

KHDSP Task Force Data Presentation

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Kentucky Public Health
Prevent. Promote. Protect.



TEAM 
KENTUCKY[®]
CABINET FOR HEALTH
AND FAMILY SERVICES

Overview

- 🛡️ National data
- 🛡️ State data
- 🛡️ Prevalence data
- 🛡️ Cardiac Catheterization
- 🛡️ Economic burden

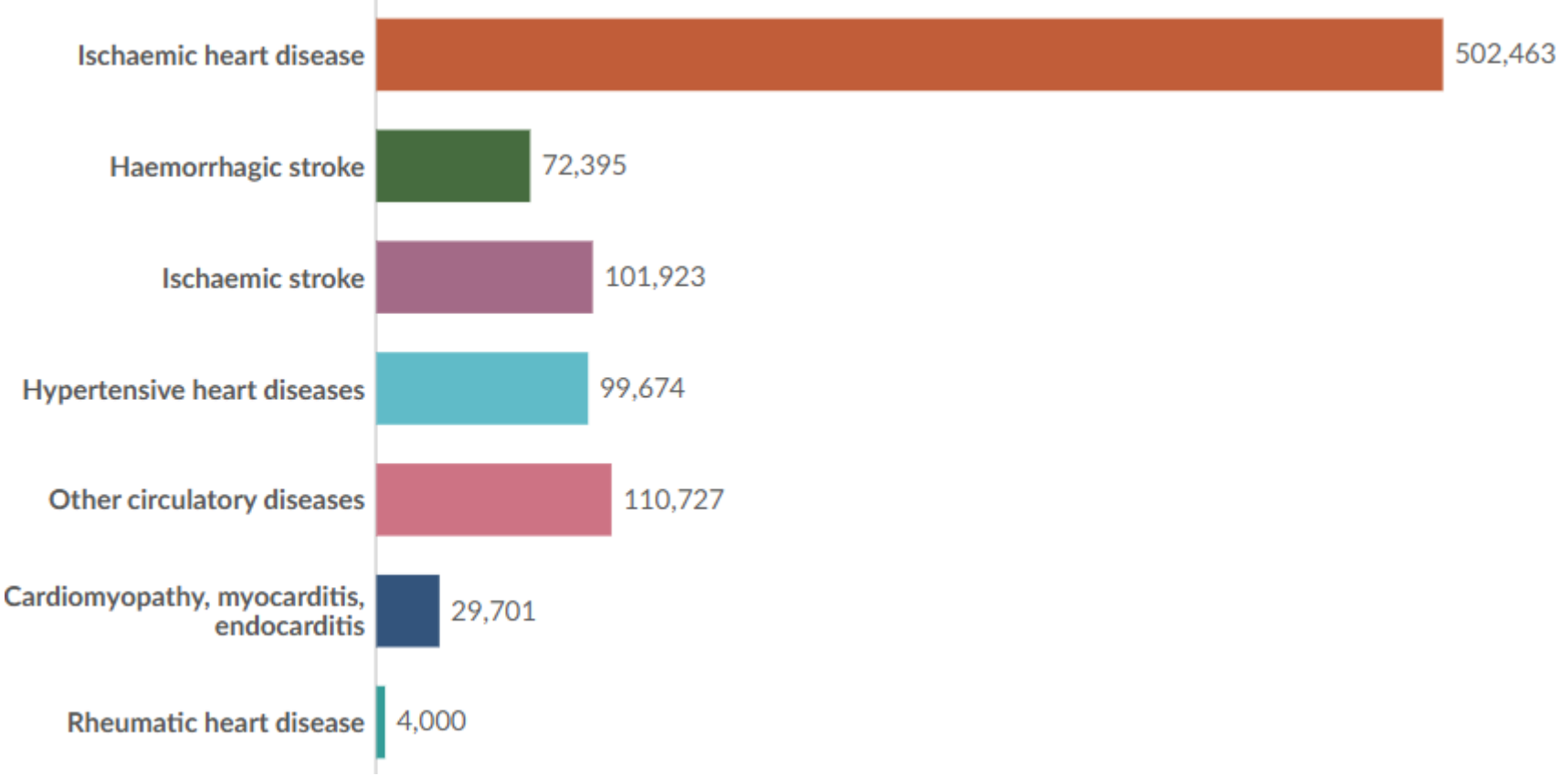


Fast Facts, 2023

- 🛡️ Heart disease is the leading cause of death in KY (10,988) & US (680,981).
- 🛡️ Stroke is the 6th leading cause of death in KY (2,249) and the 4th leading cause of death in the US (162,639).
- 🛡️ Cardiovascular diseases (CVDs) claim more lives in the U.S. than all forms of cancer and accidental deaths, the #2 and #3 causes of death combined.
- 🛡️ Nearly 47% of U.S. adults have high blood pressure.
- 🛡️ More than 72% of U.S. adults have an unhealthy weight.

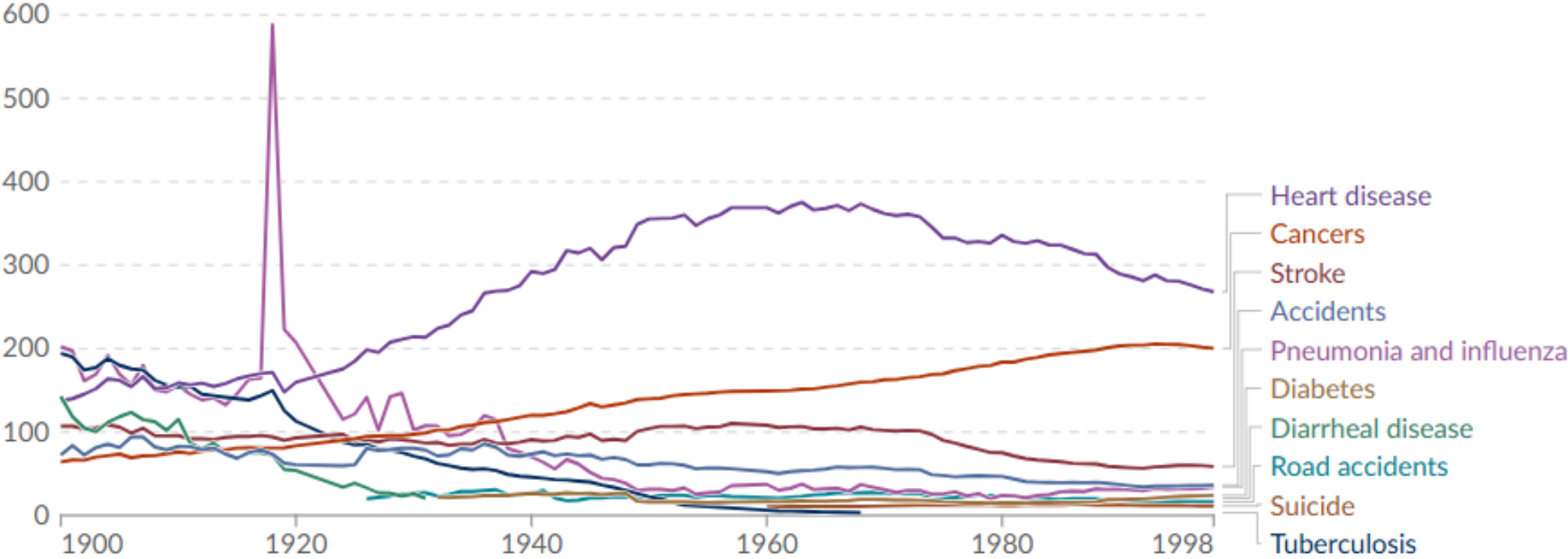
<https://newsroom.heart.org/news/heart-disease-remains-leading-cause-of-death-as-key-health-risk-factors-continue-to-rise> <https://wonder.cdc.gov/ucd-icd10-expanded.html>

Number of Deaths from CVDs by Type, US, 2021



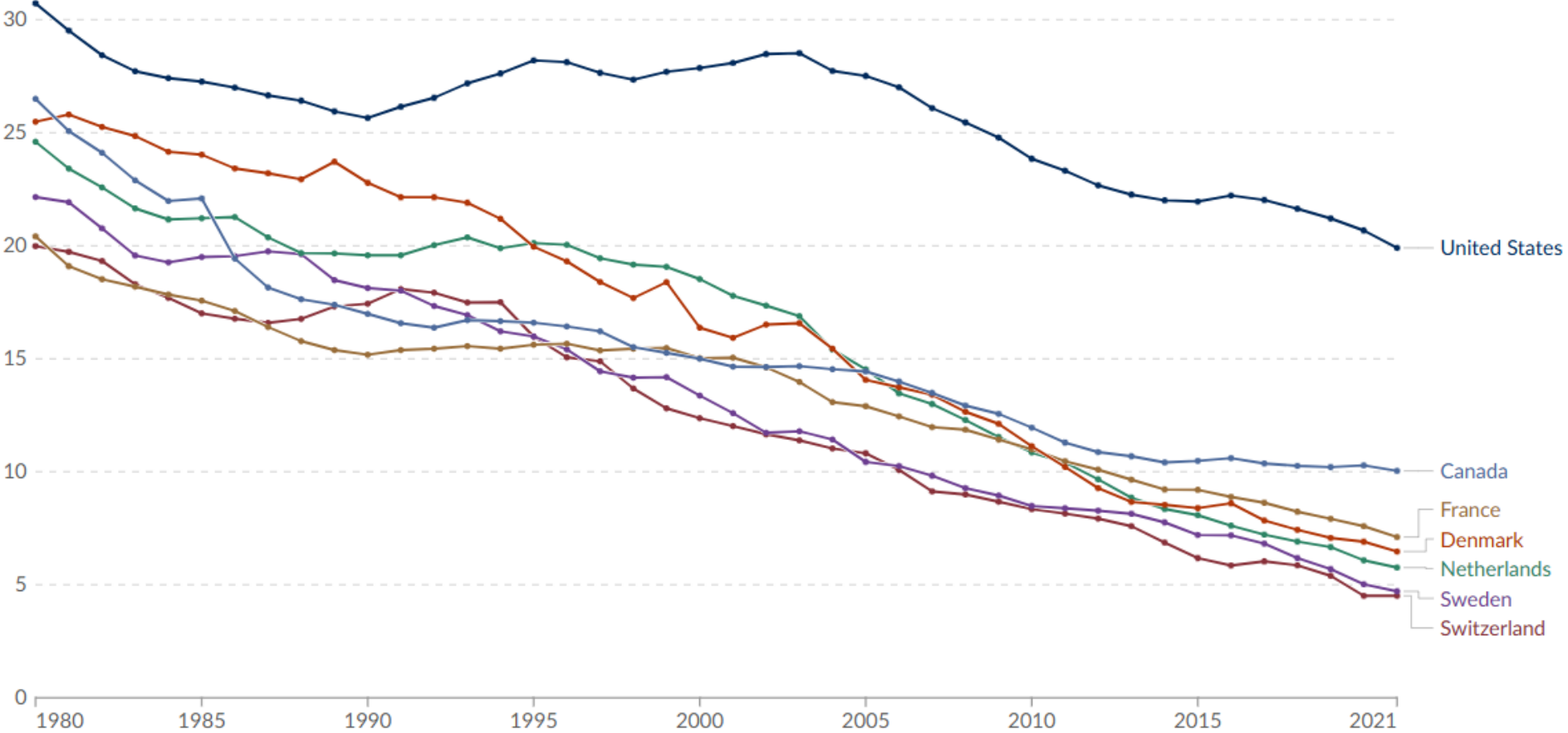
<https://ourworldindata.org/cardiovascular-diseases>

Crude Death Rates in the 20th Century, US



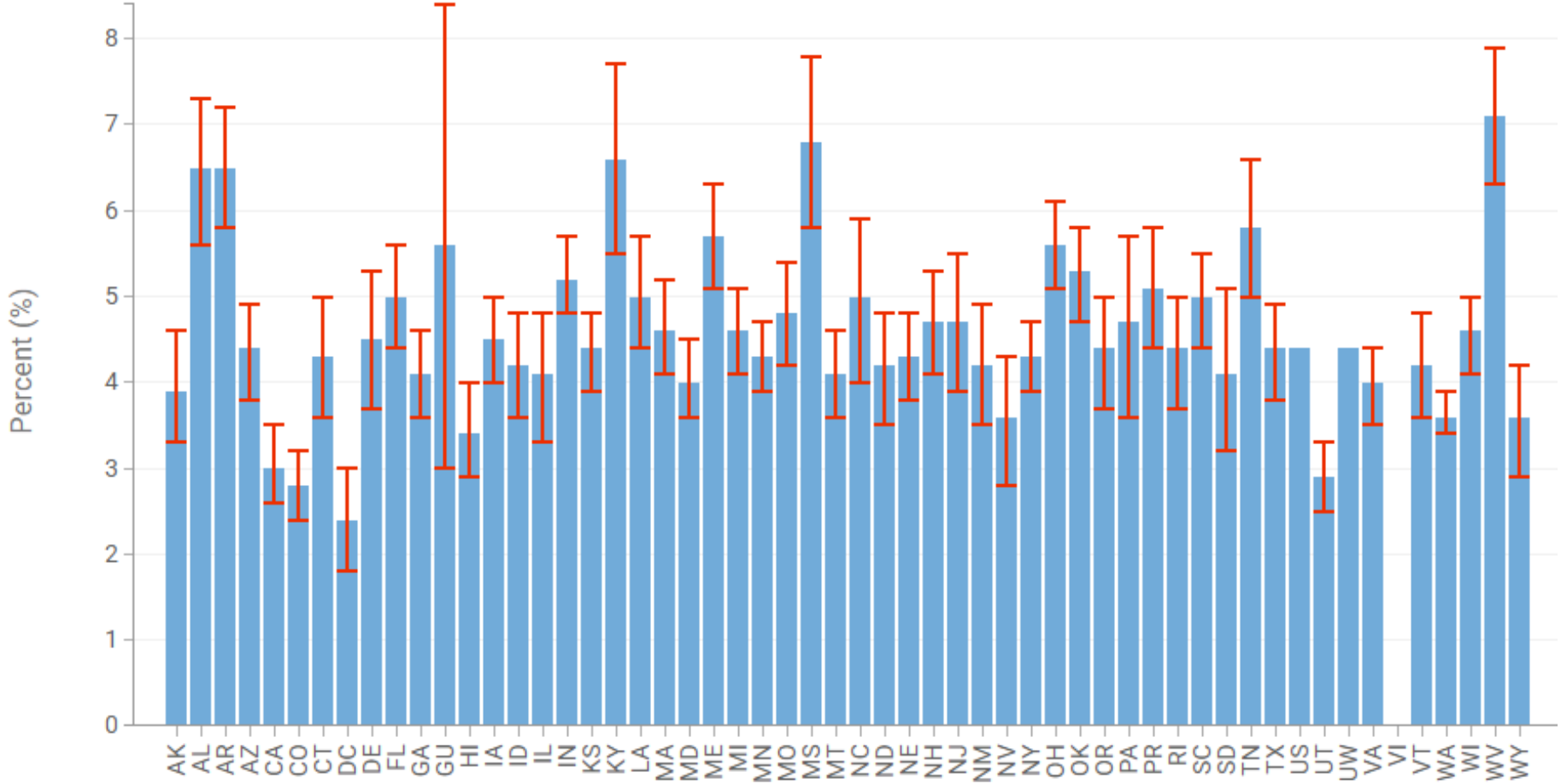
<https://ourworldindata.org/grapher/death-rates-through-the-20th-century>

Death Rate from CVDs in 15-49-year-olds



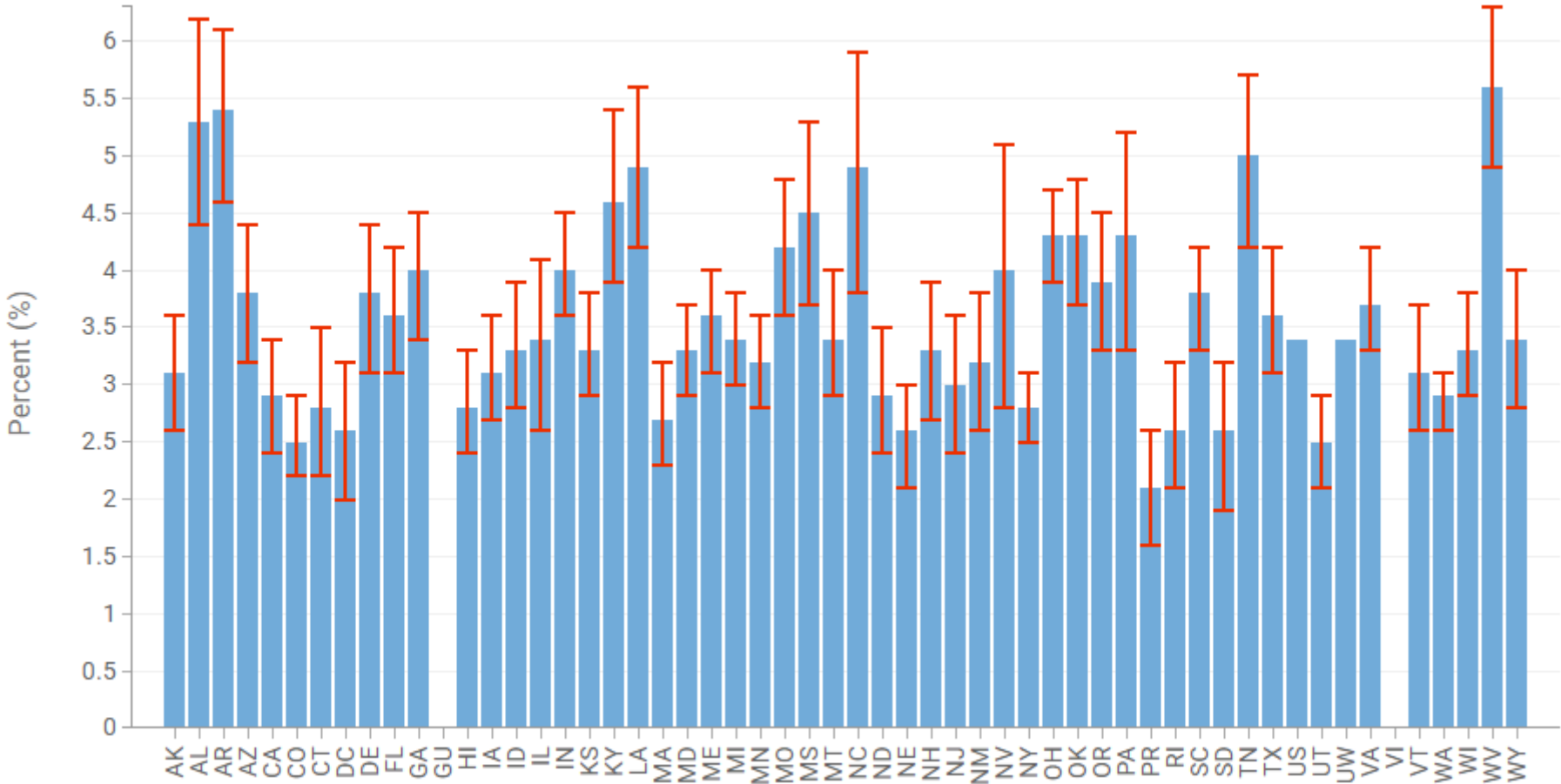
<https://ourworldindata.org/grapher/death-rate-from-cardiovascular-disease-for-15-to-49-year-olds>

Coronary Heart Disease Prevalence by State, 2022



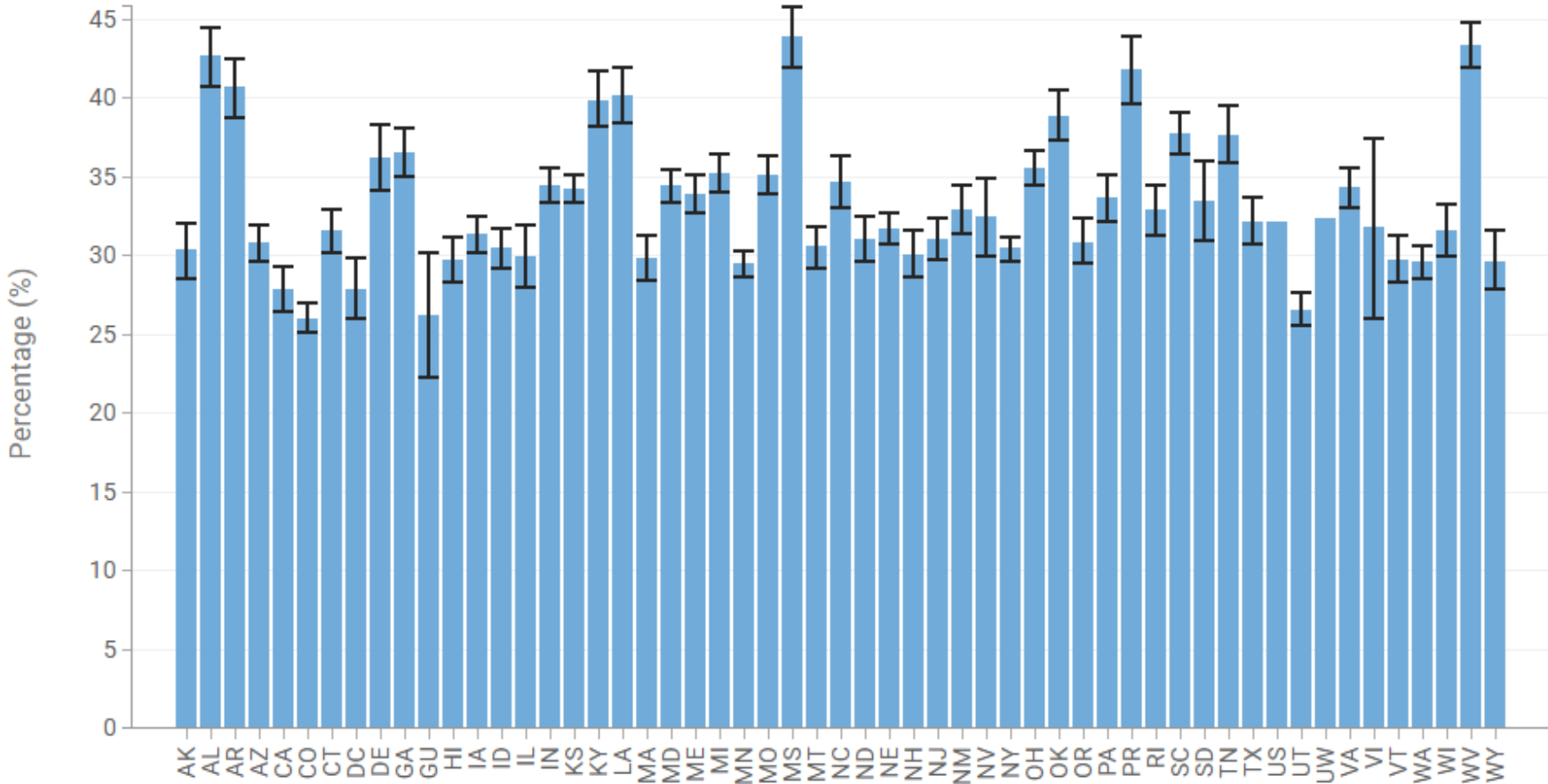
<https://data.cdc.gov/Behavioral-Risk-Factors/BRFSS-Graph-of-Current-Prevalence-of-Cardiovascula/gfhd-2f5y>

Stroke Prevalence by State, 2022



<https://data.cdc.gov/Behavioral-Risk-Factors/BRFSS-Graph-of-Current-Prevalence-of-Cardiovascula/gfhd-2f5y>

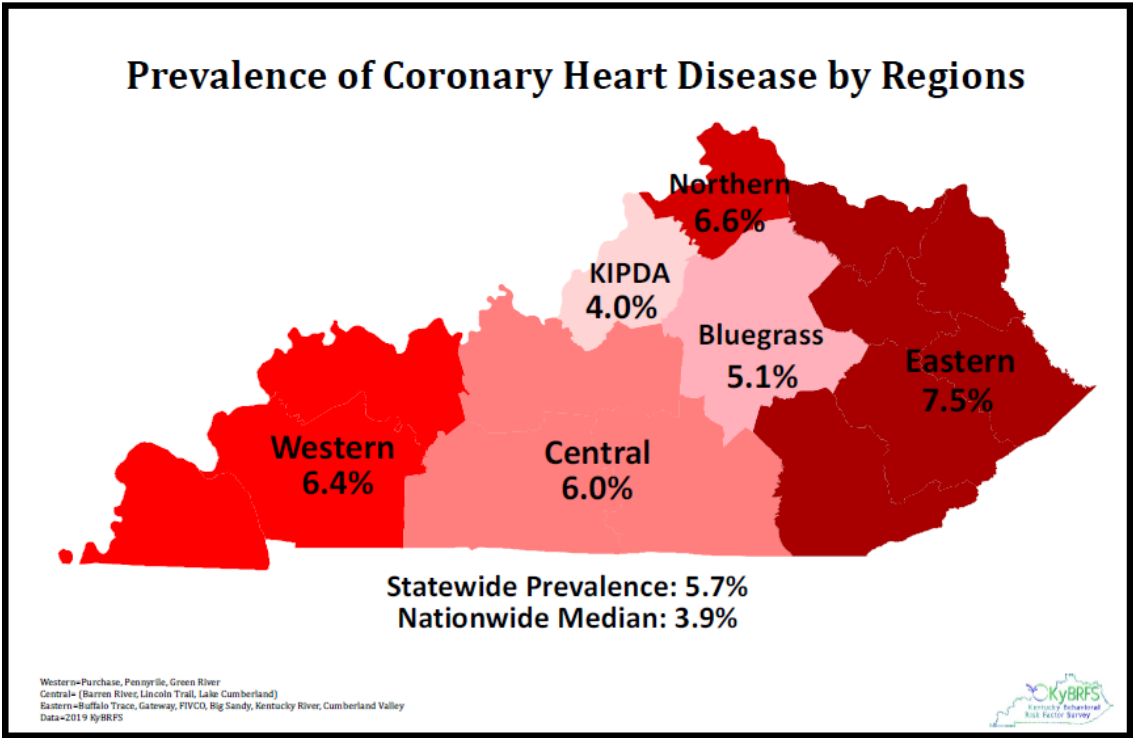
High Blood Pressure Prevalence by State, 2021



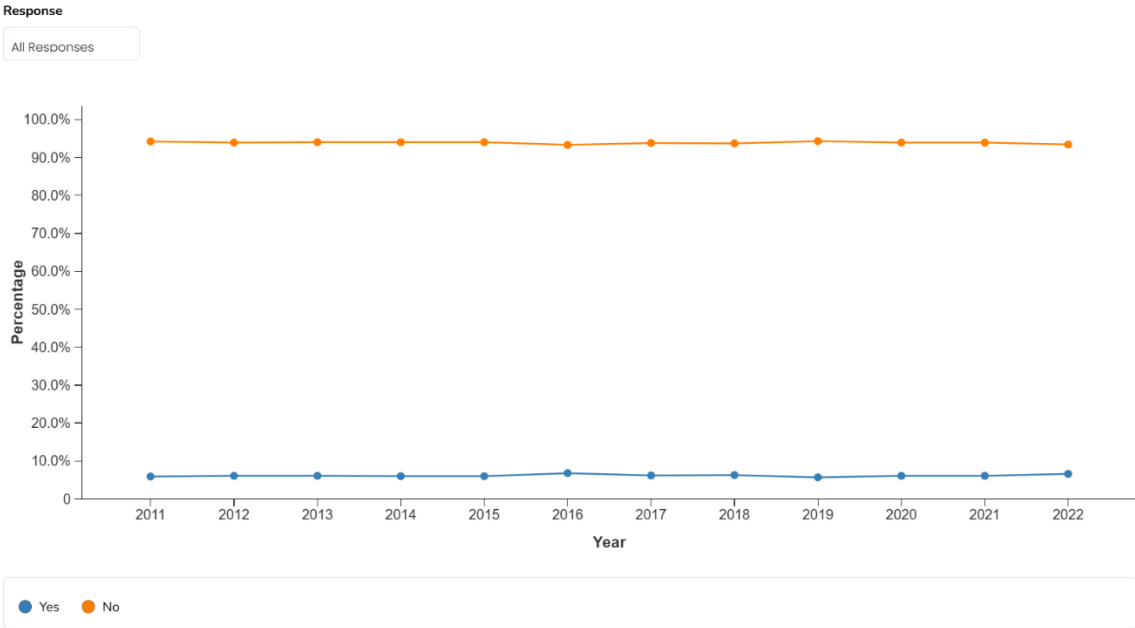
<https://data.cdc.gov/Behavioral-Risk-Factors/BRFSS-Graph-of-Current-Prevalence-of-High-Blood-Pr/wqmg-a9hj>

Coronary Heart Disease Prevalence in KY

2019



2011-2022

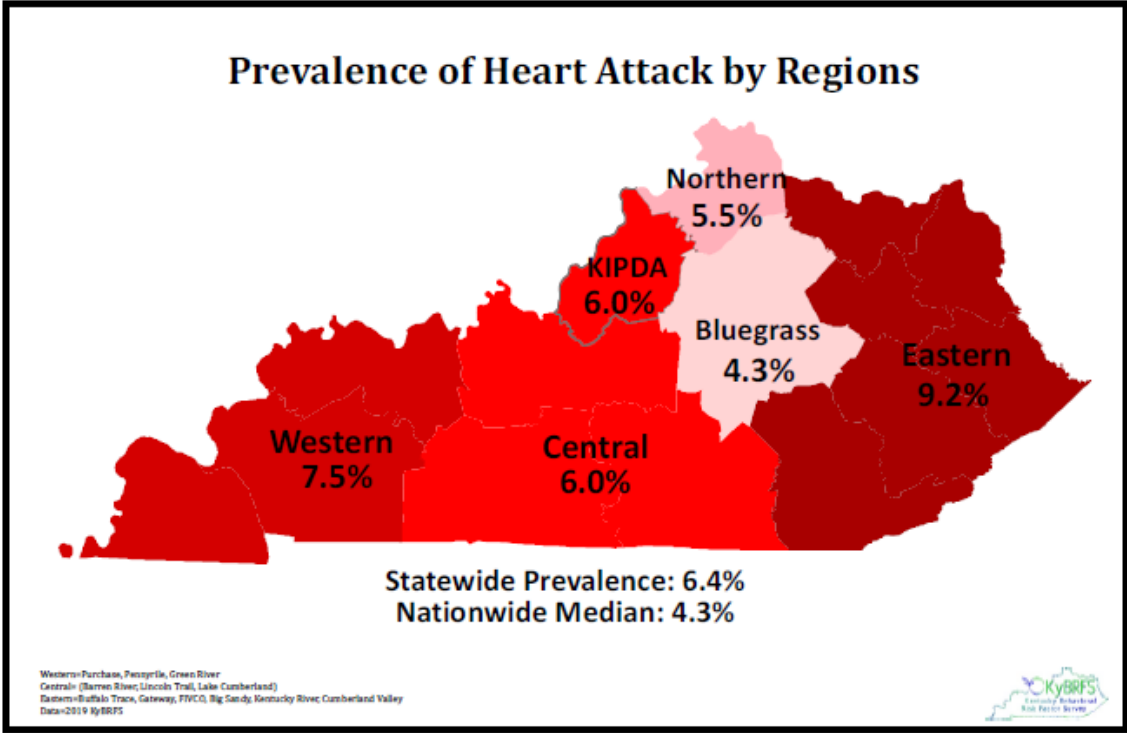


Data Source: [Behavioral Risk Factor Surveillance System \(BRFSS\)](https://www.cdc.gov/brfss/brfssprevalence/)

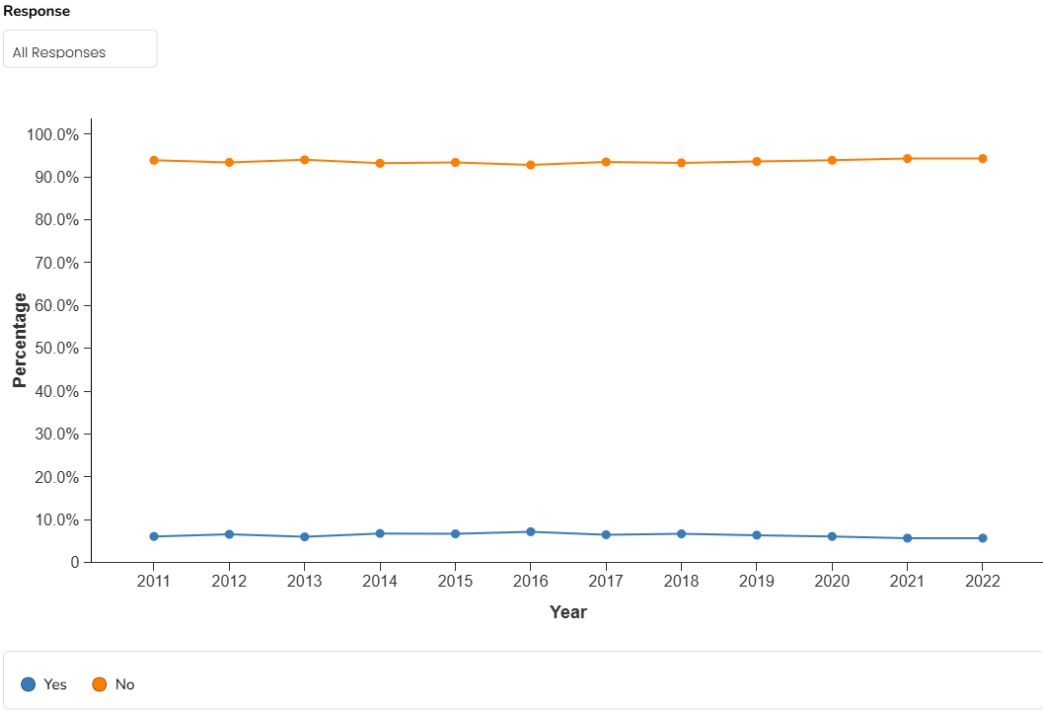
2019 Kentucky Behavior Risk Factor Survey
<https://www.cdc.gov/brfss/brfssprevalence/>

Heart Attack Prevalence in KY

2019



2011-2022

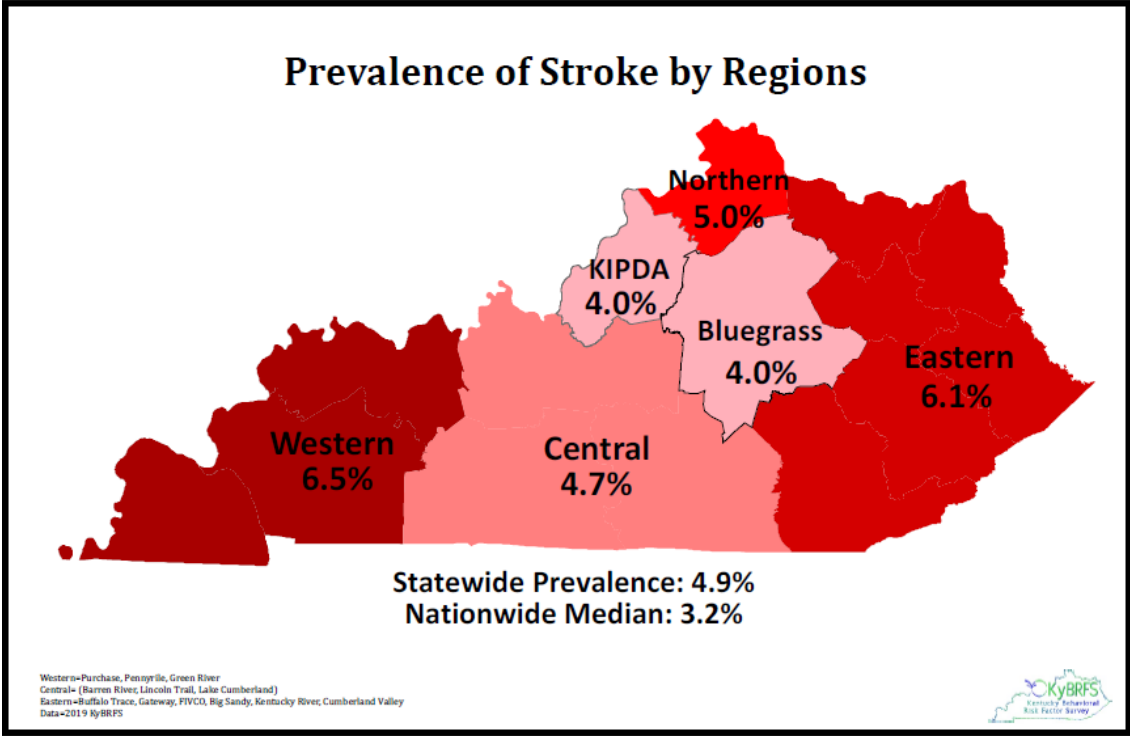


Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

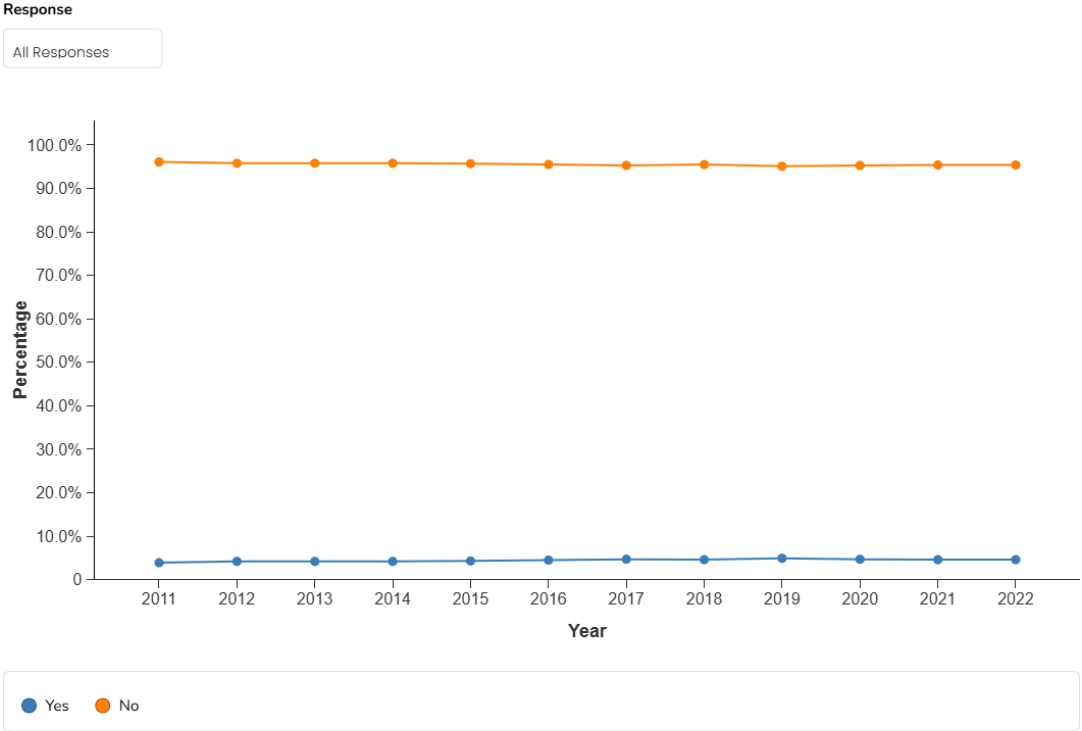
2019 Kentucky Behavior Risk Factor Survey
<https://www.cdc.gov/brfss/brfssprevalence/>

Stroke Prevalence in KY

2019



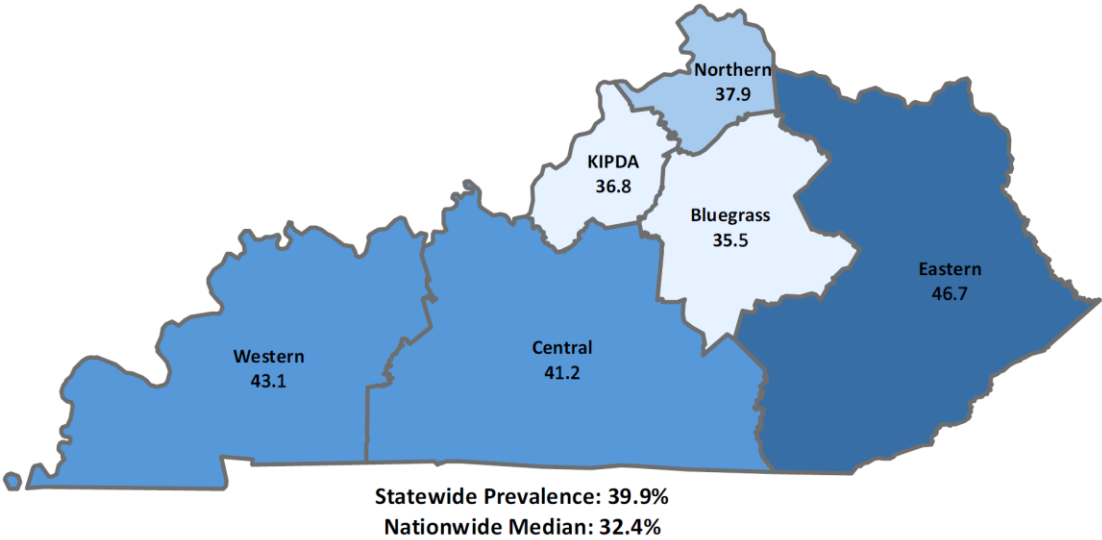
2011-2022



Data Source: [Behavioral Risk Factor Surveillance System \(BRFSS\)](https://www.cdc.gov/brfss/brfssprevalence/)

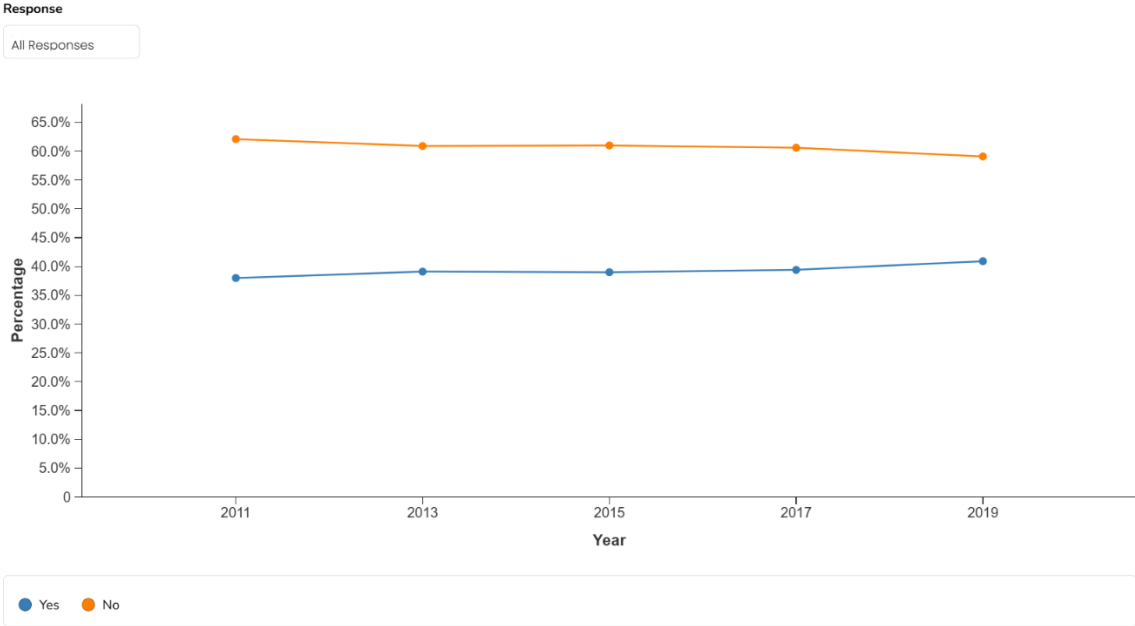
High Blood Pressure Prevalence in KY

2021



2021 Hypertension prevalence by region

2011-2019

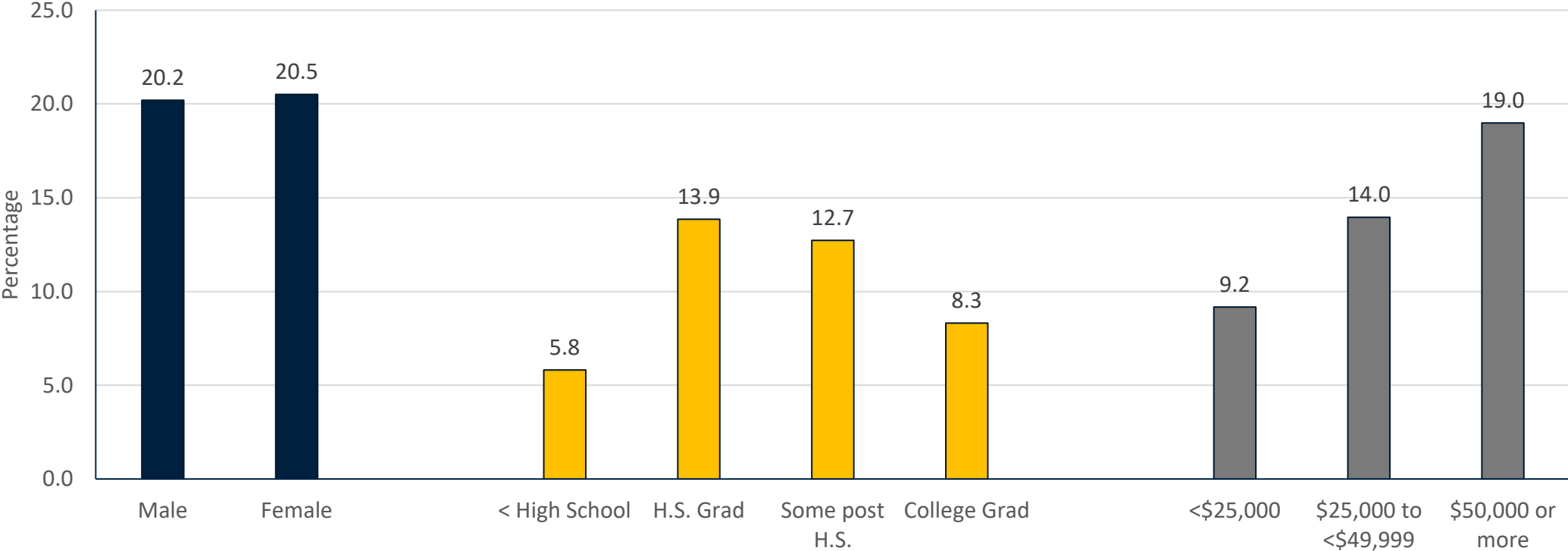


Data Source: [Behavioral Risk Factor Surveillance System \(BRFSS\)](https://www.cdc.gov/brfss/)

2019 Kentucky Behavior Risk Factor Survey
<https://www.cdc.gov/brfss/brfssprevalence/>

High Blood Pressure Prevalence in KY, 2022

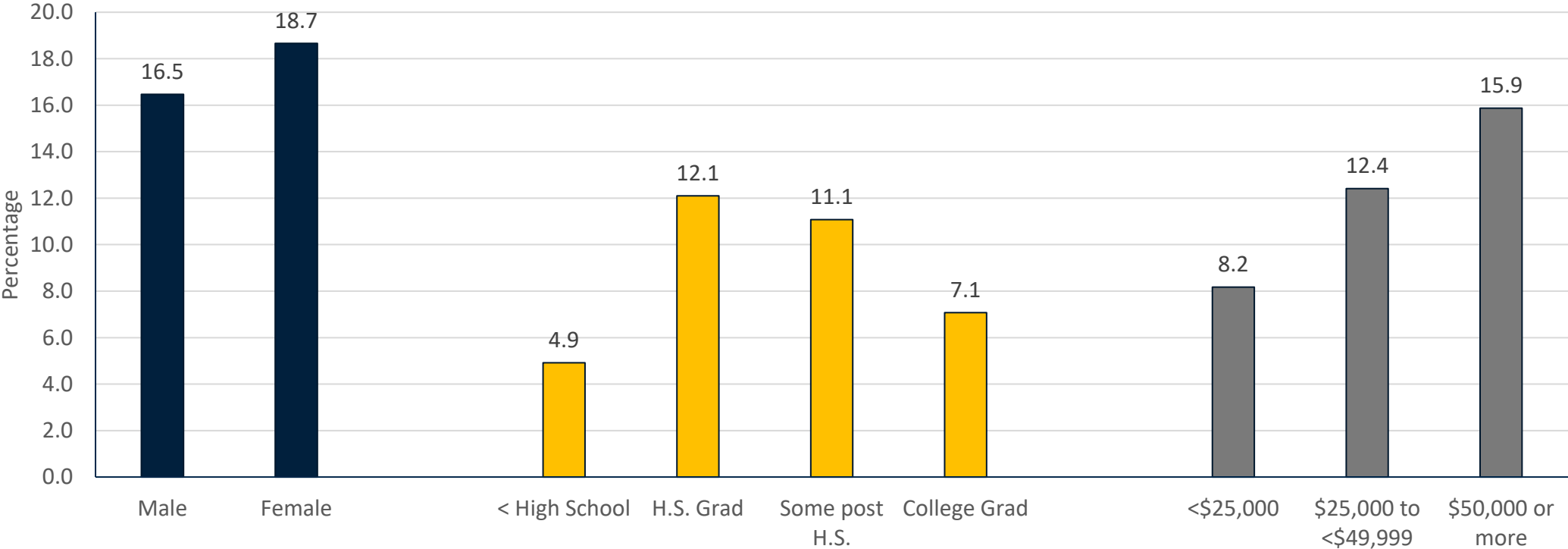
Percent of KY adults who have High Blood Pressure by Sex, Education & Income, 2022 KyBRFS



Data from 2022 KyBRFS Optional SMBP Module. Personal communication S. Kanotra and J. Buolay. 2025

Self Measured Blood Pressure (SMBP)

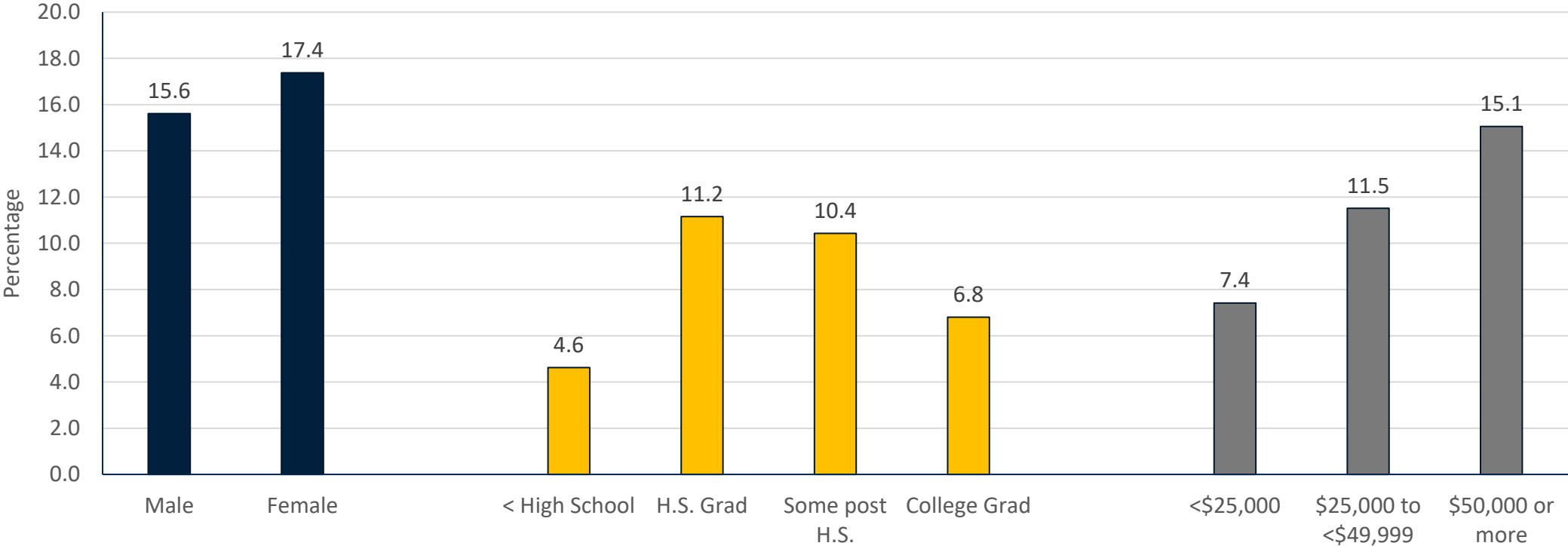
Percent of KY adults who were asked to check their BP at home by Sex, Education & Income, 2022 KyBRFS



Data from 2022 KyBRFS Optional SMBP Module. Personal communication S. Kanotra and J. Buolay. 2025

SMBP Monitoring, 2022

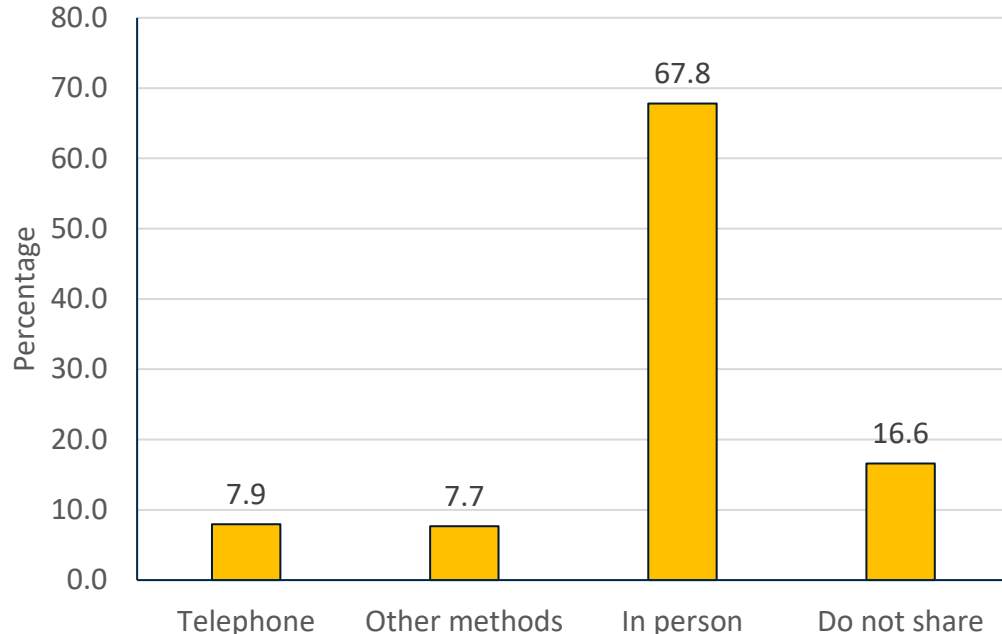
Percent of KY adults who regularly check their BP by Sex, Education & Income, 2022 KyBRFS



Data from 2022 KyBRFS Optional SMBP Module. Personal communication S. Kanotra and J. Buolay. 2025

Sharing BP Logs with Providers

Methods by which KY adults share their blood pressure readings with healthcare providers

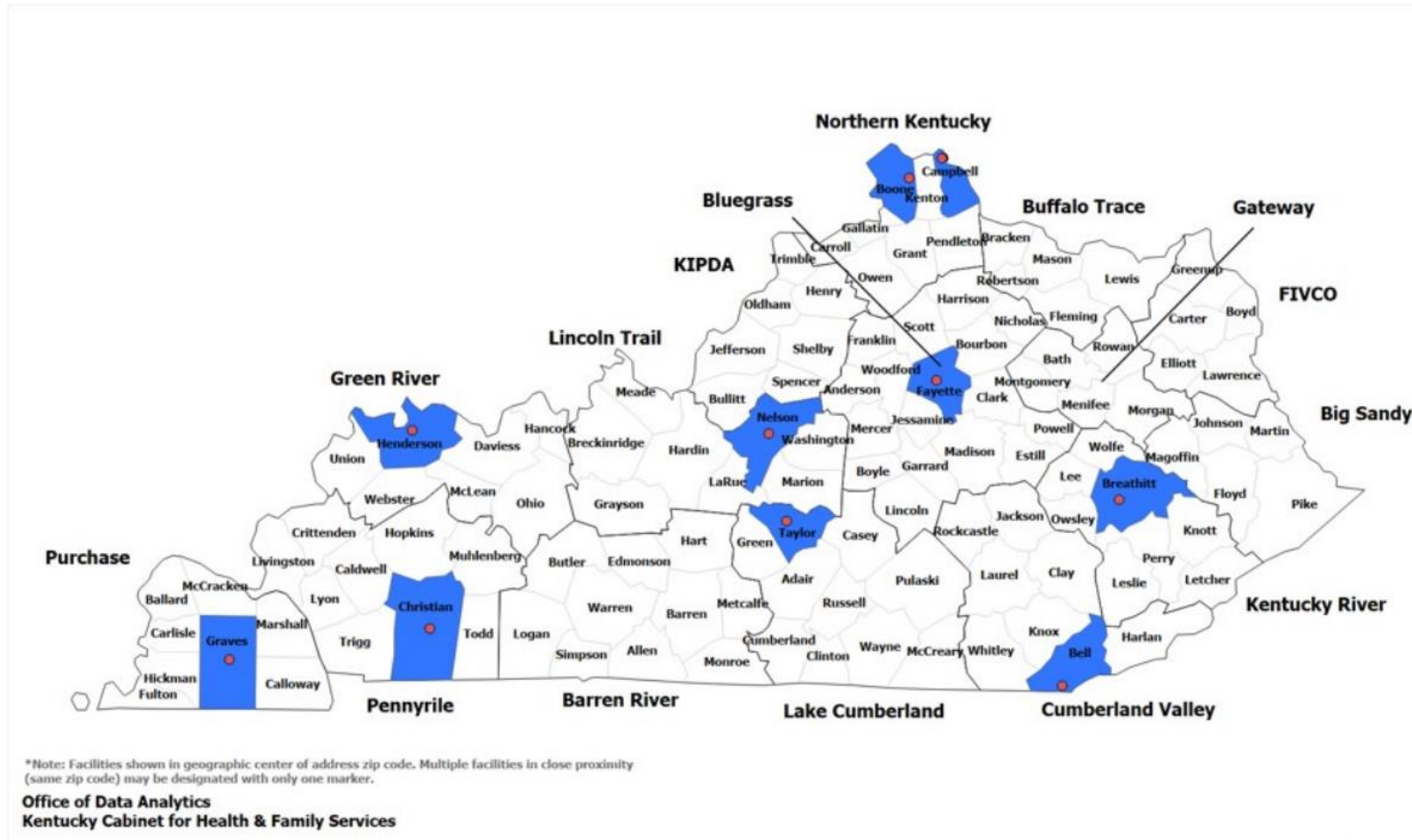


Providers use out-of-office BP measurements to:

- confirm a suspected diagnosis of hypertension
- assess the effectiveness of treatment
- to identify whitecoat and masked hypertension

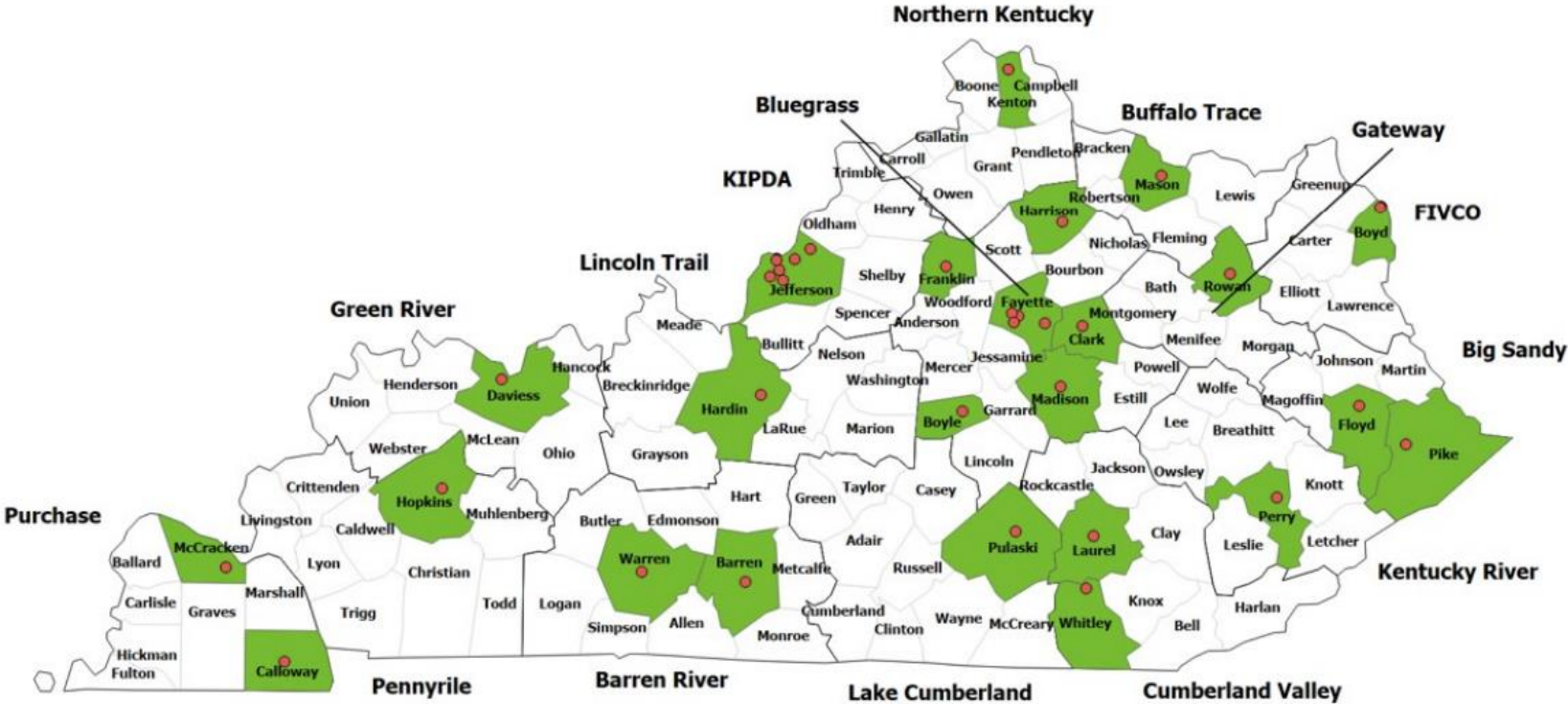
Data from 2022 KyBRFS Optional SMBP Module. Personal communication S. Kanotra and J. Buolay. 2025 <https://www.ama-assn.org/delivering-care/hypertension/6-takeaways-doctors-should-know-about-new-smbp-policy-statement>

Diagnostic Cardiac Catheterization Facilities, 2023



<https://www.chfs.ky.gov/agencies/ohda/Documents/2023CardiacCathReport.pdf>

Therapeutic Cardiac Catheterization Facilities, 2023



*Note: Facilities shown in geographic center of address zip code. Multiple facilities in close proximity (same zip code) may be designated with only one marker.

Cabinet for Health & Family Services
Office of Data Analytics

<https://www.chfs.ky.gov/agencies/ohda/Documents/2023CardiacCathReport.pdf>

Cardiac Catheterization Trends

2023 ANNUAL ADMINISTRATIVE CLAIMS DATA REPORT - CARDIAC CATHETERIZATION

Table 4 - Trend of Therapeutic and Diagnostic Cardiac Catheterization Procedures by Facility ADD

Source: Kentucky CHFS, Office of Data Analytics, Health Facilities & Services Data

Facility ADD	All Therapeutic					Therapeutic & Diagnostic					All Diagnostic				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
01 - Purchase	1,429	1,125	538	624	653	939	738	790	904	1,114	3,709	2,727	2,444	2,400	2,562
02 - Pennyrite	436	286	96	119	132	331	226	263	307	369	1,106	802	770	759	907
03 - Green River	949	691	284	361	379	640	461	551	633	574	2,518	1,821	1,499	1,622	1,305
04 - Barren River	1,501	1,197	463	457	424	1,161	928	1,102	1,143	1,214	4,119	3,322	2,786	2,826	3,244
05 - Lincoln Trail	205	213	73	76	111	167	174	226	242	233	881	844	870	860	989
06 - Kentuckiana	4,683	3,679	1,278	1,312	1,552	3,537	2,831	4,118	4,130	4,295	12,649	9,638	9,130	9,624	10,306
07 - Northern Kentucky	1,972	1,498	540	634	629	1,428	1,129	1,501	1,411	1,443	4,791	3,748	3,083	3,312	3,534
08 - Buffalo Trace	318	280	138	133	55	163	170	205	179	131	1,150	1,050	1,137	1,138	1,353
09 - Gateway	161	136	21	22	27	145	123	168	164	153	705	572	640	579	598
10 - FIVCO	1,249	886	367	422	578	939	659	785	786	841	4,450	2,940	3,114	2,827	2,708
11 - Big Sandy	678	497	211	200	278	437	328	426	480	445	2,280	1,778	1,722	1,589	1,589
12 - Kentucky River	268	258	104	134	144	225	224	233	225	175	1,112	857	745	875	686
13 - Cumberland Valley	581	386	99	156	160	467	335	399	399	372	1,525	1,124	978	1,044	1,332
14 - Lake Cumberland	423	357	123	138	135	286	282	324	366	427	2,173	1,687	1,705	1,801	1,818
15 - Bluegrass	5,271	4,048	1,755	1,931	2,029	3,518	2,803	3,145	3,043	3,369	12,361	9,505	7,864	7,467	8,165
Statewide Total	20,124	15,537	6,090	6,719	7,286	14,383	11,411	14,236	14,412	15,155	55,529	42,415	38,487	38,723	41,096

<https://www.chfs.ky.gov/agencies/ohda/Documents/2023CardiacCathReport.pdf>

Economic Burden of CVDs, US

- 🏥 Direct and indirect costs of total CVDs were **\$417.9** billion
 - \$233.3 billion in direct costs
 - \$184.6 billion in indirect costs/mortality
 - Between 2020 and 2021



https://www.heart.org/en/-/media/PHD-Files-2/Science-News/2/2025-Heart-and-Stroke-Stat-Update/2025-Statistics-At-A-Glance.pdf?sc_lang=en

Economic Burden of CVDs, KY

- 🛡️ Heart disease alone costs Kentucky approximately **\$280 billion** per year, which includes health care expenditures and lost worker productivity.
- 🛡️ KY spends an estimated **\$2.37 billion** on direct medical expenses for ASCVD care each year.
- 🛡️ Heart failure is estimated to cost Medicaid **\$29,271-\$51,937** per beneficiary per year.
- 🛡️ Investing **\$10** per person per year in chronic disease prevention efforts, Kentucky could save **\$248 million** dollars in five years (a return on investment of 6 to 1).

<https://louisville.edu/sphis/departments/cik/docs-and-pdfs-1/policy-considerations-to-address-chronic-disease-in-kentucky>
<https://takehealthtoheart.org/wp-content/uploads/2023/02/THtH-State-CVD-Outlook-KY.pdf>
https://uknowledge.uky.edu/cber_infographics/4/

Inpatient Hospital Charges for Diseases of the Heart* by Patient ADD, 2024

ADD	2024			
	Cases	ALOS	Avg Charge	Total Charges
01 - Purchase	2,424	4.54	\$105,850.73	\$256,582,173.32
02 - Pennyrile	2,081	5.16	\$105,669.24	\$219,897,696.06
03 - Green River	2,143	4.30	\$67,170.88	\$143,947,193.59
04 - Barren River	4,177	4.89	\$74,906.04	\$312,882,532.52
05 - Lincoln Trail	3,449	4.85	\$104,403.98	\$360,089,337.87
06 - KIPDA	11,848	5.22	\$110,054.55	\$1,303,926,323.39
07 - Northern Kentucky	5,041	5.00	\$72,769.54	\$366,831,257.88
08 - Buffalo Trace	630	3.53	\$78,694.15	\$49,577,316.66
09 - Gateway	1,091	4.09	\$68,673.12	\$74,922,372.32
10 - Fivco	2,230	3.87	\$65,610.96	\$146,312,448.19
11 - Big Sandy	2,231	5.56	\$92,290.60	\$205,900,330.51
12 - Kentucky River	1,678	5.01	\$90,160.54	\$151,289,382.87
13 - Cumberland Valley	3,505	4.56	\$85,220.20	\$298,696,790.53
14 - Lake Cumberland	2,806	4.75	\$102,529.35	\$287,697,366.27
15 - Bluegrass	8,365	4.68	\$96,395.01	\$806,344,274.27
Out of State	4,847	4.86	\$111,036.93	\$538,196,009.81
Total	58,546	4.84	94,337.66	\$5,523,092,806.06

*Primary ICD-10 diagnosis Code (any): I00-I09, I11, I13, I20-I51.
 ADD= Area Development District ALOS= Average length of stay.

Kentucky Hospital Inpatient Claims 2024; Kentucky Cabinet for Health and Family Services, Office of Data Analytics

Inpatient Hospital Charges for Cerebro-vascular Diseases* by Patient ADD, 2024

ADD	2024			
	Cases	ALOS	Avg Charge	Total Charges
01 - Purchase	736	5.01	\$80,050.98	\$58,917,523.27
02 - Pennyrite	569	7.11	\$72,250.85	\$41,110,733.91
03 - Green River	603	6.07	\$58,632.72	\$35,355,530.28
04 - Barren River	971	7.89	\$58,143.25	\$56,457,092.07
05 - Lincoln Trail	1,079	6.83	\$99,433.36	\$107,288,597.86
06 - KIPDA	3,618	7.49	\$112,112.04	\$405,621,356.88
07 - Northern Kentucky	1,525	7.47	\$48,744.08	\$74,334,722.45
08 - Buffalo Trace	199	7.24	\$80,689.62	\$16,057,233.89
09 - Gateway	318	6.64	\$73,784.55	\$23,463,487.87
10 - Fivco	470	4.43	\$57,332.18	\$26,946,122.27
11 - Big Sandy	513	8.46	\$93,214.49	\$47,819,034.82
12 - Kentucky River	428	8.98	\$99,698.14	\$42,670,802.46
13 - Cumberland Valley	886	7.42	\$94,326.86	\$83,573,600.07
14 - Lake Cumberland	847	7.89	\$97,877.01	\$82,901,825.87
15 - Bluegrass	2,716	7.92	\$97,815.31	\$265,666,368.57
Out of State	1,604	6.38	\$98,092.38	\$157,340,176.55
Total	17,082	7.24	\$89,305.95	\$1,525,524,209.09

* Primary ICD-10 diagnosis Code (any): I60-I69.

ADD= Area Development District ALOS= Average length of stay

Kentucky Hospital Inpatient Claims, 2024; Kentucky Cabinet for Health and Family Services, Office of Data Analytics

Thank you.

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