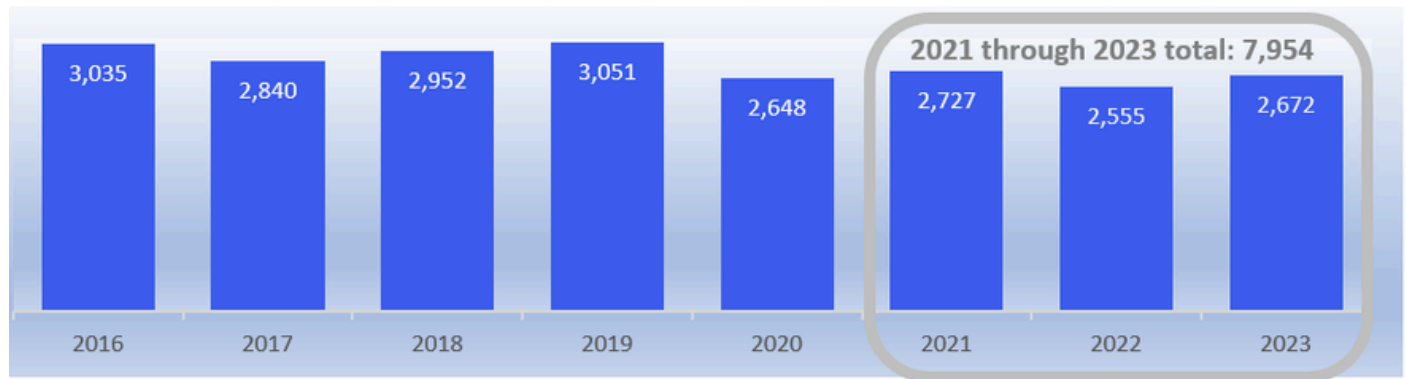




Hospitalizations for Pennsylvania Children with Cancer

This research brief examines inpatient hospitalizations for Pennsylvania children (under 18 years of age) who were admitted to a Pennsylvania general acute care hospital with a cancer diagnosis. Trends are shown for calendar years 2016 through 2023, with additional focus on hospitalizations from 2021 through 2023. The analysis does not include children admitted to a hospital outside Pennsylvania for cancer treatment.

From 2016 through 2023, annual inpatient hospitalizations for Pennsylvania children with a cancer diagnosis ranged from a low of 2,555 hospitalizations (in 2022) to a high of 3,051 hospitalizations (in 2019).



The results below focus primarily on the more recent 7,954 hospitalizations from 2021 through 2023.

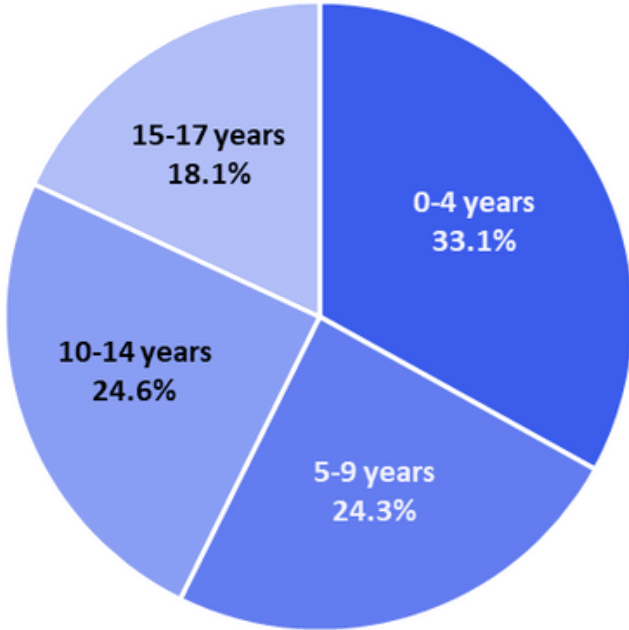
Childhood Cancer Hospitalizations by Cancer Type, 2021 - 2023

Because patients can have a diagnosis of more than one type of cancer during the same hospital stay, the sum of the categories shown below is higher than the total number of cancer hospitalizations (N=7,954). Overall, most (6,472 or 81.3%) of the 7,954 hospitalizations for childhood cancer included only one type of cancer.

Cancer Type	Cases	Average Length of Stay (in days)	Cases with Multiple Types of Cancer
Leukemia	2,280	11.3	2.9%
Secondary Cancers (Metastatic)	1,410	7.2	93.6%
Bone, Connective Tissue and Skin	1,361	4.7	31.9%
Brain and Nervous System	1,131	9.3	15.6%
Endocrine System	921	8.0	47.0%
Non-Hodgkin Lymphoma	512	8.5	11.3%
Urinary System	292	5.9	48.3%
Gastrointestinal	285	8.3	38.6%
Hodgkin Lymphoma	235	4.0	3.8%
Head and Neck	155	5.5	23.2%
Reproductive System	122	5.0	42.6%
Other	764	10.1	20.8%

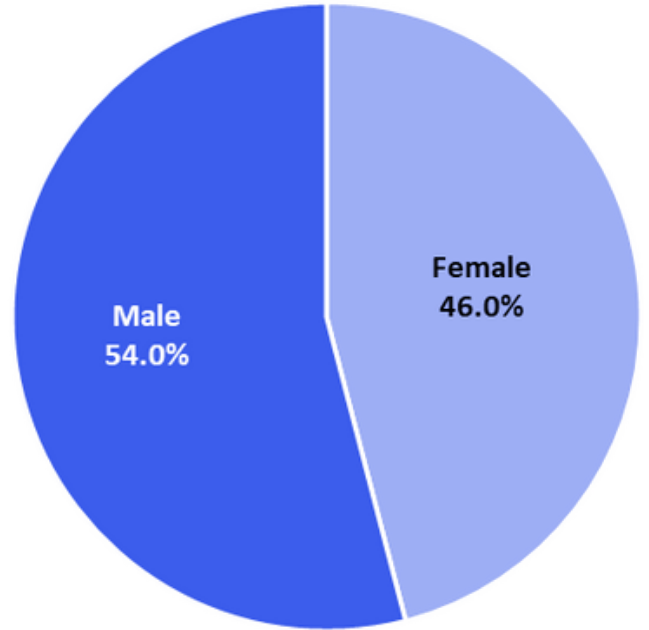
Childhood Cancer Hospitalizations, 2021 - 2023

By Age



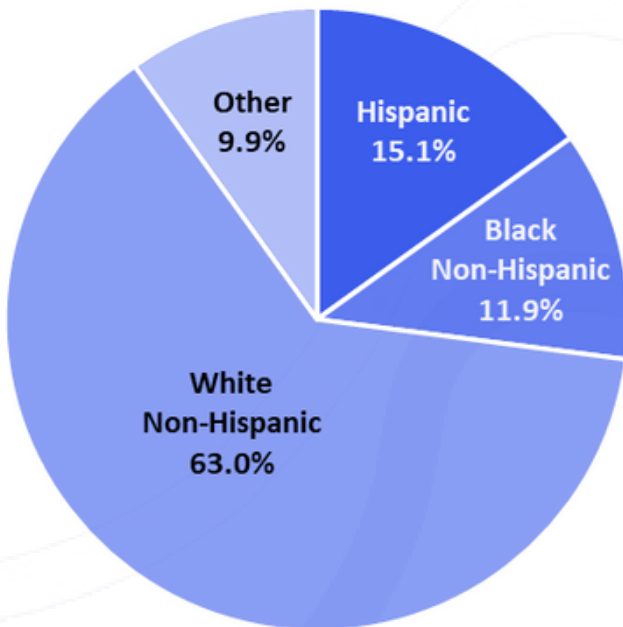
The youngest patients, age 0-4 years, accounted for the largest percent (33.1%) of childhood cancer hospitalizations.

By Sex



Male patients accounted for more than half (54.0%) of childhood cancer hospitalizations.

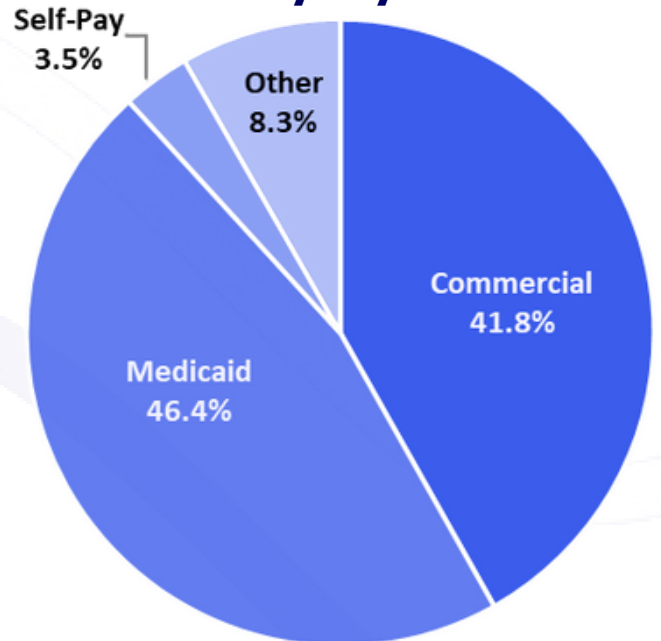
By Race and Ethnicity



White, Non-Hispanic patients accounted for the majority (63.0%) of childhood cancer hospitalizations.

Note: Pie chart percentages may not add to 100% due to rounding.

By Payer



Medicaid was the anticipated primary payer for 46.4% of childhood cancer hospitalizations.

RESEARCH BRIEF

Hospitalization Rates per 10,000 Child Residents by Cancer Type, 2021 - 2023

Leukemia

Demographic	Rate
Total	8.5
Age 0-4	11.0
Age 5-9	9.3
Age 10-14	6.4
Age 15-17	7.4
Black Non-Hispanic	7.2
Hispanic	9.7
White Non-Hispanic	8.2
Female	8.3
Male	8.7

Secondary (Metastatic)

Demographic	Rate
Total	5.3
Age 0-4	7.4
Age 5-9	4.8
Age 10-14	4.5
Age 15-17	4.1
Black Non-Hispanic	4.1
Hispanic	5.4
White Non-Hispanic	5.5
Female	5.3
Male	5.2

Bone, Connective Tissue, & Skin

Demographic	Rate
Total	5.1
Age 0-4	2.9
Age 5-9	4.3
Age 10-14	6.1
Age 15-17	7.6
Black Non-Hispanic	3.4
Hispanic	7.1
White Non-Hispanic	5.0
Female	5.3
Male	4.9

Brain and Nervous System

Demographic	Rate
Total	4.2
Age 0-4	5.7
Age 5-9	3.8
Age 10-14	4.3
Age 15-17	2.7
Black Non-Hispanic	2.6
Hispanic	4.3
White Non-Hispanic	4.6
Female	3.4
Male	5.0

Endocrine System

Demographic	Rate
Total	3.4
Age 0-4	7.7
Age 5-9	3.1
Age 10-14	1.7
Age 15-17	0.9
Black Non-Hispanic	5.0
Hispanic	3.5
White Non-Hispanic	3.1
Female	3.5
Male	3.4

Non-Hodgkin Lymphoma

Demographic	Rate
Total	1.9
Age 0-4	1.3
Age 5-9	1.7
Age 10-14	2.2
Age 15-17	2.5
Black Non-Hispanic	1.6
Hispanic	1.8
White Non-Hispanic	1.9
Female	1.3
Male	2.5

NR: Not reported due to low volume.

RESEARCH BRIEF
**Hospitalization Rates per 10,000 Child Residents
by Cancer Type, 2021 - 2023**
Urinary

<i>Demographic</i>	<i>Rate</i>
Total	1.1
Age 0-4	2.7
Age 5-9	1.1
Age 10-14	NR
Age 15-17	NR
Black Non-Hispanic	1.9
Hispanic	NR
White Non-Hispanic	0.9
Female	0.9
Male	1.2

Gastrointestinal

<i>Demographic</i>	<i>Rate</i>
Total	1.1
Age 0-4	2.3
Age 5-9	0.8
Age 10-14	0.6
Age 15-17	0.5
Black Non-Hispanic	0.6
Hispanic	1.2
White Non-Hispanic	1.2
Female	1.0
Male	1.1

Hodgkin Lymphoma

<i>Demographic</i>	<i>Rate</i>
Total	0.9
Age 0-4	NR
Age 5-9	NR
Age 10-14	1.1
Age 15-17	2.5
Black Non-Hispanic	1.2
Hispanic	0.8
White Non-Hispanic	0.8
Female	0.9
Male	0.9

Head and Neck

<i>Demographic</i>	<i>Rate</i>
Total	0.6
Age 0-4	0.8
Age 5-9	0.3
Age 10-14	0.6
Age 15-17	0.7
Black Non-Hispanic	1.2
Hispanic	NR
White Non-Hispanic	0.6
Female	0.6
Male	0.5

Reproductive System

<i>Demographic</i>	<i>Rate</i>
Total	0.5
Age 0-4	0.6
Age 5-9	NR
Age 10-14	NR
Age 15-17	1.3
Black Non-Hispanic	0.3
Hispanic	0.3
White Non-Hispanic	0.4
Female	0.5
Male	0.4

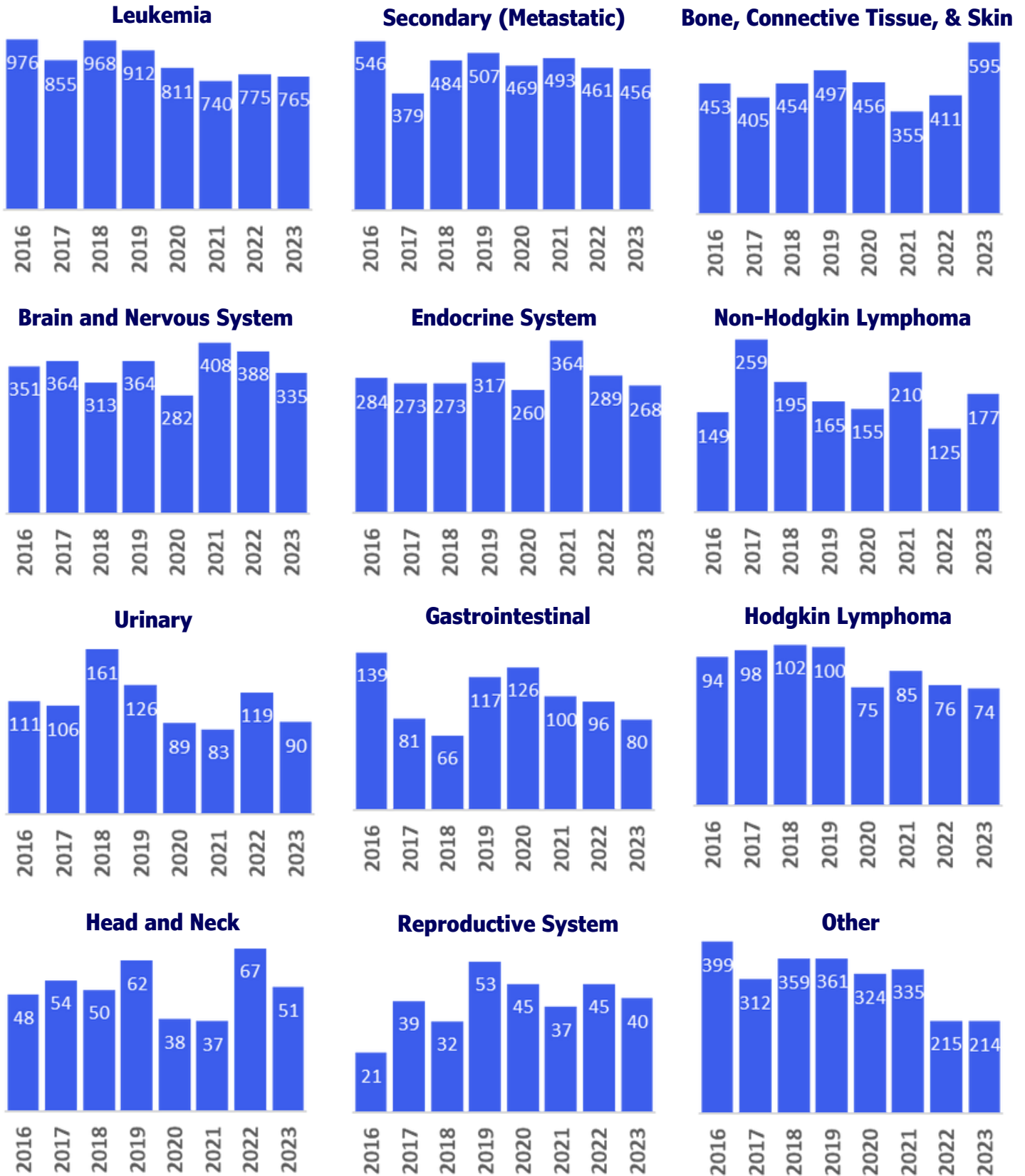
Other

<i>Demographic</i>	<i>Rate</i>
Total	2.9
Age 0-4	5.0
Age 5-9	1.5
Age 10-14	2.3
Age 15-17	2.8
Black Non-Hispanic	3.3
Hispanic	2.2
White Non-Hispanic	2.7
Female	2.6
Male	3.1

NR: Not reported due to low volume.

RESEARCH BRIEF

Trends in Childhood Cancer Hospitalizations by Cancer Type, 2016 - 2023



The vertical axes of the above charts are unique to each type of cancer, to better show the differences from year to year.

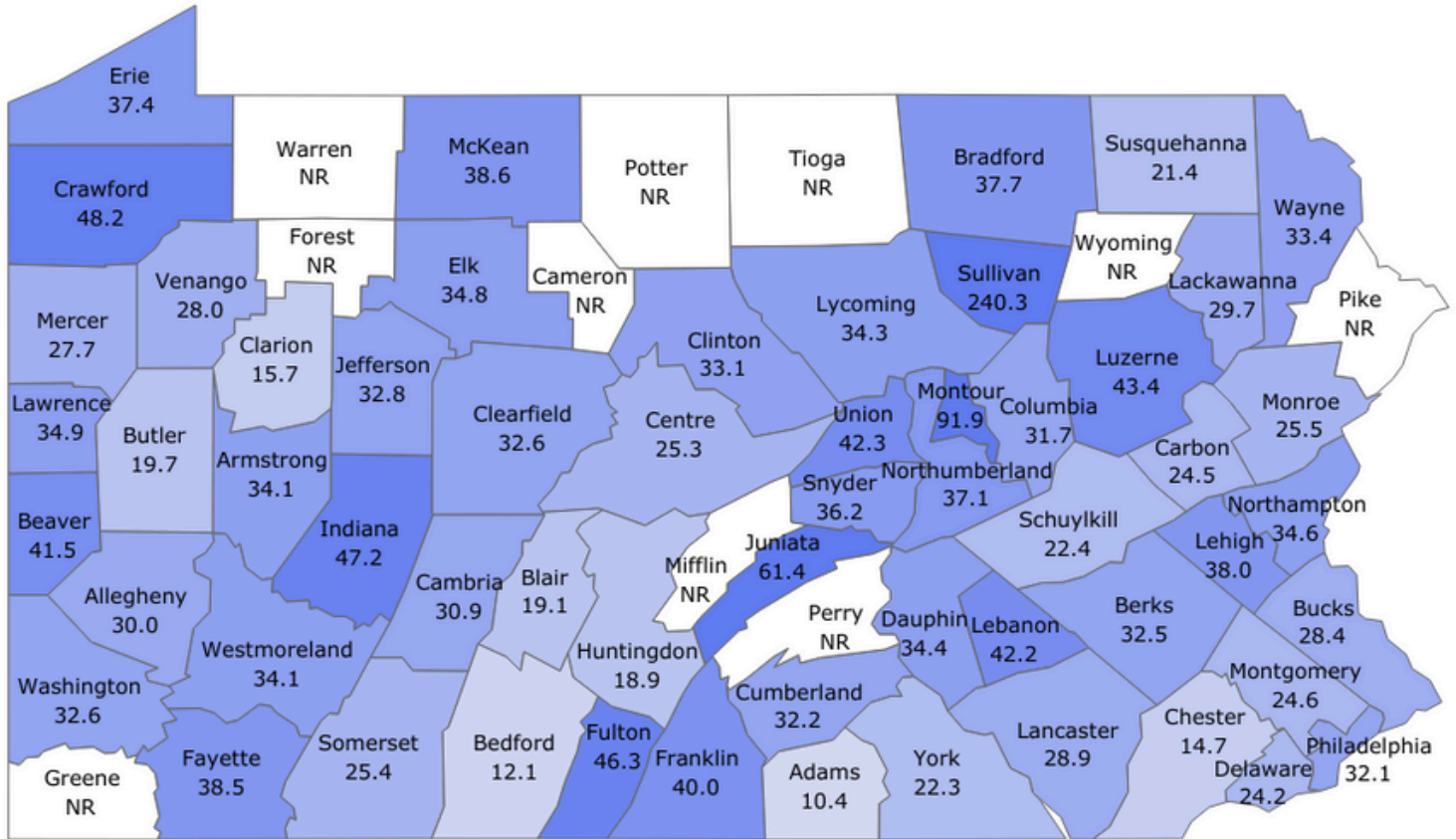
Childhood Cancer Hospitalizations per 10,000 Child Residents, 2021 - 2023

	Number	Rate
Statewide	7,954	29.7
Adams	22	10.4
Allegheny	701	30.0
Armstrong	41	34.1
Beaver	132	41.5
Bedford	11	12.1
Berks	311	32.5
Blair	47	19.1
Bradford	49	37.7
Bucks	360	28.4
Butler	77	19.7
Cambria	79	30.9
Cameron	NR	NR
Carbon	30	24.5
Centre	71	25.3
Chester	178	14.7
Clarion	12	15.7
Clearfield	46	32.6
Clinton	26	33.1
Columbia	40	31.7
Crawford	82	48.2
Cumberland	182	32.2
Dauphin	220	34.4
Delaware	312	24.2
Elk	20	34.8
Erie	213	37.4
Fayette	91	38.5
Forest	NR	NR
Franklin	136	40.0
Fulton	13	46.3
Greene	NR	NR
Huntingdon	15	18.9
Indiana	79	47.2
Jefferson	30	32.8

	Number	Rate
Juniata	31	61.4
Lackawanna	132	29.7
Lancaster	372	28.9
Lawrence	59	34.9
Lebanon	136	42.2
Lehigh	319	38.0
Luzerne	289	43.4
Lycoming	81	34.3
McKean	30	38.6
Mercer	58	27.7
Mifflin	NR	NR
Monroe	82	25.5
Montgomery	450	24.6
Montour	33	91.9
Northampton	218	34.6
Northumberland	65	37.1
Perry	NR	NR
Philadelphia	1,092	32.1
Pike	NR	NR
Potter	NR	NR
Schuylkill	63	22.4
Snyder	31	36.2
Somerset	33	25.4
Sullivan	15	240.3
Susquehanna	15	21.4
Tioga	NR	NR
Union	35	42.3
Venango	26	28.0
Warren	NR	NR
Washington	134	32.6
Wayne	28	33.4
Westmoreland	216	34.1
Wyoming	NR	NR
York	222	22.3

NR: Not reported due to low volume.

Childhood Cancer Hospitalizations per 10,000 Child Residents, 2021 - 2023



Childhood Cancer Hospitalizations Per 10,000 Child Residents

0.0 20.0 30.0 40.0 50.0+

NR: Not reported due to low volume.

Hospitalization rates were based on PHC4 discharge data for Pennsylvania child residents and 2022 US Census Bureau county population figures, the most recent data available. Note that higher rates for some counties might reflect larger numbers of hospitalizations with certain at-risk characteristics (e.g., factors related to patient age, sex, race and ethnicity). County rates were not adjusted for these differences so that important effects of these patient characteristics were not masked by such adjustment.

About PHC4

Created by the PA General Assembly in 1986, the PA Health Care Cost Containment Council (PHC4) is an independent council charged with collecting, analyzing and reporting information that can be used to improve the quality and restrain the cost of health care in the state. Today, PHC4 is a recognized national leader in public health care reporting. PHC4 is governed by a council with members representing business, labor, consumers, health care providers, insurers, health economists and state government.

Barry D. Buckingham, Executive Director • 225 Market Street, Suite 400, Harrisburg, PA 17101 • 717-232-6787