72,918	MEADE	77,865	TRIMBLE	34,557
CASEY	46,926	HICKMAN	15,724	MENIFEE	35,323	UNION	85,653
CHRISTIAN	179,626	HOPKINS	240,790	MERCER	79,476	WARREN	413,828
CLARK	202,039	JACKSON	72,517	METCALFE	42,825	WASHINGTON	35,095
CLAY	137,474	JEFFERSON	2,782,690	MONROE	46,784	WAYNE	89,310
CLINTON	97,753	JESSAMINE	196,518	MONTGOMERY	153,954	WEBSTER	94,977
CRITTENDEN	65,207	JOHNSON	116,695	MORGAN	49,539	WHITLEY	253,885
CUMBERLAND	39,251	KENTON	778,468	MUHLENBERG	214,842	WOLFE	40,000
DAVISS	227,674	KNOTT	132,556	NELSON	206,570	WOODFORD	75,406
						<b>TOTAL</b>	<b>18,000,089</b>

# Per 1000 Oxycodone Usage Q4 2017

Actual Number of Oxycodone Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	2,545	EDMONSON	3,980	KNOX	3,960	NICHOLAS	4,457
ALLEN	3,761	ELLIOTT	2,877	LARUE	4,676	OHIO	3,961
ANDERSON	2,980	ESTILL	8,068	LAUREL	3,295	OLDHAM	2,188
BALLARD	4,908	FAYETTE	2,226	LAWRENCE	4,118	OWEN	4,545
BARREN	3,212	FLEMING	3,733	LEE	5,494	OWSLEY	7,224
BATH	4,898	FLOYD	7,408	LESLIE	6,755	PENDLETON	6,402
BELL	2,763	FRANKLIN	2,937	LETCHER	5,445	PERRY	9,079
BOONE	4,733	FULTON	4,916	LEWIS	3,825	PIKE	2,702
BOURBON	3,865	GALLATIN	7,056	LINCOLN	4,620	POWELL	9,319
BOYD	2,090	GARRARD	4,119	LIVINGSTON	8,249	PULASKI	3,964
BOYLE	2,850	GRANT	7,226	LOGAN	4,561	ROBERTSON	3,510
BRACKEN	6,144	GRAVES	4,877	LYON	5,302	ROCKCASTLE	5,358
BREATHITT	5,600	GRAYSON	4,773	MADISON	6,086	ROWAN	2,886
BRECKINRIDGE	3,331	GREEN	2,787	MAGOFFIN	6,223	RUSSELL	1,056
BULLITT	4,136	GREENUP	4,506	MARION	4,845	SCOTT	3,155
BUTLER	4,014	HANCOCK	2,665	MARSHALL	3,755	SHELBY	3,363
CALDWELL	5,498	HARDIN	3,580	MARTIN	5,299	SIMPSON	3,842
CALLOWAY	3,133	HARLAN	5,309	MASON	4,635	SPENCER	3,810
CAMPBELL	5,716	HARRISON	3,818	MCCRACKEN	6,577	TAYLOR	3,528
CARLISLE	6,256	HART	3,601	MCCREARY	3,462	TODD	3,192
CARROLL	6,676	HENDERSON	6,532	MCLEAN	2,613	TRIGG	4,780
CARTER	3,184	HENRY	4,610	MEADE	2,768	TRIMBLE	4,009
CASEY	2,967	HICKMAN	3,398	MENIFEE	5,512	UNION	5,756
CHRISTIAN	2,483	HOPKINS	5,246	MERCER	3,701	WARREN	3,297
CLARK	5,641	JACKSON	5,425	METCALFE	4,275	WASHINGTON	2,879
CLAY	6,620	JEFFERSON	3,636	MONROE	4,419	WAYNE	4,367
CLINTON	9,605	JESSAMINE	3,753	MONTGOMERY	5,544	WEBSTER	7,133
CRITTENDEN	7,097	JOHNSON	5,079	MORGAN	3,725	WHITLEY	7,034
CUMBERLAND	5,825	KENTON	4,720	MUHLENBERG	6,924	WOLFE	5,587
DAVISS	2,284	KNOTT	8,528	NELSON	4,534	WOODFORD	2,886

# Diazepam Prescribing Q4 2017



# Diazepam Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Diazepam Doses for Quarter 4, 2017
400	81,835
401	25,030
402	506,681
403	176,699
404	132,708
405	306,049
406	20,132
407	92,257
408	10,639
409	95,346
410	341,524
411	111,231
412	160,803
413	56,759
414	27,231
415	26,499
416	134,163
417	42,462
418	8,579
420	309,686
421	174,808
422	70,549
423	64,442
424	114,508
425	81,759
426	46,341
427	193,301
<b>Totals</b>	<b>3,412,021</b>



# Diazepam Usage

## Q4 2017

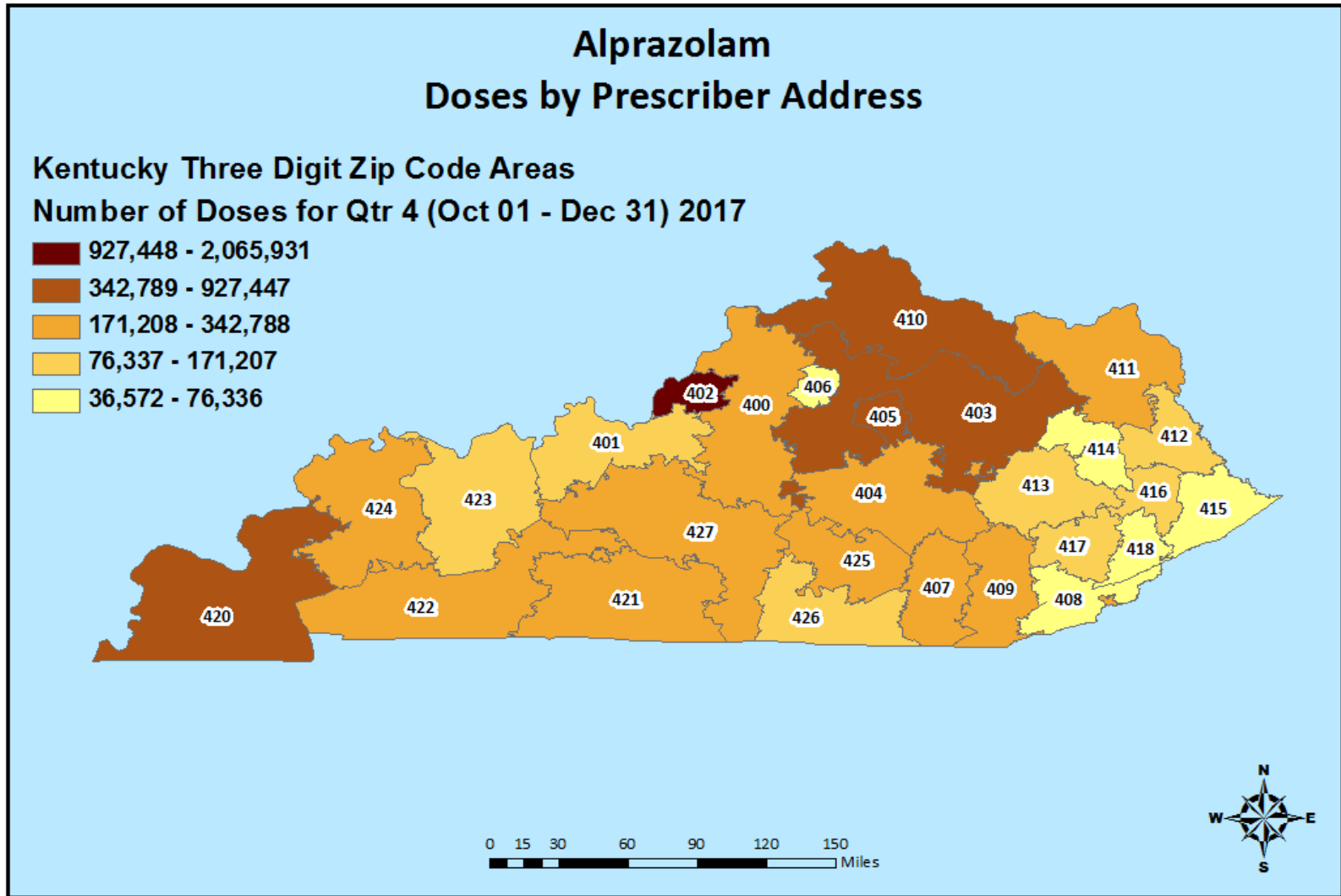
Actual Number of Diazepam Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	28,637	EDMONSON	15,514	KNOX	39,925	NICHOLAS	5,290
ALLEN	13,561	ELLIOTT	7,028	LARUE	30,983	OHIO	27,486
ANDERSON	9,066	ESTILL	18,409	LAUREL	39,766	OLDHAM	16,484
BALLARD	9,043	FAYETTE	132,889	LAWRENCE	30,962	OWEN	8,262
BARREN	41,440	FLEMING	11,544	LEE	16,201	OWSLEY	15,927
BATH	10,280	FLOYD	126,852	LESLIE	4,905	PENDLETON	11,809
BELL	58,888	FRANKLIN	31,164	LETCHER	11,249	PERRY	30,226
BOONE	85,078	FULTON	9,799	LEWIS	11,101	PIKE	58,909
BOURBON	13,092	GALLATIN	7,922	LINCOLN	27,113	POWELL	8,179
BOYD	31,473	GARRARD	14,579	LIVINGSTON	17,290	PULASKI	53,863
BOYLE	30,137	GRANT	22,947	LOGAN	16,552	ROBERTSON	2,225
BRACKEN	14,537	GRAVES	45,308	LYON	8,590	ROCKCASTLE	16,496
BREATHITT	23,728	GRAYSON	55,547	MADISON	50,155	ROWAN	22,075
BRECKINRIDGE	12,556	GREEN	16,149	MAGOFFIN	37,399	RUSSELL	9,317
BULLITT	30,480	GREENUP	39,708	MARION	20,343	SCOTT	38,308
BUTLER	10,842	HANCOCK	4,403	MARSHALL	47,273	SHELBY	21,283
CALDWELL	16,886	HARDIN	47,229	MARTIN	33,153	SIMPSON	11,030
CALLOWAY	45,843	HARLAN	16,932	MASON	13,975	SPENCER	10,692
CAMPBELL	68,606	HARRISON	26,845	MCCRACKEN	93,566	TAYLOR	46,852
CARLISLE	9,113	HART	19,015	MCCREARY	13,120	TODD	9,016
CARROLL	9,551	HENDERSON	60,876	MCLEAN	8,752	TRIGG	13,317
CARTER	27,479	HENRY	6,234	MEADE	8,885	TRIMBLE	2,301
CASEY	19,461	HICKMAN	3,298	MENIFEE	7,151	UNION	14,201
CHRISTIAN	36,250	HOPKINS	42,867	MERCER	21,123	WARREN	83,014
CLARK	22,684	JACKSON	10,865	METCALFE	16,143	WASHINGTON	8,592
CLAY	30,492	JEFFERSON	384,050	MONROE	8,160	WAYNE	18,402
CLINTON	17,396	JESSAMINE	29,348	MONTGOMERY	24,670	WEBSTER	13,793
CRITTENDEN	16,244	JOHNSON	99,916	MORGAN	10,967	WHITLEY	53,125
CUMBERLAND	7,140	KENTON	100,354	MUHLENBERG	32,899	WOLFE	11,328
DAVISS	41,733	KNOTT	21,406	NELSON	29,342	WOODFORD	15,094
						<b>TOTAL</b>	<b>3,609,322</b>

# Per 1000 Diazepam Usage Q4 2017

Actual Number of Diazepam Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	1,485	EDMONSON	1,281	KNOX	1,260	NICHOLAS	747
ALLEN	657	ELLIOTT	926	LARUE	2,198	OHIO	1,127
ANDERSON	409	ESTILL	1,287	LAUREL	660	OLDHAM	251
BALLARD	1,123	FAYETTE	417	LAWRENCE	1,952	OWEN	776
BARREN	942	FLEMING	796	LEE	2,462	OWSLEY	3,546
BATH	834	FLOYD	3,418	LESLIE	465	PENDLETON	811
BELL	2,172	FRANKLIN	616	LETCHER	494	PERRY	1,105
BOONE	662	FULTON	1,586	LEWIS	826	PIKE	973
BOURBON	654	GALLATIN	920	LINCOLN	1,112	POWELL	665
BOYD	654	GARRARD	843	LIVINGSTON	1,865	PULASKI	842
BOYLE	1,004	GRANT	921	LOGAN	622	ROBERTSON	1,032
BRACKEN	1,731	GRAVES	1,219	LYON	1,065	ROCKCASTLE	979
BREATHITT	1,786	GRAYSON	2,121	MADISON	1,436	ROWAN	903
BRECKINRIDGE	629	GREEN	1,460	MAGOFFIN	749	RUSSELL	526
BULLITT	385	GREENUP	1,106	MARION	924	SCOTT	710
BUTLER	844	HANCOCK	500	MARSHALL	560	SHELBY	459
CALDWELL	1,344	HARDIN	440	MARTIN	2,949	SIMPSON	610
CALLOWAY	1,193	HARLAN	623	MASON	1,059	SPENCER	585
CAMPBELL	744	HARRISON	1,440	MCCRACKEN	1,507	TAYLOR	1,845
CARLISLE	1,877	HART	1,021	MCCREARY	2,762	TODD	733
CARROLL	894	HENDERSON	1,316	MCLEAN	813	TRIGG	934
CARTER	1,016	HENRY	394	MEADE	316	TRIMBLE	267
CASEY	1,231	HICKMAN	713	MENIFEE	1,116	UNION	954
CHRISTIAN	501	HOPKINS	934	MERCER	984	WARREN	661
CLARK	633	JACKSON	813	METCALFE	1,611	WASHINGTON	705
CLAY	1,468	JEFFERSON	502	MONROE	771	WAYNE	900
CLINTON	1,709	JESSAMINE	561	MONTGOMERY	888	WEBSTER	1,036
CRITTENDEN	1,768	JOHNSON	4,348	MORGAN	825	WHITLEY	1,472
CUMBERLAND	1,060	KENTON	608	MUHLENBERG	1,060	WOLFE	1,582
DAVISS	419	KNOTT	1,377	NELSON	644	WOODFORD	578



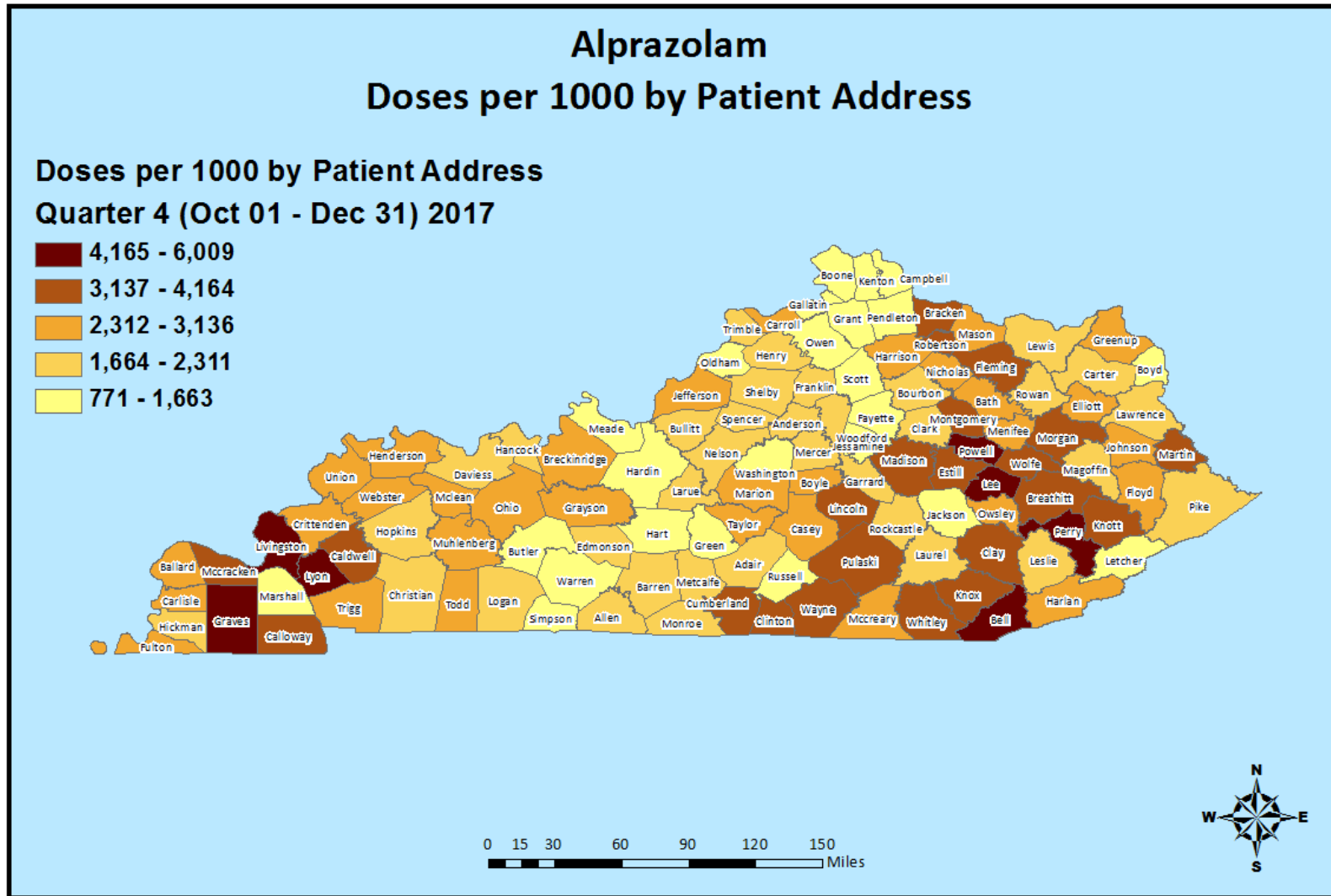
# Alprazolam Prescribing Q4 2017



# Alprazolam Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Alprazolam Doses for Quarter 4, 2017
400	324,352
401	112,945
402	2,065,931
403	546,733
404	304,704
405	927,447
406	76,336
407	292,874
408	43,307
409	244,494
410	763,968
411	245,690
412	101,248
413	101,467
414	48,407
415	56,732
416	134,805
417	167,840
418	36,572
420	859,665
421	342,788
422	229,931
423	171,207
424	311,084
425	317,078
426	114,437
427	299,922
<b>Totals</b>	<b>9,241,964</b>

# Alprazolam Usage Q4 2017



# Alprazolam Usage

## Q4 2017

Actual Number of Alprazolam Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	41,428	EDMONSON	21,294	KNOX	101,603	NICHOLAS	18,310
ALLEN	41,204	ELLIOTT	20,645	LARUE	26,936	OHIO	60,004
ANDERSON	42,924	ESTILL	53,228	LAUREL	136,536	OLDHAM	94,136
BALLARD	22,214	FAYETTE	494,100	LAWRENCE	28,051	OWEN	15,646
BARREN	77,227	FLEMING	49,792	LEE	29,351	OWSLEY	12,563
BATH	31,736	FLOYD	109,139	LESLIE	21,460	PENDLETON	20,404
BELL	162,951	FRANKLIN	101,731	LETCHER	28,002	PERRY	130,558
BOONE	171,890	FULTON	16,592	LEWIS	29,915	PIKE	101,778
BOURBON	43,011	GALLATIN	11,118	LINCOLN	78,655	POWELL	69,472
BOYD	69,961	GARRARD	39,959	LIVINGSTON	41,304	PULASKI	242,711
BOYLE	72,048	GRANT	26,917	LOGAN	51,763	ROBERTSON	7,039
BRACKEN	28,327	GRAVES	168,553	LYON	39,310	ROCKCASTLE	30,069
BREATHITT	53,540	GRAYSON	66,511	MADISON	122,627	ROWAN	42,758
BRECKINRIDGE	53,724	GREEN	14,189	MAGOFFIN	44,664	RUSSELL	13,669
BULLITT	172,744	GREENUP	109,483	MARION	57,259	SCOTT	81,558
BUTLER	20,106	HANCOCK	16,203	MARSHALL	118,728	SHELBY	79,901
CALDWELL	43,023	HARDIN	132,930	MARTIN	32,374	SIMPSON	26,135
CALLOWAY	145,443	HARLAN	71,071	MASON	53,679	SPENCER	33,904
CAMPBELL	148,743	HARRISON	47,947	MCCRACKEN	237,882	TAYLOR	66,155
CARLISLE	13,695	HART	28,645	MCCREARY	36,192	TODD	30,868
CARROLL	27,813	HENDERSON	143,027	MCLEAN	27,848	TRIGG	41,810
CARTER	59,311	HENRY	32,193	MEADE	37,550	TRIMBLE	15,661
CASEY	49,600	HICKMAN	8,958	MENIFEE	16,937	UNION	42,891
CHRISTIAN	132,696	HOPKINS	98,105	MERCER	37,421	WARREN	134,839
CLARK	75,112	JACKSON	20,866	METCALFE	22,656	WASHINGTON	20,273
CLAY	72,989	JEFFERSON	1,818,341	MONROE	21,431	WAYNE	77,168
CLINTON	42,376	JESSAMINE	86,673	MONTGOMERY	90,828	WEBSTER	37,749
CRITTENDEN	26,311	JOHNSON	58,972	MORGAN	44,544	WHITLEY	147,254
CUMBERLAND	22,117	KENTON	215,864	MUHLENBERG	97,306	WOLFE	26,070
DAVISS	170,600	KNOTT	54,106	NELSON	95,810	WOODFORD	46,207
						<b>TOTAL</b>	<b>9,848,198</b>

# Per 1000 Alprazolam Usage Q4 2017

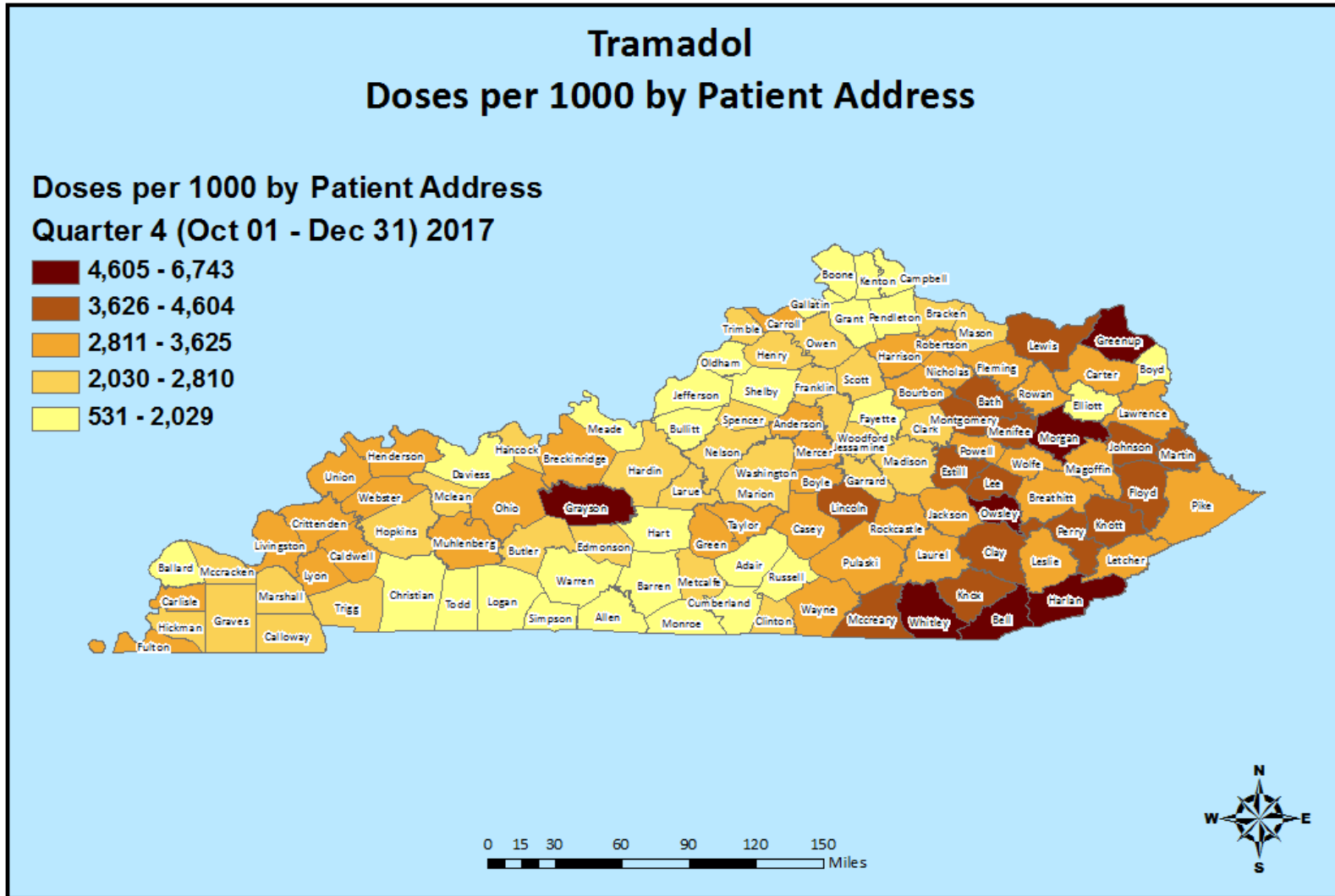
Actual Number of Alprazolam Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	2,149	EDMONSON	1,758	KNOX	3,206	NICHOLAS	2,585
ALLEN	1,997	ELLIOTT	2,721	LARUE	1,911	OHIO	2,461
ANDERSON	1,937	ESTILL	3,720	LAUREL	2,266	OLDHAM	1,436
BALLARD	2,758	FAYETTE	1,552	LAWRENCE	1,768	OWEN	1,470
BARREN	1,755	FLEMING	3,432	LEE	4,461	OWSLEY	2,797
BATH	2,575	FLOYD	2,941	LESLIE	2,036	PENDLETON	1,401
BELL	6,009	FRANKLIN	2,012	LETCHER	1,230	PERRY	4,775
BOONE	1,337	FULTON	2,685	LEWIS	2,225	PIKE	1,681
BOURBON	2,147	GALLATIN	1,291	LINCOLN	3,227	POWELL	5,644
BOYD	1,454	GARRARD	2,311	LIVINGSTON	4,456	PULASKI	3,795
BOYLE	2,400	GRANT	1,080	LOGAN	1,946	ROBERTSON	3,266
BRACKEN	3,372	GRAVES	4,533	LYON	4,872	ROCKCASTLE	1,785
BREATHITT	4,030	GRAYSON	2,540	MADISON	3,651	ROWAN	1,749
BRECKINRIDGE	2,691	GREEN	1,283	MAGOFFIN	2,067	RUSSELL	771
BULLITT	2,182	GREENUP	3,050	MARION	2,939	SCOTT	1,511
BUTLER	1,565	HANCOCK	1,839	MARSHALL	1,369	SHELBY	1,722
CALDWELL	3,423	HARDIN	1,239	MARTIN	3,521	SIMPSON	1,445
CALLOWAY	3,784	HARLAN	2,616	MASON	2,981	SPENCER	1,855
CAMPBELL	1,613	HARRISON	2,571	MCCRACKEN	3,785	TAYLOR	2,605
CARLISLE	2,821	HART	1,538	MCCREARY	2,697	TODD	2,511
CARROLL	2,604	HENDERSON	3,092	MCLEAN	3,123	TRIGG	2,931
CARTER	2,193	HENRY	2,035	MEADE	1,335	TRIMBLE	1,817
CASEY	3,136	HICKMAN	1,936	MENIFEE	2,643	UNION	2,882
CHRISTIAN	1,834	HOPKINS	2,137	MERCER	1,742	WARREN	1,074
CLARK	2,097	JACKSON	1,561	METCALFE	2,262	WASHINGTON	1,663
CLAY	3,515	JEFFERSON	2,376	MONROE	2,024	WAYNE	3,773
CLINTON	4,164	JESSAMINE	1,655	MONTGOMERY	3,271	WEBSTER	2,835
CRITTENDEN	2,864	JOHNSON	2,566	MORGAN	3,350	WHITLEY	4,080
CUMBERLAND	3,282	KENTON	1,309	MUHLENBERG	3,136	WOLFE	3,642
DAVISS	1,712	KNOTT	3,481	NELSON	2,103	WOODFORD	1,769



# Tramadol Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Tramadol Doses for Quarter 4, 2017
400	341,051
401	164,166
402	1,507,623
403	672,881
404	479,029
405	1,388,203
406	94,262
407	341,176
408	112,068
409	333,855
410	737,580
411	380,633
412	187,136
413	91,471
414	85,046
415	147,847
416	159,461
417	176,722
418	84,983
420	548,017
421	403,335
422	153,153
423	173,185
424	332,152
425	226,505
426	122,645
427	480,901
<b>Totals</b>	<b>9,925,086</b>

# Tramadol Usage Q4 2017





# Tramadol Usage

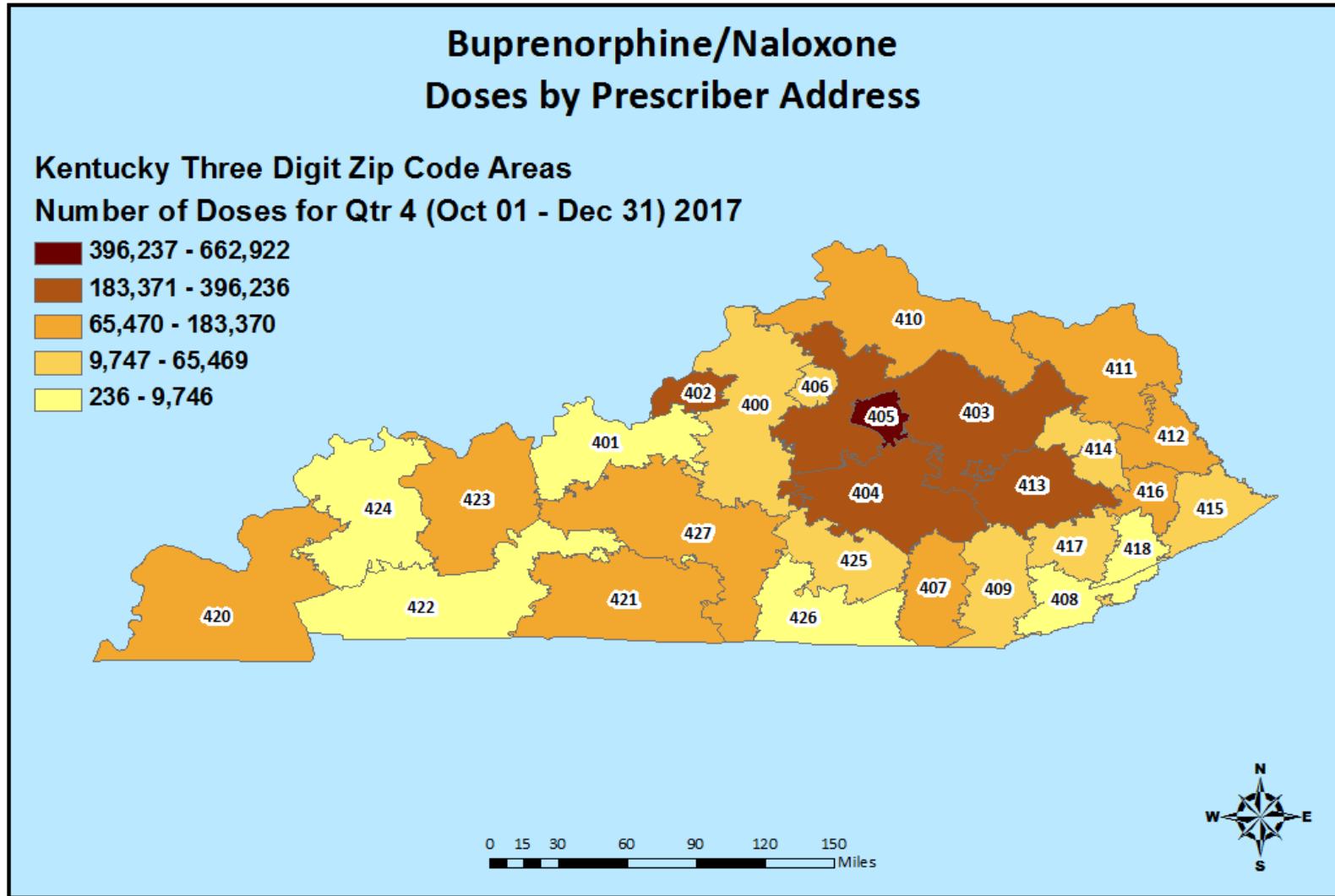
## Q4 2017

Actual Number of Tramadol Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	39,121	EDMONSON	31,352	KNOX	126,402	NICHOLAS	24,383
ALLEN	33,985	ELLIOTT	13,192	LARUE	36,931	OHIO	79,432
ANDERSON	64,219	ESTILL	63,633	LAUREL	189,029	OLDHAM	82,697
BALLARD	14,004	FAYETTE	605,776	LAWRENCE	55,370	OWEN	27,087
BARREN	70,043	FLEMING	44,872	LEE	30,297	OWSLEY	23,694
BATH	45,738	FLOYD	161,780	LESLIE	33,923	PENDLETON	26,192
BELL	182,845	FRANKLIN	126,094	LETCHER	66,845	PERRY	109,241
BOONE	193,638	FULTON	21,425	LEWIS	59,403	PIKE	196,151
BOURBON	61,726	GALLATIN	16,673	LINCOLN	96,041	POWELL	44,533
BOYD	92,270	GARRARD	46,008	LIVINGSTON	30,801	PULASKI	225,539
BOYLE	92,690	GRANT	36,655	LOGAN	50,604	ROBERTSON	6,976
BRACKEN	21,857	GRAVES	93,311	LYON	23,026	ROCKCASTLE	55,088
BREATHITT	39,244	GRAYSON	135,368	MADISON	249,642	ROWAN	87,882
BRECKINRIDGE	57,454	GREEN	37,416	MAGOFFIN	51,383	RUSSELL	9,402
BULLITT	147,818	GREENUP	186,128	MARION	45,260	SCOTT	131,883
BUTLER	26,823	HANCOCK	18,738	MARSHALL	82,304	SHELBY	92,391
CALDWELL	41,670	HARDIN	253,714	MARTIN	46,855	SIMPSON	30,789
CALLOWAY	79,301	HARLAN	147,921	MASON	40,528	SPENCER	45,321
CAMPBELL	124,810	HARRISON	56,132	MCCRACKEN	144,037	TAYLOR	89,175
CARLISLE	15,446	HART	33,827	MCCREARY	54,812	TODD	20,360
CARROLL	32,824	HENDERSON	135,386	MCLEAN	22,950	TRIGG	40,077
CARTER	81,744	HENRY	40,705	MEADE	54,430	TRIMBLE	21,310
CASEY	56,611	HICKMAN	10,181	MENIFEE	24,910	UNION	52,169
CHRISTIAN	86,262	HOPKINS	122,982	MERCER	72,266	WARREN	181,121
CLARK	96,847	JACKSON	40,674	METCALFE	24,243	WASHINGTON	28,728
CLAY	86,628	JEFFERSON	1,148,905	MONROE	21,147	WAYNE	70,225
CLINTON	25,420	JESSAMINE	128,798	MONTGOMERY	114,282	WEBSTER	48,267
CRITTENDEN	26,815	JOHNSON	101,646	MORGAN	77,520	WHITLEY	183,929
CUMBERLAND	11,164	KENTON	210,944	MUHLENBERG	88,541	WOLFE	22,272
DAVISS	144,529	KNOTT	70,621	NELSON	95,159	WOODFORD	73,032
						<b>TOTAL</b>	<b>10,472,690</b>

# Per 1000 Tramadol Usage Q4 2017

Actual Number of Tramadol Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	2,029	EDMONSON	2,588	KNOX	3,989	NICHOLAS	3,442
ALLEN	1,647	ELLIOTT	1,739	LARUE	2,620	OHIO	3,258
ANDERSON	2,898	ESTILL	4,448	LAUREL	3,137	OLDHAM	1,261
BALLARD	1,739	FAYETTE	1,902	LAWRENCE	3,491	OWEN	2,545
BARREN	1,592	FLEMING	3,093	LEE	4,604	OWSLEY	5,276
BATH	3,710	FLOYD	4,359	LESLIE	3,219	PENDLETON	1,799
BELL	6,743	FRANKLIN	2,494	LETCHER	2,935	PERRY	3,995
BOONE	1,506	FULTON	3,467	LEWIS	4,419	PIKE	3,239
BOURBON	3,082	GALLATIN	1,937	LINCOLN	3,941	POWELL	3,618
BOYD	1,917	GARRARD	2,661	LIVINGSTON	3,323	PULASKI	3,526
BOYLE	3,088	GRANT	1,471	LOGAN	1,903	ROBERTSON	3,237
BRACKEN	2,602	GRAVES	2,510	LYON	2,854	ROCKCASTLE	3,269
BREATHITT	2,954	GRAYSON	5,170	MADISON	2,210	ROWAN	3,594
BRECKINRIDGE	2,878	GREEN	3,383	MAGOFFIN	3,130	RUSSELL	531
BULLITT	1,868	GREENUP	5,186	MARION	2,422	SCOTT	2,444
BUTLER	2,088	HANCOCK	2,127	MARSHALL	2,788	SHELBY	1,991
CALDWELL	3,316	HARDIN	2,364	MARTIN	4,051	SIMPSON	1,703
CALLOWAY	2,063	HARLAN	5,445	MASON	2,357	SPENCER	2,480
CAMPBELL	1,354	HARRISON	3,010	MCCRACKEN	2,624	TAYLOR	3,511
CARLISLE	3,181	HART	1,816	MCCREARY	3,904	TODD	1,656
CARROLL	3,074	HENDERSON	2,927	MCLEAN	2,358	TRIGG	2,810
CARTER	3,022	HENRY	2,573	MEADE	1,935	TRIMBLE	2,472
CASEY	3,580	HICKMAN	2,200	MENIFEE	3,887	UNION	3,506
CHRISTIAN	1,192	HOPKINS	2,679	MERCER	3,365	WARREN	1,443
CLARK	2,704	JACKSON	3,043	METCALFE	2,420	WASHINGTON	2,357
CLAY	4,172	JEFFERSON	1,501	MONROE	1,997	WAYNE	3,433
CLINTON	2,498	JESSAMINE	2,460	MONTGOMERY	4,115	WEBSTER	3,625
CRITTENDEN	2,918	JOHNSON	4,424	MORGAN	5,829	WHITLEY	5,096
CUMBERLAND	1,657	KENTON	1,279	MUHLENBERG	2,854	WOLFE	3,111
DAVISS	1,450	KNOTT	4,543	NELSON	2,089	WOODFORD	2,796

# Buprenorphine/Naloxone Prescribing Q4 2017



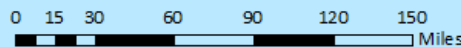
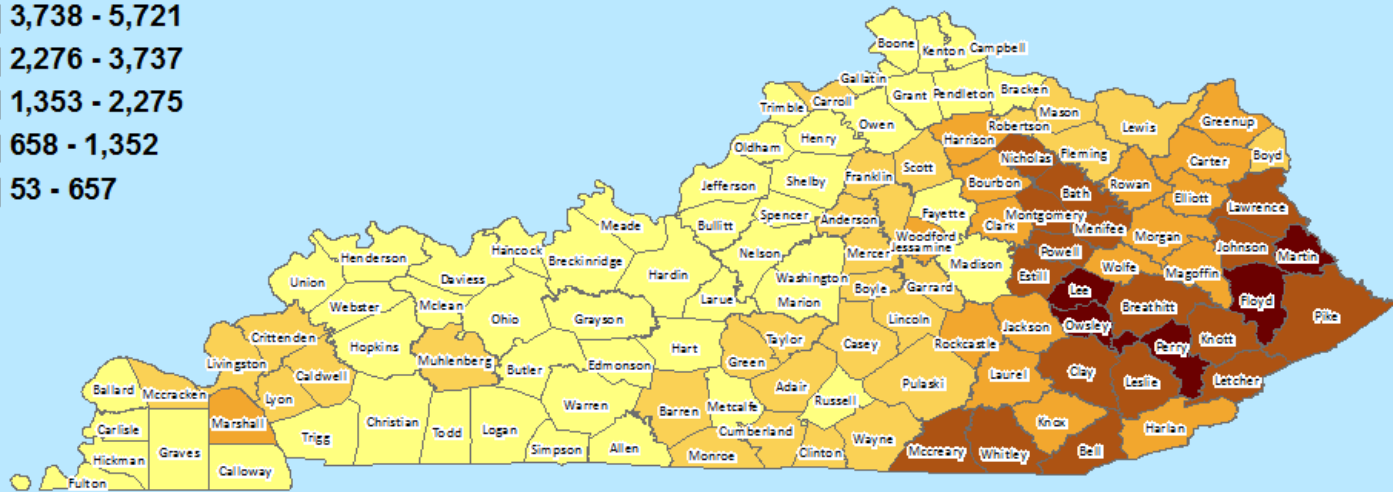
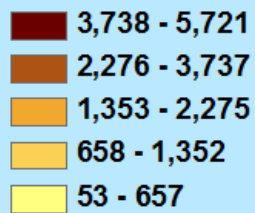
# Buprenorphine/Naloxone Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Buprenorphine/Naloxone Doses for Quarter 4, 2017
400	40,689
401	9,746
402	396,236
403	344,815
404	252,267
405	662,922
406	40,271
407	128,639
408	5,210
409	65,469
410	102,460
411	183,370
412	129,631
413	293,583
414	30,440
415	46,305
416	165,721
417	35,772
418	7,238
420	112,500
421	97,755
422	9,059
423	88,597
424	2,804
425	39,833
426	236
427	108,138
<b>Totals</b>	<b>3,399,706</b>

# Buprenorphine/Naloxone Usage Q4 2017

## Buprenorphine/Naloxone Doses per 1000 by Patient Address

Doses per 1000 by Patient Address  
Quarter 4 (Oct 01 - Dec 31) 2017



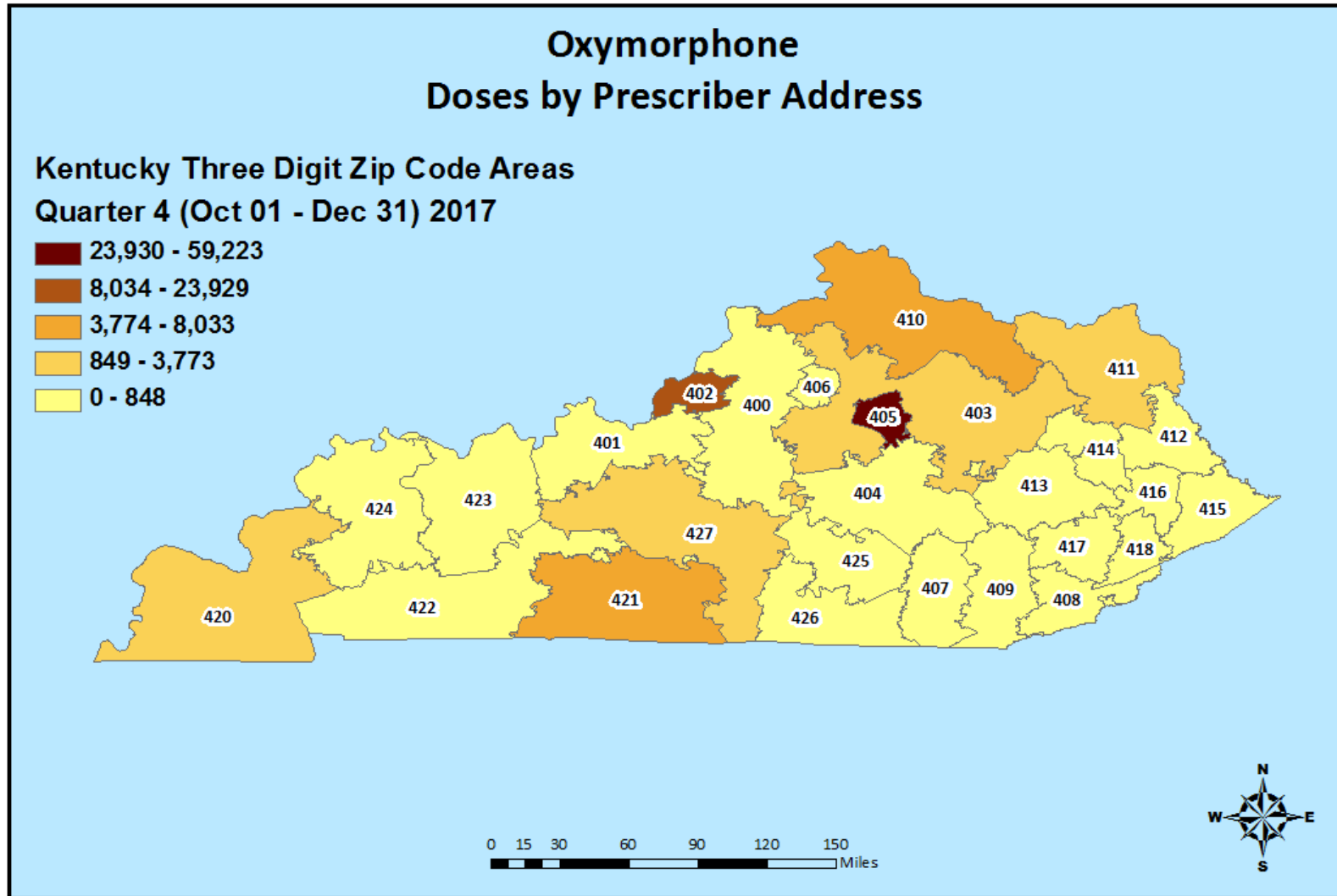
# Buprenorphine/Naloxone Usage Q4 2017

Actual Number of Buprenorphine/Naloxone Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	24,451	EDMONSON	2,827	KNOX	47,688	NICHOLAS	23,564
ALLEN	8,224	ELLIOTT	11,625	LARUE	4,898	OHIO	10,075
ANDERSON	22,981	ESTILL	46,796	LAUREL	102,837	OLDHAM	13,572
BALLARD	2,316	FAYETTE	186,938	LAWRENCE	46,642	OWEN	5,897
BARREN	32,332	FLEMING	12,348	LEE	26,766	OWSLEY	21,913
BATH	31,309	FLOYD	171,909	LESLIE	33,658	PENDLETON	7,928
BELL	64,605	FRANKLIN	55,481	LETCHER	68,986	PERRY	120,095
BOONE	35,702	FULTON	3,038	LEWIS	18,171	PIKE	160,686
BOURBON	44,266	GALLATIN	4,821	LINCOLN	28,691	POWELL	44,351
BOYD	56,751	GARRARD	19,868	LIVINGSTON	7,577	PULASKI	80,820
BOYLE	25,108	GRANT	11,772	LOGAN	6,837	ROBERTSON	2,074
BRACKEN	4,385	GRAVES	18,773	LYON	6,335	ROCKCASTLE	25,341
BREATHITT	49,639	GRAYSON	6,652	MADISON	131,694	ROWAN	33,797
BRECKINRIDGE	3,110	GREEN	8,162	MAGOFFIN	72,569	RUSSELL	9,841
BULLITT	31,352	GREENUP	65,925	MARION	23,632	SCOTT	57,845
BUTLER	3,920	HANCOCK	1,258	MARSHALL	24,345	SHELBY	18,420
CALDWELL	10,078	HARDIN	17,394	MARTIN	43,963	SIMPSON	4,673
CALLOWAY	10,805	HARLAN	61,799	MASON	7,226	SPENCER	9,355
CAMPBELL	32,068	HARRISON	26,210	MCCRACKEN	38,967	TAYLOR	25,999
CARLISLE	1,933	HART	7,872	MCCREARY	30,727	TODD	1,680
CARROLL	10,357	HENDERSON	7,789	MCLEAN	2,799	TRIGG	5,717
CARTER	55,441	HENRY	9,589	MEADE	6,197	TRIMBLE	4,528
CASEY	18,644	HICKMAN	903	MENIFEE	16,293	UNION	787
CHRISTIAN	17,685	HOPKINS	28,483	MERCER	26,788	WARREN	36,849
CLARK	70,755	JACKSON	26,672	METCALFE	6,110	WASHINGTON	8,013
CLAY	62,736	JEFFERSON	261,476	MONROE	8,687	WAYNE	26,870
CLINTON	7,935	JESSAMINE	72,989	MONTGOMERY	67,599	WEBSTER	4,038
CRITTENDEN	7,221	JOHNSON	66,365	MORGAN	22,588	WHITLEY	103,414
CUMBERLAND	8,864	KENTON	54,112	MUHLENBERG	35,541	WOLFE	11,610
DAVISS	11,928	KNOTT	49,395	NELSON	23,170	WOODFORD	20,644
						<b>TOTAL</b>	<b>3,974,519</b>

# Per 1000 Buprenorphine/Naloxone Usage Q4 2017

Actual Number of Buprenorphine/Naloxone Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	1,268	EDMONSON	233	KNOX	1,505	NICHOLAS	3,326
ALLEN	399	ELLIOTT	1,532	LARUE	347	OHIO	413
ANDERSON	1,037	ESTILL	3,271	LAUREL	1,707	OLDHAM	207
BALLARD	288	FAYETTE	587	LAWRENCE	2,940	OWEN	554
BARREN	735	FLEMING	851	LEE	4,068	OWSLEY	4,879
BATH	2,540	FLOYD	4,632	LESLIE	3,194	PENDLETON	545
BELL	2,382	FRANKLIN	1,097	LETCHER	3,029	PERRY	4,392
BOONE	278	FULTON	492	LEWIS	1,352	PIKE	2,654
BOURBON	2,210	GALLATIN	560	LINCOLN	1,177	POWELL	3,603
BOYD	1,179	GARRARD	1,149	LIVINGSTON	817	PULASKI	1,264
BOYLE	836	GRANT	472	LOGAN	257	ROBERTSON	962
BRACKEN	522	GRAVES	505	LYON	785	ROCKCASTLE	1,504
BREATHITT	3,737	GRAYSON	254	MADISON	598	ROWAN	1,382
BRECKINRIDGE	156	GREEN	738	MAGOFFIN	1,755	RUSSELL	555
BULLITT	396	GREENUP	1,837	MARION	295	SCOTT	1,072
BUTLER	305	HANCOCK	143	MARSHALL	1,471	SHELBY	397
CALDWELL	802	HARDIN	162	MARTIN	5,721	SIMPSON	258
CALLOWAY	281	HARLAN	2,275	MASON	1,231	SPENCER	512
CAMPBELL	348	HARRISON	1,406	MCCRACKEN	776	TAYLOR	1,024
CARLISLE	398	HART	423	MCCREARY	3,663	TODD	137
CARROLL	970	HENDERSON	168	MCLEAN	420	TRIGG	401
CARTER	2,050	HENRY	606	MEADE	220	TRIMBLE	525
CASEY	1,179	HICKMAN	195	MENIFEE	2,543	UNION	53
CHRISTIAN	244	HOPKINS	620	MERCER	1,247	WARREN	294
CLARK	1,975	JACKSON	1,995	METCALFE	610	WASHINGTON	657
CLAY	3,021	JEFFERSON	342	MONROE	820	WAYNE	1,314
CLINTON	780	JESSAMINE	1,394	MONTGOMERY	2,434	WEBSTER	303
CRITTENDEN	786	JOHNSON	2,888	MORGAN	1,699	WHITLEY	2,865
CUMBERLAND	1,316	KENTON	328	MUHLENBERG	1,145	WOLFE	1,622
DAVISS	120	KNOTT	3,178	NELSON	509	WOODFORD	790

# Oxymorphone Prescribing Q4 2017

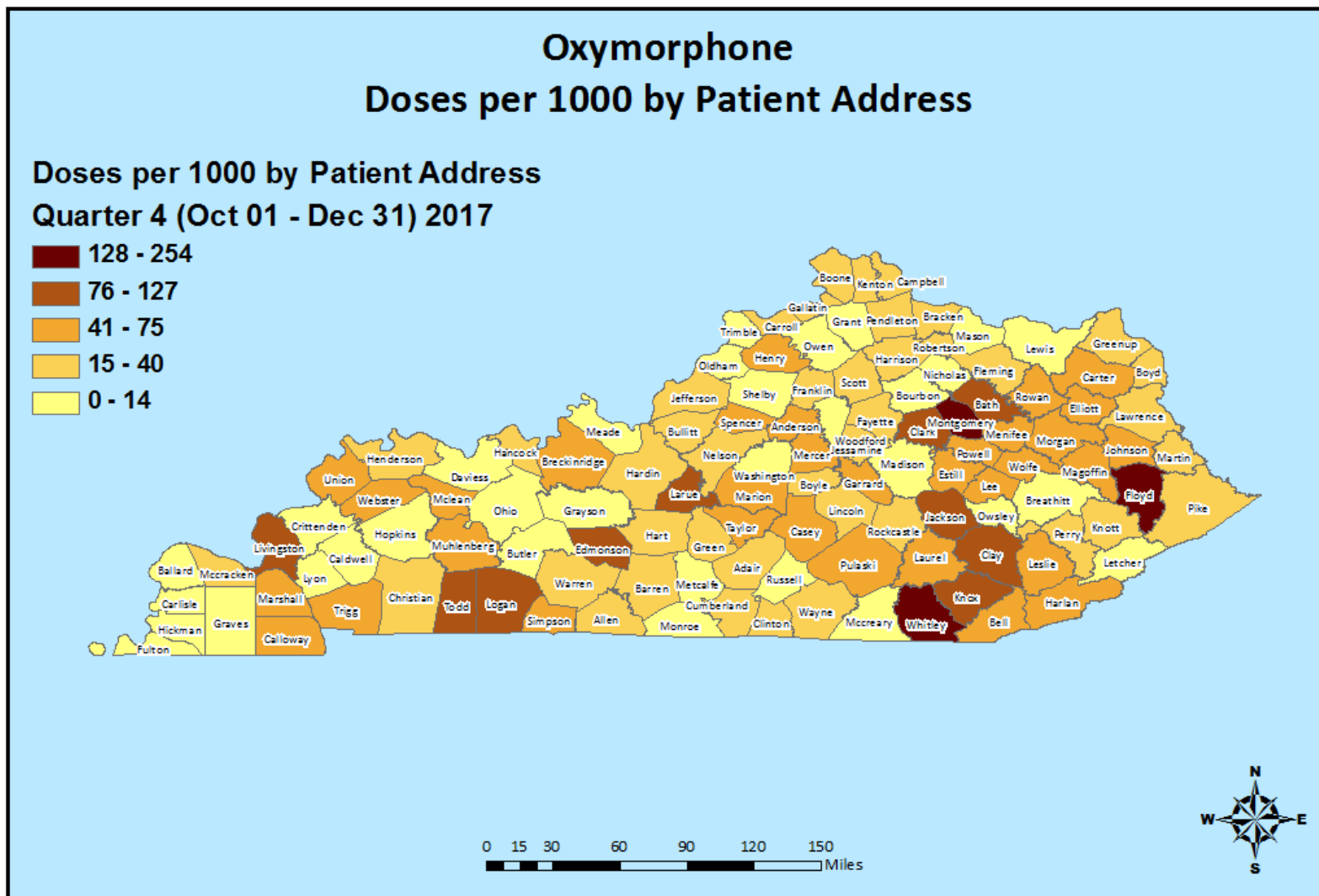




# Oxymorphone Prescribing Q4 2017

3 Digit Zip	Doses By Prescriber Zip-Actual Number of Oxymorphone Doses for Quarter 4, 2017
400	180
401	180
402	23,929
403	1,946
404	360
405	59,223
406	0
407	180
408	794
409	368
410	8,033
411	2,012
412	180
413	452
414	0
415	0
416	554
417	224
418	0
420	3,773
421	7,944
422	540
423	294
424	848
425	360
426	0
427	3,293
<b>Totals</b>	<b>115,667</b>

# Oxymorphone Usage Q4 2017



# Oxymorphone Usage

## Q4 2017

Actual Number of Oxymorphone Doses for Quarter 4, 2017							
COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES	COUNTY	# DOSES
ADAIR	447	EDMONSON	1,224	KNOX	4,030	NICHOLAS	90
ALLEN	686	ELLIOTT	360	LARUE	1,320	OHIO	0
ANDERSON	1,170	ESTILL	870	LAUREL	4,294	OLDHAM	420
BALLARD	0	FAYETTE	7,936	LAWRENCE	258	OWEN	0
BARREN	708	FLEMING	570	LEE	360	OWSLEY	0
BATH	1,420	FLOYD	6,240	LESLIE	480	PENDLETON	420
BELL	1,688	FRANKLIN	840	LETCHER	60	PERRY	780
BOONE	2,868	FULTON	0	LEWIS	0	PIKE	2,082
BOURBON	0	GALLATIN	292	LINCOLN	840	POWELL	870
BOYD	1,106	GARRARD	1,071	LIVINGSTON	853	PULASKI	3,240
BOYLE	1,200	GRANT	340	LOGAN	2,193	ROBERTSON	75
BRACKEN	180	GRAVES	270	LYON	0	ROCKCASTLE	490
BREATHITT	180	GRAYSON	270	MADISON	4,130	ROWAN	1,260
BRECKINRIDGE	990	GREEN	180	MAGOFFIN	390	RUSSELL	0
BULLITT	1,390	GREENUP	990	MARION	90	SCOTT	1,740
BUTLER	0	HANCOCK	168	MARSHALL	975	SHELBY	356
CALDWELL	9	HARDIN	3,708	MARTIN	130	SIMPSON	1,192
CALLOWAY	1,714	HARLAN	1,502	MASON	840	SPENCER	900
CAMPBELL	1,877	HARRISON	380	MCCRACKEN	660	TAYLOR	1,080
CARLISLE	0	HART	570	MCCREARY	960	TODD	1,230
CARROLL	360	HENDERSON	1,486	MCLEAN	390	TRIGG	884
CARTER	1,290	HENRY	840	MEADE	277	TRIMBLE	60
CASEY	840	HICKMAN	0	MENIFEE	270	UNION	690
CHRISTIAN	1,296	HOPKINS	180	MERCER	1,560	WARREN	3,890
CLARK	2,970	JACKSON	1,132	METCALFE	0	WASHINGTON	0
CLAY	1,824	JEFFERSON	16,123	MONROE	0	WAYNE	510
CLINTON	330	JESSAMINE	1,260	MONTGOMERY	4,483	WEBSTER	720
CRITTENDEN	0	JOHNSON	1,412	MORGAN	870	WHITLEY	9,172
CUMBERLAND	168	KENTON	3,126	MUHLENBERG	1,418	WOLFE	534
DAVISS	360	KNOTT	300	NELSON	870	WOODFORD	0
<b>TOTAL</b>						<b>146,397</b>	

# Per 1000 Oxymorphone Usage Q4 2017

Actual Number of Oxymorphone Doses per 1,000 Residents for Quarter 4, 2017							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	23	EDMONSON	101	KNOX	127	NICHOLAS	13
ALLEN	33	ELLIOTT	47	LARUE	94	OHIO	0
ANDERSON	53	ESTILL	61	LAUREL	71	OLDHAM	6
BALLARD	0	FAYETTE	25	LAWRENCE	16	OWEN	0
BARREN	16	FLEMING	39	LEE	55	OWSLEY	0
BATH	115	FLOYD	168	LESLIE	46	PENDLETON	29
BELL	62	FRANKLIN	17	LETCHER	3	PERRY	29
BOONE	22	FULTON	0	LEWIS	0	PIKE	34
BOURBON	0	GALLATIN	34	LINCOLN	34	POWELL	71
BOYD	23	GARRARD	62	LIVINGSTON	92	PULASKI	51
BOYLE	40	GRANT	14	LOGAN	82	ROBERTSON	35
BRACKEN	21	GRAVES	7	LYON	0	ROCKCASTLE	29
BREATHITT	14	GRAYSON	10	MADISON	10	ROWAN	52
BRECKINRIDGE	50	GREEN	16	MAGOFFIN	55	RUSSELL	0
BULLITT	18	GREENUP	28	MARION	41	SCOTT	32
BUTLER	0	HANCOCK	19	MARSHALL	46	SHELBY	8
CALDWELL	1	HARDIN	35	MARTIN	31	SIMPSON	66
CALLOWAY	45	HARLAN	55	MASON	5	SPENCER	49
CAMPBELL	20	HARRISON	20	MCCRACKEN	31	TAYLOR	43
CARLISLE	0	HART	31	MCCREARY	11	TODD	100
CARROLL	34	HENDERSON	32	MCLEAN	49	TRIGG	62
CARTER	48	HENRY	53	MEADE	10	TRIMBLE	7
CASEY	53	HICKMAN	0	MENIFEE	42	UNION	46
CHRISTIAN	18	HOPKINS	4	MERCER	73	WARREN	31
CLARK	83	JACKSON	85	METCALFE	0	WASHINGTON	0
CLAY	88	JEFFERSON	21	MONROE	0	WAYNE	25
CLINTON	32	JESSAMINE	24	MONTGOMERY	161	WEBSTER	54
CRITTENDEN	0	JOHNSON	61	MORGAN	65	WHITLEY	254
CUMBERLAND	25	KENTON	19	MUHLENBERG	46	WOLFE	75
DAVISS	4	KNOTT	19	NELSON	19	WOODFORD	0