

Heat-Related Illness (HRI) Emergency Department and Inpatient Admissions 2021-2025, Arizona Residents and Non-Residents

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Summary Report of Heat-Related Illness (HRI) Cases in 2025

Emergency Department Visits	Inpatient Admissions (Hospitalizations)
Total number of heat-related illness emergency department visits in Arizona during 2025 is 4,273 .	Total number of heat-related illness inpatient admissions in Arizona during 2025 is 1,215 .
3.4% of ED visits were work-related, compared with 0.8% among all causes.	1.3% of cases were work-related, compared with 0.2% among all causes.
6.6% of ED visits involved individuals experiencing homelessness, compared with 0.9% among all causes.	11.7% of cases involved individuals experiencing homelessness, compared with 0.9% among all causes.
The rate of ED visits among Arizona residents per 100,000 population is highest in La Paz, Mohave and Yuma counties.	The rate of hospitalizations among Arizona residents per 100,000 population is highest in Mohave, Gila, and Maricopa counties.
58% of heat-related cases occurred among Non-Hispanic Whites and 25% among Hispanics.	62% of heat-related cases occurred among Non-Hispanic Whites and 21% among Hispanics.
43% of the heat-related illness cases are seen in 20-44 years of age group.	30% of the heat-related illness cases are seen in 45-64 years of age group.
Over 23% of heat-related illness cases had cardiovascular disease as a comorbidity.	Over 68% of heat-related illness cases had cardiovascular disease as a comorbidity.
Among the listed activities, over 48% of the heat-related illness cases involved engaging in recreational activities.	Among the listed activities, 47% of the heat-related illness cases involved engaging in recreational activities.

Table 1: Heat-related illness cases 2025

Heat-Related Illness by Year

Visit Year	Emergency Department Visit	Inpatient Admission (Hospitalization)
2021	2,941 Of those, 1,848 were heat-caused† (62.8%)	997 Of those, 446 were heat-caused† (44.7%)
2022	3,335 Of those, 2,005 were heat-caused† (60.1%)	1,155 Of those, 544 were heat-caused† (47.1%)
2023	4,392 Of those, 2,552 were heat-caused† (58.1%)	1,434 Of those, 691 were heat-caused† (48.2%)
2024	5,285 Of those, 3,140 were heat-caused† (59.4%)	1,578 Of those, 736 were heat-caused† (46.6%)
2025	4,273 Of those, 2,495 were heat-caused† (58.4%)	1,215 Of those, 543 were heat-caused† (44.7%)

Table 2: Heat-related illness (2021-2025)

†Heat-caused emergency department and inpatient visits (hospitalizations) are visits where the primary diagnosis is listed as exposure to excessive natural heat. Heat-related visits are where exposure to excessive natural heat is listed anywhere in the diagnoses and include those that were heat-caused.

Heat-Related Illness Emergency Department Visits and Inpatient Admissions (Hospitalizations) by Resident Status

Resident Status	2021	2022	2023	2024	2025
AZ Resident Emergency Department Visit	2,573	2,886	3,823	4,642	3,629
A Resident Inpatient Admission (Hospitalization)	834	1,007	1,197	1,297	1,021
Non-Resident Emergency Department Visit	368	449	569	643	644
Non-Resident Inpatient Admission (Hospitalization)	163	148	237	281	194

Table 3: Heat-related illness emergency department and hospitalizations by resident status (2021-2025)

Heat-Related Illness Emergency Department Visits by Sex and Age Group, Arizona Residents and Non-Residents

Sex	2021	2022	2023	2024	2025
Female	906	1,036	1,413	1,712	1,451
Male	2,035	2,299	2,975	3,569	2,822

Table 4: Heat-related illness emergency department visits by sex (2021-2025)

Age Group	2021	2022	2023	2024	2025
Infants <1	10	10	15	25	14
Children 1-14	114	134	144	185	134
Adolescents 15-19	147	155	200	246	188
Young Adults 20-44	1,317	1,381	1,982	2,222	1,847
Middle-Aged Adults 45-64	826	1,015	1,315	1,632	1,263
Elderly 65+	527	640	736	975	827

Table 5: Heat-related illness emergency department visits by age group (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Inpatient Admissions (Hospitalizations) by Sex and Age Group, Arizona Residents and Non-Residents

Sex	2021	2022	2023	2024	2025
Female	231	298	327	364	282
Male	766	857	1,104	1,208	928

Table 6: Heat-related illness hospitalizations by sex (2021-2025)

Age Group	2021	2022	2023	2024	2025
Infants <1	7	9	<6*	7	<6*
Children 1-14	8	<6*	7	<6*	<6*
Adolescents 15-19	18	10	13	12	16
Young Adults 20-44	316	374	473	512	360
Middle-Aged Adults 45-64	344	402	494	560	407
Elderly 65+	304	358	444	484	424

Table 7: Heat-related illness hospitalizations by age group (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Emergency Department Visits by Race/ Ethnicity, Arizona Residents and Non-Residents

Race/Ethnicity	2021	2022	2023	2024	2025
American Indian/Alaskan Native	120	132	191	210	207
Asian or Pacific Islander	32	36	43	61	48
Black or African American	218	294	383	483	388
Hispanic	734	824	1,122	1,385	1,081
White	1,785	2,014	2,593	3,070	2,481
Other	52	35	60	76	68

Table 8: Heat-related emergency department visits by race/ethnicity (2021-2025)

Heat-Related Illness Inpatient Admissions (Hospitalizations) by Race/Ethnicity, Arizona Residents and Non-Residents

Race/Ethnicity	2021	2022	2023	2024	2025
American Indian/Alaskan Native	42	45	74	84	52
Asian or Pacific Islander	8	19	11	15	15
Black or African American	78	90	133	144	102
Hispanic	233	262	285	296	250
White	625	718	895	998	753
Other	11	21	36	41	43

Table 9: Heat-related illness hospitalizations by race/ethnicity (2021-2025)

Heat-Related Illness Emergency Department Visits by Month, Arizona Residents and Non-Residents

Month	2021	2022	2023	2024	2025
January	<6*	<6*	<6*	<6*	<6*
February	<6*	10	8	6	18
March	20	75	20	10	59
April	104	107	154	118	124
May	198	266	214	254	287
June	915	811	382	1,167	922
July	809	1,034	2,088	1,936	1,157
August	552	591	1,095	1,033	1,203
September	290	382	317	529	424
October	29	50	91	224	51
November	16	7	12	<6*	14
December	<6*	0	6	<6*	9

Table 10: Heat-related illness emergency department visits by month (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Inpatient Admissions (Hospitalizations) by Month, Arizona Residents and Non-Residents

Month	2021	2022	2023	2024	2025
January	<6*	0	0	<6*	<6*
February	<6*	0	<6*	<6*	<6*
March	6	7	<6*	<6*	14
April	22	24	25	19	15
May	48	57	41	49	67
June	311	244	110	322	248
July	271	454	792	614	332
August	209	193	331	367	409
September	110	161	101	142	104
October	11	14	27	58	17
November	<6*	0	<6*	0	<6*
December	0	<6*	<6*	<6*	<6*

Table 11: Heat-related illness hospitalizations by month (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Emergency Department Visits by County, Arizona Residents Only

County Residence	2021	2022	2023	2024	2025
Apache	9	8	6	12	22
Cochise	36	33	62	53	53
Coconino	22	25	24	23	33
Gila	18	24	22	36	32
Graham	11	11	26	22	19
Greenlee	<6*	<6*	<6*	<6*	<6*
La Paz	37	38	32	59	20
Maricopa	1,528	1,845	2,492	3,031	2,272
Mohave	182	164	179	297	167
Navajo	23	22	30	28	21
Pima	251	237	369	388	443
Pinal	193	244	314	342	293
Santa Cruz	14	6	6	10	15
Yavapai	61	49	57	70	69
Yuma	179	165	194	257	150

Table 12: Heat-related illness emergency department visits by county, AZ residents (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Emergency Department Visits Rates by County, Arizona Residents Only

County Residence	2021	2022	2023	2024	2025
Apache	13.6	12.0	*	18.0	33.3
Cochise	28.5	26.1	48.7	41.3	41.1
Coconino	14.9	16.7	15.9	15.3	22.1
Gila	33.6	44.6	40.9	66.7	59.4
Graham	28.2	28.2	65.6	54.9	47.2
Greenlee	*	*	*	*	*
La Paz	220.0	225.4	189.5	344.5	115.8
Maricopa	33.9	40.2	53.4	64.1	47.5
Mohave	84.1	74.2	79.8	130.2	72.3
Navajo	21.3	20.3	27.3	25.3	18.9
Pima	23.7	22.1	34.2	35.7	40.5
Pinal	44.0	53.8	67.2	70.7	58.4
Santa Cruz	28.9	*	*	19.8	29.2
Yavapai	25.3	20.0	22.9	27.8	27.2
Yuma	86.3	78.6	90.5	117.9	67.5

Table 13: Heat-related illness emergency department visits rate by county, AZ residents (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Note: Crude rates are calculated per 100,000 population. Rate calculations utilize the official [population estimates from Arizona Department of Health Services Vital Statistics](#).

Heat-Related Illness Inpatient Admissions (Hospitalizations) by County, Arizona Residents Only

County Residence	2021	2022	2023	2024	2025
Apache	<6*	<6*	<6*	9	<6*
Cochise	<6*	7	9	6	7
Coconino	<6*	<6*	<6*	<6*	<6*
Gila	<6*	<6*	14	8	9
Graham	<6*	<6*	<6*	0	<6*
Greenlee	0	0	<6*	<6*	0
La Paz	6	<6*	<6*	12	6
Maricopa	536	719	807	885	705
Mohave	54	36	43	78	41
Navajo	7	<6*	7	6	7
Pima	104	91	172	157	135
Pinal	53	61	65	64	50
Santa Cruz	0	<6*	<6*	6	0
Yavapai	9	8	14	13	18
Yuma	48	51	38	35	28

Table 14: Heat-related illness hospitalizations by county, AZ residents, (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Inpatient Admissions (Hospitalizations) Rates by County, Arizona Residents Only

County Residence	2021	2022	2023	2024	2025
Apache	*	*	*	13.5	*
Cochise	*	5.5	7.1	*	5.4
Coconino	*	*	*	*	*
Gila	*	*	26.0	14.8	16.7
Graham	*	*	*	0.0	*
Greenlee	0.0	0.0	*	*	0.0
La Paz	*	*	*	70.1	*
Maricopa	11.9	15.7	17.3	18.7	14.7
Mohave	24.9	16.3	19.2	34.2	17.2
Navajo	6.5	*	6.4	*	6.3
Pima	9.8	8.5	15.9	14.4	12.3
Pinal	12.1	13.4	13.9	13.2	10.0
Santa Cruz	0.0	*	*	*	0.0
Yavapai	3.7	3.3	5.6	5.2	7.1
Yuma	23.2	24.3	17.7	16.1	12.6

Table 15: Heat-related illness hospitalization rates by county (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Note: Crude rates are calculated per 100,000 population. Rate calculations utilize the official [population estimates from Arizona Department of Health Services Vital Statistics](#).

Heat-Related Illness Emergency Department Visits by Comorbidity and Substance Use, Arizona Residents and Non-Residents

Comorbidity [†]	2021	2022	2023	2024	2025
Obese/Overweight	53	52	64	80	62
Mental Disorders	852	902	1,092	1,392	1,178
Circulatory Disease	702	820	965	1,296	989
Respiratory Disease	222	224	265	363	290
No Comorbidity	1,581	1,795	2,523	2,846	2,308

Table 16: Heat-related illness emergency department visits by comorbidity (2021-2025)

Substance Use	2021	2022	2023	2024	2025
Alcohol Use	60	66	113	146	125
Drug Use	601	642	715	905	762
Combined Alcohol and Drug Use	31	34	61	65	44
No Substance Use	2,249	2,593	3,503	4,169	3,342

Table 17: Heat-related illness emergency department visits by substance use (2021-2025)

[†] More than 1 comorbidity may be listed in the visit record. All comorbidities identified in a record are represented in these yearly totals.

Heat-Related Illness Inpatient Admissions (Hospitalizations) by Comorbidity and Substance Use, Arizona Residents and Non-Residents

Comorbidity [†]	2021	2022	2023	2024	2025
Obese/Overweight	106	112	115	149	130
Mental Disorders	636	738	953	1,069	797
Circulatory Disease	659	790	949	1,023	837
Respiratory Disease	423	494	606	619	435
No Comorbidity	74	87	110	114	82

Table 18: Heat-related illness hospitalizations by comorbidity (2021-2025)

Substance Use	2021	2022	2023	2024	2025
Alcohol Use	51	56	97	94	67
Drug Use	393	477	604	742	504
Combined Alcohol and Drug Use	93	89	119	123	105
No Substance Use	460	533	614	619	539

Table 19: Heat-related illness hospitalizations by substance use (2021-2025)

[†] More than 1 comorbidity may be listed in the visit record. All comorbidities identified in a record are represented in these yearly totals.

Heat-Related Illness Emergency Department Visits by Place of Injury and Preceding Activity, Arizona Residents and Non-Residents

Place of Injury	2021	2022	2023	2024	2025
Industrial Site	445	450	596	769	614
Private Residence	972	1,163	1,590	1,994	1,555
Public Building	75	89	120	144	294
Recreational Site	93	101	103	151	132
Residential Institution	20	18	29	44	31
Street/Highway	523	612	876	1,068	841
Not Listed	813	902	1,074	1,111	806

Table 20: Heat-related illness emergency department visits by place of injury (2021-2025)

Preceding Activity	2021	2022	2023	2024	2025
Exercise	8	<6*	7	9	6
Household Activities	29	21	26	27	19
Occupational	129	108	98	152	104
Recreational	281	293	262	341	208
Sports/Athletics	95	99	113	134	88
Not Listed	2,399	2,810	3,886	4,622	3,848

Table 21: Heat-related illness emergency department visits by preceding activity (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Inpatient Admissions (Hospitalizations) by Place of Injury and Preceding Activity, Arizona Residents and Non-Residents

Place of Injury	2021	2022	2023	2024	2025
Industrial Site	87	124	155	152	112
Private Residence	316	364	446	524	414
Public Building	20	24	35	33	22
Recreational Site	8	10	10	13	17
Residential Institution	<6*	11	9	7	<6*
Street/Highway	321	356	498	527	424
Not Listed	239	266	278	316	215

Table 22: Heat-related illness hospitalizations by place of injury (2021-2025)

Preceding Activity	2021	2022	2023	2024	2025
Exercise	<6*	0	<6*	<6*	0
Household Activities	<6*	<6*	6	<6*	<6*
Occupational	14	27	22	22	20
Recreational	24	39	27	26	28
Sports/Athletics	11	7	8	7	9
Not Listed	945	1,078	1,369	1,520	1,156

Table 23: Heat-related illness hospitalizations by preceding activity (2021-2025)

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Heat-Related Illness Emergency Department Visits by Payer Type, in Comparison to All-Cause Visits by Year, Arizona Residents and Non-Residents

Workers' Compensation	2021	2022	2023	2024	2025
Percent Workers' Compensation for HRI Visits	3.71%	3.15%	3.85%	3.20%	3.35%
Percent Workers' Compensation for All Visits	0.71%	0.73%	0.75%	0.76%	0.80%

Table 24: Heat-related illness emergency department visits by payer type (2021-2025)

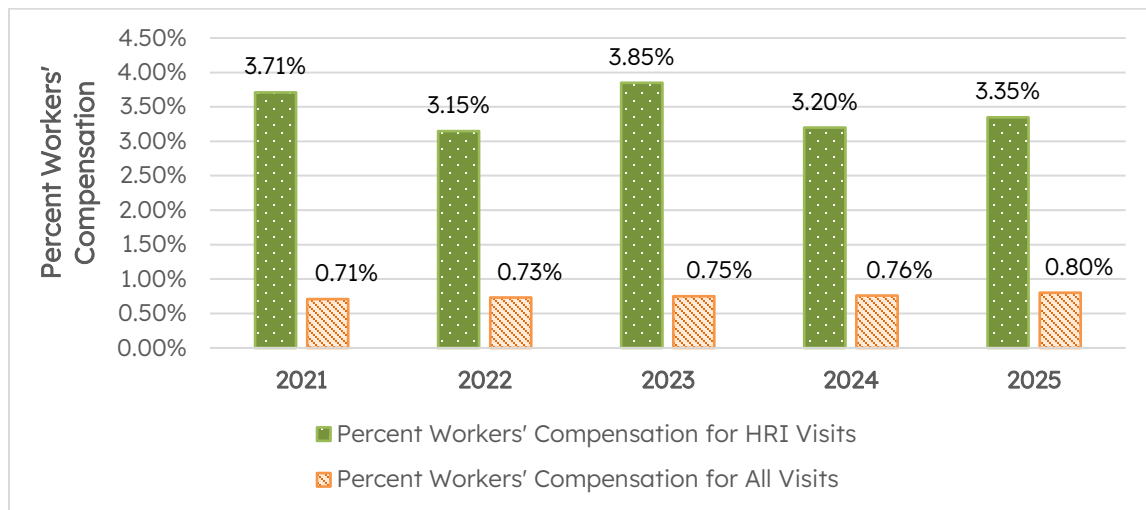


Figure 1: Workers' Compensation for heat-related illness emergency department visits compared to all visits (2021-2025)

Source: [Hospital Discharge Data Public Use File](#)

Heat-Related Illness Inpatient Admissions (Hospitalizations) by Payer Type, in Comparison to All-Cause Admissions by Year, Arizona Residents and Non-Residents

Workers' Compensation	2021	2022	2023	2024	2025
Percent Workers' Compensation for HRI Admissions	0.70%	0.87%	1.26%	0.57%	1.32%
Percent Workers' Compensation for All Admissions	0.20%	0.19%	0.20%	0.19%	0.20%

Table 25: Heat-related illness admissions by payer type (2021-2025)

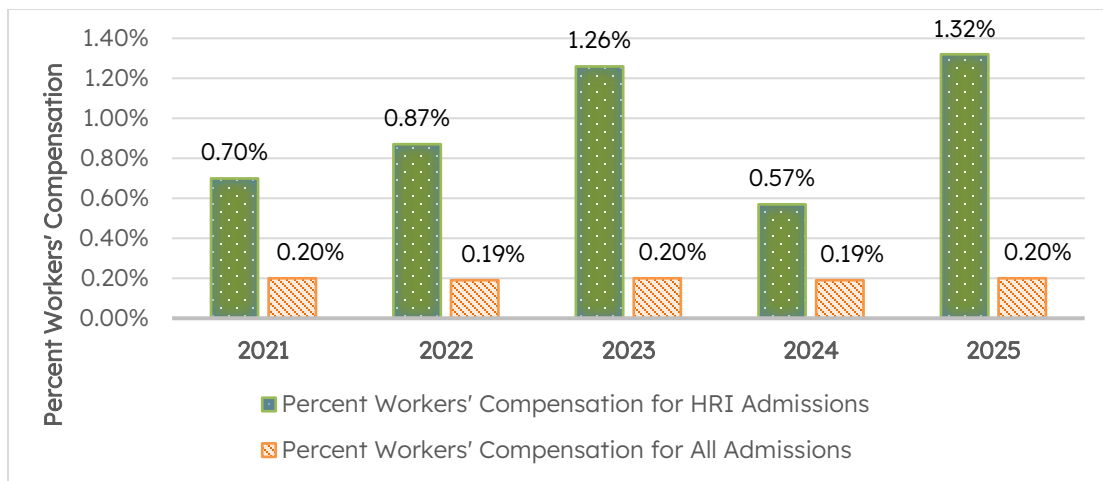


Figure 2: Workers' Compensation for heat-related illness admissions compared to all admissions (2021-2025)

Source: [Hospital Discharge Data Public Use File](#)

Heat-Related Illness Emergency Department Visits for People Experiencing Homelessness by Year, in Comparison to All-Cause Visits by Year

Emergency Department Visits	2021	2022	2023	2024	2025
Percent Homeless for Heat-Related Illness Visits	2.92%	3.42%	4.49%	4.69%	6.55%
Percent Homeless for All Visits	0.74%	0.77%	0.81%	0.83%	0.91%

Table 26: Heat-related illness emergency department visits, people experiencing homelessness (2021-2025)

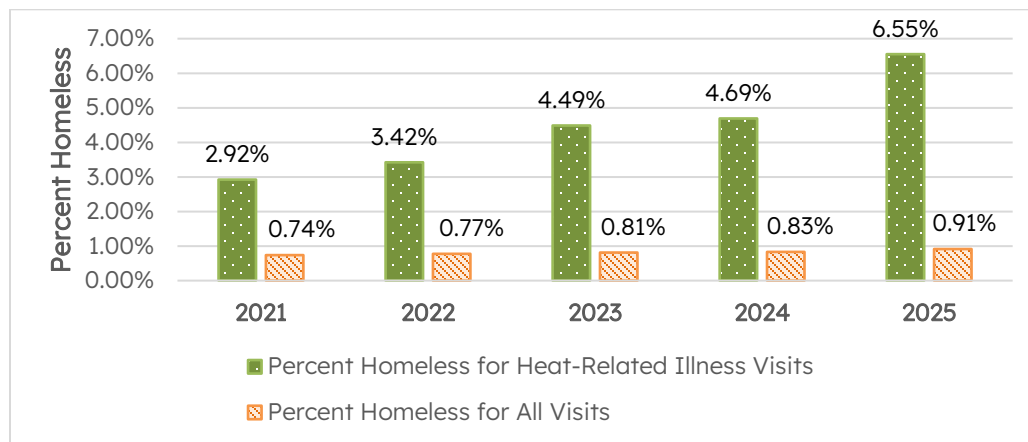


Figure 3: Percent of heat-related illness emergency department visits for homeless individuals compared to all-cause visits (2021-2025)

Source: [Hospital Discharge Data Public Use File](#)

Heat-Related Illness Inpatient Admissions (Hospitalizations) for People Experiencing Homelessness by Year, in Comparison to All-Cause Admissions by Year

Admissions (Hospitalizations)	2021	2022	2023	2024	2025
Percent Homeless for Heat-Related Illness Admissions	9.03%	6.93%	11.44%	12.04%	11.69%
Percent Homeless for All Admissions	0.64%	0.70%	0.77%	0.83%	0.91%

Table 27: Heat-related illness hospitalizations, people experiencing homelessness (2021-2025)

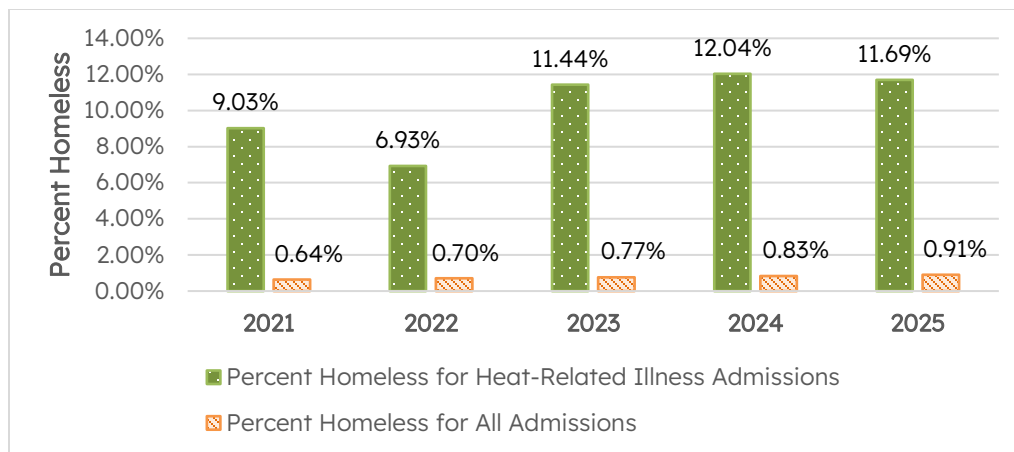


Figure 4: Percent of heat-related illness admissions for homeless individuals compared to all-cause admissions (2021-2025)

Source: [Hospital Discharge Data Public Use File](#)

Heat-Related Illness Emergency Department Visits and Inpatient Admissions (Hospitalizations) for People Experiencing Homelessness by Age Group and Race/Ethnicity 2021-2025, Residents and Non-Residents

Age Group	Emergency Department Visit	Inpatient Admission
Infants <1	*	*
Children 1-14	*	0
Adolescents 15-19	1.07%	*
Young Adults 20-44	4.61%	14.10%
Middle-Aged Adults 45-64	6.49%	12.87%
Elderly 65+	3.08%	4.37%

Table 28: Heat-related illness emergency department visits and hospitalizations, people experiencing homelessness by age group (2021-2025).

Race/Ethnicity	Emergency Department Visit	Inpatient Admission
American Indian/Alaskan Native	5.58%	12.46%
Asian or Pacific Islander	4.09%	*
Black or African American	5.83%	13.53%
Hispanic	2.53%	6.49%
White	5.18%	11.03%
Other	5.50%	18.42%

Table 29: Heat-related illness emergency department visits and hospitalizations, people experiencing homelessness by race/ethnicity (2021-2025).

*Visit count related to excessive natural heat exposure were suppressed due to small cell sizes (between 1-5).

Methods for Hospital Discharge Data (HDD)

ICD-10 Codes	Emergency Department Visit
T67.0	Heat stroke and sunstroke
T67.1	Heat syncope
T67.2	Heat cramps
T67.3	Heat exhaustion from water depletion
T67.4	Heat exhaustion from salt depletion
T67.5	Heat exhaustion, unspecified
T67.6	Heat fatigue, transient
T67.7	Heat edema
T67.8	Other specified heat effects
T67.9	Unspecified effects of heat and light
X30	Exposure to excessive natural heat

Table 30: Emergency department visit ICD-10 codes.

Criteria are adapted from Council of State and Territorial Epidemiologists (CSTE). Methods search entire record for ICD-10 codes. ICD codes related to manmade sources of heat were excluded.

Methods for Comorbidity

ICD-10 Codes	Comorbidity Description
E66	Overweight and obesity
FXX	Mental, behavioral, and neurodevelopmental disorders
IXX	Diseases of the circulatory system
JXX	Diseases of the respiratory system

Table 31: Comorbidity ICD-10 codes.

Methods search entire record for ICD-10 codes. Substance use codes (ICD-10) for alcohol- and drug-related comorbidities are defined by [ADHS Population Health and Vital Statistics Diagnostics Categories](#).

Note: New methods were implemented beginning in 2025 and applied to previous data years for reports published in 2025 and onward. Prior year reports' annual totals may not match. This new method utilizes the same inclusion and exclusion ICD-10 codes, but the database search uses a more flexible approach instead of exact matching. This wildcard search allows for a more accurate understanding of data entry variations among the heat-related codes.