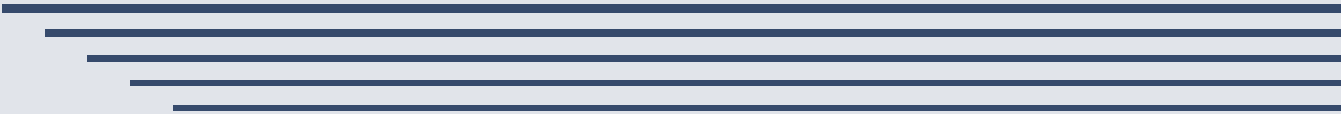
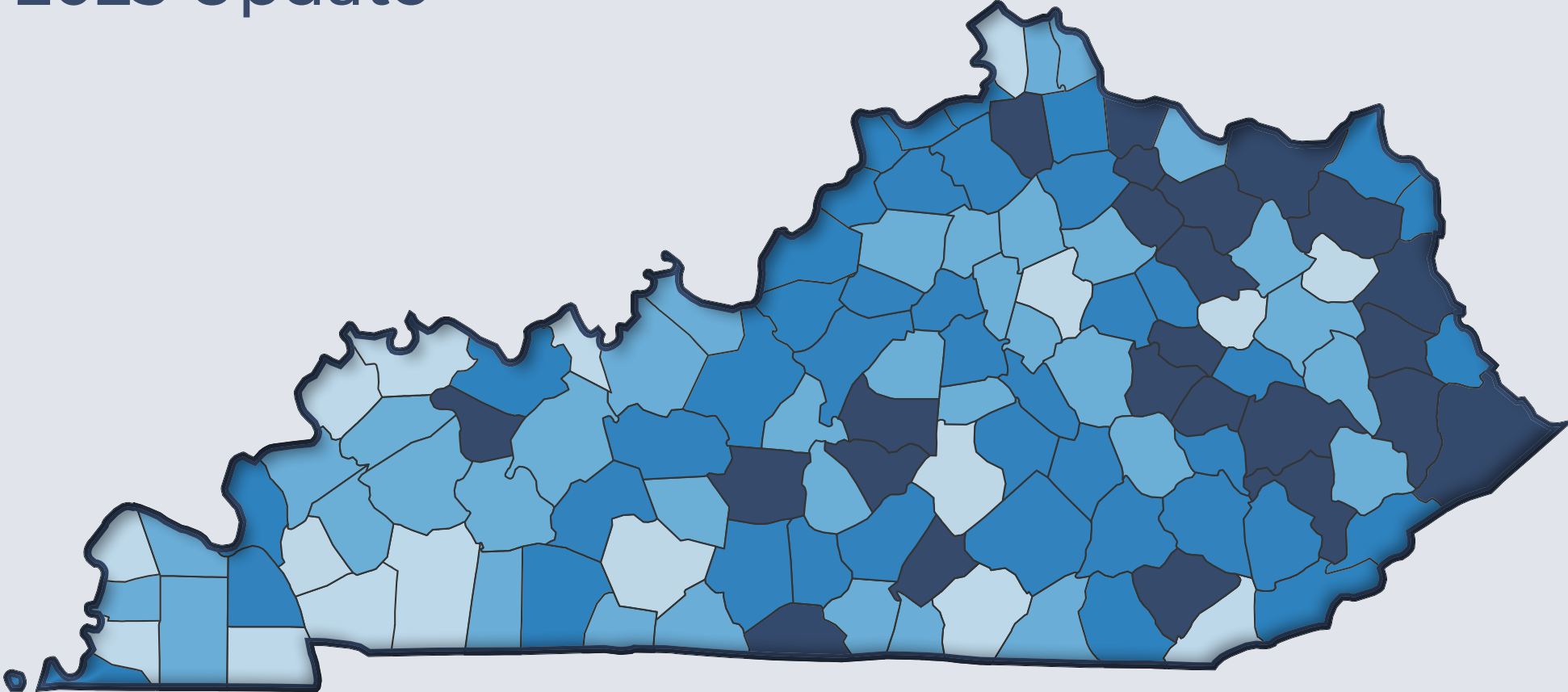


KENTUCKY CANCER NEEDS ASSESSMENT

2025 Update



Behavioral Risk Factors & Cancer Screenings At-A-Glance

Adults

	KY vs US (all race/ethnicity)	KY vs US (Black)	KY vs US (Hispanic)	KY vs US (male)	KY vs US (female)	Rural KY vs Urban KY	App KY vs Non-App KY
Currently smoke	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red	Dark Red	Dark Red
Currently drink alcohol	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray
Unhealthy drinking	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray
Obese (BMI 30+)	Dark Red	Light Gray	Light Gray	Dark Red	Light Gray	Light Gray	Light Gray
Unhealthy weight	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red	Light Gray	Dark Red
Physically inactive	Dark Red	Light Gray	Light Gray	Dark Red	Light Gray	Dark Red	Light Gray
Sleep <6 hours per day	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red	Light Gray	Light Gray
Breast cancer screening (50-74 years)	Light Gray	Light Gray	Light Gray	Dark Gray	Light Gray	Light Gray	Light Gray
Breast cancer screening (40-74 years)	Light Gray	Light Gray	Light Gray	Dark Gray	Light Gray	Light Gray	Light Gray
Colorectal cancer screening (45-75 years)	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Dark Red
Lung cancer screening (50-80 years)	Light Gray	Dark Red	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray

Youth

	KY vs US (all race/ethnicity)	KY vs US (Black)	KY vs US (Hispanic)	KY vs US (male)	KY vs US (female)
Ever smoked	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red
Currently smoke	Dark Red	Light Gray	Light Gray	Dark Red	Light Gray
Ever vaped	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red
Currently vape	Dark Red	Light Gray	Light Gray	Dark Red	Dark Red
Obese (BMI 30+)	Dark Red	Light Gray	Light Gray	Dark Red	Light Gray
Physically inactive	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray

- First group is doing significantly worse than the second group
- First group is **not** doing significantly worse than the second group
- Not applicable

Sources:
 Adults — BRFSS & KyBRFSS, 2022
 Youth — YRBS, 2021 & 2023

Cancer Rates At-A-Glance

Rankings

“In KY” = ranking among cancer sites within Kentucky

“vs US” = ranking for KY among US states

Red/blue blocks indicate a significantly higher rate for the first group listed versus the second group. Grey blocks indicate that data was not obtained/not available.

	RANKINGS			
	Incidence		Mortality	
	In KY	vs US	In KY	vs US
All Cancer Sites	-	1	-	2
Female Breast	1	32	2	9
Prostate	2	28	3	42
Lung and Bronchus	3	1	1	1
Colon and Rectum	4	2	4	4
Melanoma	5	10	19	7
Corpus and Uterus, NOS	6	24	13	40
Urinary Bladder	7	9	10	3
Kidney and Renal Pelvis	8	4	14	6
Non-Hodgkin Lymphoma	9	9	8	2
Leukemia	10	6	6	3
Oral Cavity and Pharynx	11	5	16	4
Pancreas	12	13	5	16
Thyroid	13	18	-	-
Cervix Uteri	14	3	17	9
Liver and IBD	15	11	7	22
Ovary	16	46	9	47
Myeloma	17	15	15	18
Brain and ONS	18	6	11	20
Stomach	19	16	18	23
Testis	20	39	-	-
Esophagus	-	-	12	9
Larynx	-	-	20	3

	DISPARITIES							
	Incidence				Mortality			
	KY vs US	Rural vs Urban KY	App vs Non-App KY	Black vs White KY	KY vs US	Rural vs Urban KY	App vs Non-App KY	Black vs White KY
All Cancer Sites	Blue	Blue	Blue	Grey	Red	Red	Red	Grey
Female Breast	Grey	Grey	Grey	Grey	Red	Red	Red	Red
Prostate	Grey	Grey	Grey	Blue	Grey	Grey	Grey	Red
Lung and Bronchus	Blue	Blue	Blue	Grey	Red	Red	Red	Grey
Colon and Rectum	Blue	Blue	Blue	Grey	Red	Red	Red	Red
Melanoma	Blue	Grey	Grey	Grey	Red	Red	Grey	Grey
Corpus and Uterus, NOS	Grey	Blue	Blue	Grey	Grey	Grey	Grey	Red
Urinary Bladder	Blue	Blue	Blue	Grey	Red	Grey	Grey	Grey
Kidney and Renal Pelvis	Blue	Grey	Grey	Grey	Red	Red	Red	Grey
Non-Hodgkin Lymphoma	Blue	Grey	Grey	Grey	Red	Red	Grey	Grey
Leukemia	Blue	Grey	Grey	Grey	Red	Red	Red	Grey
Oral Cavity and Pharynx	Blue	Grey	Grey	Grey	Red	Grey	Grey	Grey
Pancreas	Grey	Grey	Grey	Blue	Grey	Grey	Grey	Red
Thyroid	Grey	Blue	Blue	Grey	Grey	Grey	Grey	Grey
Cervix Uteri	Blue	Grey	Blue	Grey	Red	Red	Red	Grey
Liver and IBD	Grey	Grey	Grey	Blue	Grey	Grey	Grey	Red
Ovary	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Myeloma	Grey	Grey	Grey	Blue	Grey	Grey	Grey	Red
Brain and ONS	Blue	Grey	Grey	Grey	Red	Grey	Grey	Grey
Stomach	Grey	Grey	Blue	Blue	Grey	Red	Red	Red
Testis	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Esophagus	Grey	Grey	Grey	Grey	Red	Red	Red	Grey
Larynx	Grey	Grey	Grey	Grey	Red	Red	Red	Grey

Opportunities for Action At-A-Glance

Colored blocks indicate evidence-based risk reduction strategies or clinical guidelines.

	OPPORTUNITIES FOR ACTION								
	Risk Reduction						Clinical		
	Tobacco	Obesity	Alcohol	HPV	HIV	Hepatitis	Germline Testing	Screening	Precision Medicine
Female Breast									
Prostate									
Lung and Bronchus									
Colon and Rectum									
Melanoma									
Corpus and Uterus, NOS									
Urinary Bladder									
Kidney and Renal Pelvis									
Non-Hodgkin Lymphoma									
Leukemia									
Oral Cavity and Pharynx									
Pancreas									
Thyroid									
Cervix Uteri									
Liver and IBD									
Ovary									
Myeloma									
Brain and ONS									
Stomach									
Testis									
Esophagus									
Larynx									

Additional Information

Definitions

Currently smoke = smoked at least one cigarette in the past 30 days

Currently vape = used an electronic vapor product to consume nicotine in the past 30 days

Currently drink alcohol = had at least one alcoholic drink in the past 30 days

Unhealthy drinking = average drinking one (females) or two (males) alcoholic drinks per day OR had at least one session of drinking at least four (females) or five (males) drinks in the past 30 days

Unhealthy weight = have a body mass index of less than 18.5 or more than 24.9

Physically inactive = participated in no leisure time activity or exercise in the past 30 days (adults) or did not have 60 minutes of physical activity or exercise in the past week (youth)

Breast cancer screening = percentage of eligible females that have met USPSTF breast cancer screening guidelines, e.g. aged 50-74 years (or 40-74 years under new guidelines) with a mammogram to check for breast cancer in the past two years.

Colorectal cancer screening = percentage of eligible individuals that have met USPSTF colorectal cancer screening guidelines, e.g. aged 45-75 years with either a fecal-occult blood test or FIT in the past year, a stool-based DNA test in the past three years, a sigmoidoscopy in the past five years, or a colonoscopy in the past 10 years.

Lung cancer screening = percentage of eligible individuals that have met USPSTF lung cancer screening guidelines, e.g. aged 50-80 years old, who either currently smoke or quit smoking in the last 15 years, and have accumulated a 20 pack-year smoking history, with a low-dose CT scan to check for lung cancer in the past year

Acronyms

App = Appalachian

BMI = body mass index

IBD = intrahepatic bile duct

NOS = not otherwise specified

ONS = other nervous system

USPSTF = US Preventive Services Task Force

Note

Germline testing refers to testing individuals for markers of inherited cancer risk. Special thanks to Justine Pickarski and the Markey Cancer Center Molecular Tumor Board for supplying guidance on clinical opportunities for action.

Sources

Behavioral Risk Factor Surveillance System (BRFSS), Centers for Disease Control and Prevention, 2022

Kentucky Behavioral Risk Factor Survey (KyBRFS), Kentucky Cabinet for Health and Family Services, 2022

National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, 2017-2022

Surveillance, Epidemiology, and End Results Program 22 Registries Database (SEER 22), National Cancer Institute, 2017-2021

Youth Risk Behavior Survey (YRBS), Centers for Disease Control and Prevention, 2021 & 2023

Appendix: Behavioral Risk Factors & Cancer Screenings Table

Adult Measures	KY	Black KY	Hispanic KY	Male KY	Female KY	Rural KY	App KY	US
Currently smoke	17.4 *	20.1	19.4	19.4 *	15.5 *	19.4 *	21.6 *	12.8
Currently drink alcohol	35.2	31.6	37.2	40.8	29.9	26.8	24.0	53.0
Unhealthy drinking	13.8	11.8	13.1	17.8	10.0	10.2	8.7	18.1
Obese (BMI 30+)	37.7 *	41.6	43.7	38.7 *	36.7	39.0	41.0	33.3
Unhealthy weight	73.7 *	71.7	74.0	77.1 *	70.1 *	75.9	76.6 *	69.4
Physically inactive	26.4 *	34.3	32.5	25.7 *	27.1	29.0 *	28.9	23.7
Sleep <6 hours per day	16.4 *	18.4	22.8	17.5 *	15.3 *	16.1	15.7	12.4
Breast cancer screening (50-74 years)	72.9	77.9	65.9	NA	72.9	72.1	71.3	76.8
Breast cancer screening (40-74 years)	68.5	66.4	70.3	NA	68.5	68.1	67.0	71.7
Colorectal cancer screening (45-75 years)	67.2	61.5	60.4	66.1	68.2	63.0	59.5 *	66.3
Lung cancer screening (50-80 years)	21.4	7.8 *	69.4	23.0	19.6	19.7	15.2	18.1

Youth Measures	KY	Black KY	Hispanic KY	Male KY	Female KY	US
Ever smoked	25.4 *	16.3	21.2	25.7 *	24.9 *	17.1
Currently smoke	5.1 *	3.2	4.7	5.8 *	4.0	3.6
Ever vaped	43.4 *	40.1	40.6	39.7 *	46.8 *	36.1
Currently vape	20.8 *	17.7	18.5	17.4 *	24.1 *	17.0
Obese (BMI 30+)	20.8 *	24.9	23.7	25.7 *	15.6	16.7
Physically inactive	15.8	18.6	18.7	13.5	18.0	16.8

* indicates significantly higher than comparison group

Comparison groups: (1) KY vs US; (2) Black KY vs Black US; (3) Hispanic KY vs Hispanic US; (4) Male KY vs Male US; (5) Female KY vs Female US; (6) Rural KY vs Urban KY; (7) App KY vs non-App KY. Rural and Appalachian not available for youth measures.

Source: BRFSS & KyBRFS, 2017-2021

Appendix: Cancer Incidence Rates Table

Site	Rank in US	KY	Rural KY	App KY	Black KY	US
All Sites	1	513.7 *	523.2 *	530.5 *	495.5	438.2
Female Breast	32	129.2	118.8	119.6	133.1	129.4
Prostate	28	113.9	104.4	96.8	188.8 *	116.6
Lung and Bronchus	1	84.5 *	94.4 *	99.0 *	76.2	47.9
Colon and Rectum	2	45.9 *	49.9 *	51.6 *	46.6	36.2
Melanoma	10	28.2 *	27.2	25.5	1.2	21.0
Corpus and Uterus, NOS	24	27.8	29.5 *	32.0 *	28.1	28.0
Urinary Bladder	9	21.7 *	23.1 *	23.1 *	12.2	18.0
Kidney and Renal Pelvis	4	21.4 *	21.3	21.3	22.3	17.1
Non-Hodgkin Lymphoma	9	19.6 *	19.4	19.6	15.5	18.6
Leukemia	6	16.4 *	16.4	16.6	13.1	14.0
Oral Cavity and Pharynx	5	14.0 *	14.1	14.0	9.8	11.4
Pancreas	13	13.9	13.8	13.5	17.1 *	13.5
Thyroid	18	13.7	16.0 *	18.4 *	8.8	13.5
Cervix Uteri	3	9.7 *	10.3	11.8 *	9.3	7.6
Liver and IBD	11	8.9	8.2	8.6	11.2 *	9.4
Ovary	46	8.6	8.9	8.8	6.3	10.3
Myeloma	15	7.2	6.6	6.7	13.7 *	7.2
Brain and ONS	6	7.1 *	7.5	7.0	4.7	6.1
Stomach	16	6.4	6.6	7.1 *	8.8 *	7.1
Testis	39	2.6	2.6	2.5	0.9	3.0

Rank in US, where 1 = highest, 51 = lowest

* indicates significantly higher than comparison group

Comparison groups: (1) KY vs US; (2) Rural KY vs Urban KY; (3) App KY vs Non-App KY; (4) Black KY vs White KY

Source: SEER 22, 2017-2021

Appendix: Cancer Mortality Rates Table

Site	Rank in US	KY	Rural KY	App KY	Black KY	US
All Sites	2	181.1 *	199.5 *	206.4 *	184.3	147.9
Lung and Bronchus	1	52.7 *	61.8 *	65.3 *	47.1	33.6
Female Breast	9	21.4 *	22.6 *	22.9 *	25.6 *	19.6
Prostate	42	18.4	18.0	17.5	36.8 *	19.2
Colon and Rectum	4	16.3 *	18.8 *	19.5 *	19.3 *	13.0
Pancreas	16	11.6	11.4	11.3	14.1 *	11.2
Leukemia	3	7.0 *	7.9 *	8.0 *	5.5	6.0
Liver and IBD	22	6.6	6.2	6.5	8.4 *	6.6
Non-Hodgkin Lymphoma	2	6.0 *	6.4 *	6.2	3.8	5.1
Ovary	47	5.5	5.8	5.9	4.0	6.2
Urinary Bladder	3	5.0 *	5.1	5.0	4.1	4.2
Brain and ONS	20	4.7 *	5.0	5.0	3.1	4.4
Esophagus	9	4.6 *	4.9 *	5.1 *	4.3	3.8
Corpus and Uterus, NOS	40	4.5	4.1	4.5	8.1 *	5.2
Kidney and Renal Pelvis	6	4.3 *	4.6 *	4.8 *	3.2	3.5
Myeloma	18	3.2	3.3	3.2	5.3 *	3.1
Oral Cavity and Pharynx	4	3.0 *	3.2	3.4	2.6	2.6
Cervix Uteri	9	2.8 *	3.2 *	3.6 *	2.7	2.2
Stomach	23	2.6	3.0 *	3.3 *	3.6 *	2.8
Melanoma	7	2.6 *	2.9 *	2.6	NA	2.0
Larynx	3	1.4 *	1.6 *	1.6 *	1.4	0.9

Rank in US, where 1 = highest, 51 = lowest

* indicates significantly higher than comparison group

Comparison groups: (1) KY vs US; (2) Rural KY vs Urban KY; (3) App KY vs Non-App KY; (4) Black KY vs White KY

Source: NCHS, 2017-2021

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