

2026 Marion County Cold-Related Illness Data Report



O R E G O N

Health & Human Services

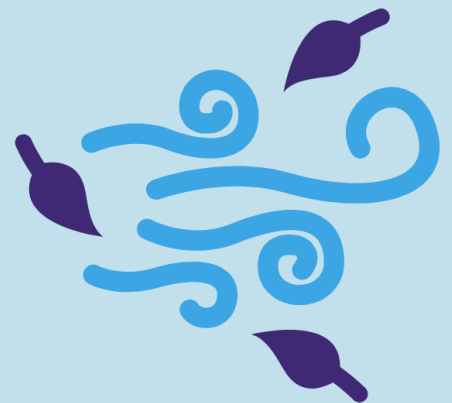
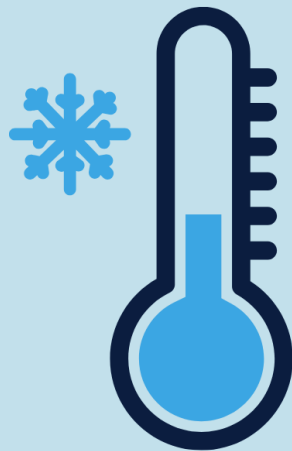




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Prepared by:

Michael Keuler, MCHHS Environmental Health Resiliency Coordinator
Aryn Walker, MCHHS Senior Epidemiologist

Purpose of this report

The purpose of this report is to evaluate the association between cold-related illnesses (CRI) emergency department and urgent care visits (emergency visits), hospitalizations (in-patient admissions), and deaths due to cold exposure in Marion County. This report explores CRI by population characteristics (age, sex, zip code, and race), and characteristics related to cold exposure. This report is meant to inform emergency preparedness for environmental health hazards, threats, and natural disasters that impact the public's health and wellbeing.

Background

Located in the heart of the Mid-Willamette Valley, Marion County has a landscape that stretches from the Willamette River to the Cascade Mountains and encompasses nearly 1,200 square miles of rural, urban, forested, and agricultural landscapes. Marion County is home to a diverse population of 345,920 people and 20 cities, including Oregon's capital, Salem. According to the 2020 US Census, the five largest cities are Salem, Keizer, Woodburn, Silverton, and Stayton, home to 66% of the county's total population. The remaining 34% live in one of the 15 smaller cities or on unincorporated land. Demographically, Marion County is home to people of various ages, occupations, faiths, physical and mental capabilities, languages, and many more unique characteristics.

Methods

This report presents seasonal cold weather data during the months of October-April between 2019-2026 in Marion County to understand the effect of wind chill temperature and precipitation on emergency visits, hospitalizations, and deaths due to cold-related illness (CRI). The data was collected from the Oregon Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), the Oregon Health Authority Center for Disease Statistics, United States Census, and the National Oceanic and Atmospheric Administration. Counts and numerical data are shown in the Appendix. All counts and rates are based on the patient's residence and not the location where they were seen for care.



Summary of Findings

This report shows the cold weather month season (October through April) statistics between 2019-2026. Cold-related illnesses have increased during the winter months over the past several cold weather seasons.⁴

Between 2019-2026, wind chill temperatures and precipitation fluctuated in severity. During this time, the number of cold-related illness emergency visits peaked in the 2022-2023 cold weather month season. This coincided with the most precipitation and wind chill cold weather days. Hospitalizations were highest in the 2022-2023 season and steadily decreased each subsequent season. Deaths remain low, but have steadily increased between 2019-2023, dropping in 2024.^{1,4,5}

Cold-related illnesses have not affected all people and communities the same. The data shows that some people and communities experience cold-related illnesses more and are more vulnerable to cold than others. Males had higher rates of emergency visits and hospitalizations than females. Emergency visits and hospitalizations increased with age and were especially severe for residents 65 years old or older. Residents who identified as American Indian/Alaska Native had the highest rates of emergency visits among identified racial groups, while residents who identified as African American/Black had the highest rates of hospitalizations. Residents who did not identify as Hispanic or Latino had significantly higher rates of emergency visits and hospitalizations than residents who identified as Hispanic or Latino.^{4,8}

Geographically, urban geographies have had significantly higher rates of cold-related illness and hospitalizations than rural geographies. This trend indicates urban areas may have more cold sensitivity (vulnerable people) than rural areas, such as unsheltered or homeless populations, populations with lower incomes who cannot properly heat their home, and more older adults. Zip codes with the highest cold-related illness emergency visit rate include Central Salem (97301), Northeast Salem (97305), and Southeast Salem (97302).^{4,8}

Residents who were identified as homeless were disproportionately affected by cold-related illness emergency visits. According to the Oregon Housing and Community Services, an estimated 1,428 Marion County residents (0.4% of the population) were identified as homeless.⁷ Individuals identified as homeless made up 42.3% of total emergency visits and 19.2% of all hospitalizations. Cold-related illnesses for people identified as homeless increased between 2019-2025 cold seasons, similarly to the overall homelessness rate. While emergency visits decreased in the 2025-26 cold weather season, people identified as homeless were still disproportionately affected. Among those experiencing homelessness: men, adults 45-64, and urban areas had the highest rates of cold-related illness emergency visits. Overall, homelessness counts were likely undercounted, as a homeless designation for patients may not be standardized for individual emergency department and urgent care clinics.^{4,7,8}

In June 2025, Marion County Health and Human Services created the [Marion County 2025-2030 Climate and Health Adaptation Plan](#) (CHAP). In this plan, MCHHS and planning partners set the following goal: “Reduce Marion County cold-related illness emergency visits on days with a wind chill of 32°F or lower by 20%. This would be an average change from 1.3/day to 1.1/day between July 2025-June 2030.” Between October 2025-April 2026, the average number of visits on 32°F wind chill or lower was 0.9/day, meeting the target of 1.1/day. This shows that interventions may be effective to meet the CHAP goal.^{1,4}

This report and its associated indicators provide timely information that can detect trends and groups disproportionately affected by cold-related illness for targeted interventions. Like any source, ESSENCE has key limitations, including the requirement that a person must be seen at an urgent care or emergency department to be detected in the ESSENCE surveillance system. Patients seen in other settings, such as a clinic, would be missed. Duplications in patient visits may also exist, where one person could be counted more than once due to

multiple visits. Other limitations include errors in medical coding, inaccurate patient reporting, or incomplete notes, which may influence results.⁴

ESSENCE remains amongst the timeliest surveillance system for tracking resident patient visits for cold-related illness in our community. Like any system, it is most effective when used in concert with other systems and indicators that describe cold-related illness and its contributing risk factors.⁴

Definitions

Cold-related illness (CRI): An emergency visit for illnesses associated with cold weather. Definition includes chief complaint terms and diagnosis codes for direct cold exposure causing reduced temperature, hypothermia, frostbite, and other tissue damage. Secondary harms from cold weather such as carbon monoxide exposure, slips, trips, and falls were not included in this definition. Using this query in combination with cold temperature trends may further assist with surveillance efforts.²

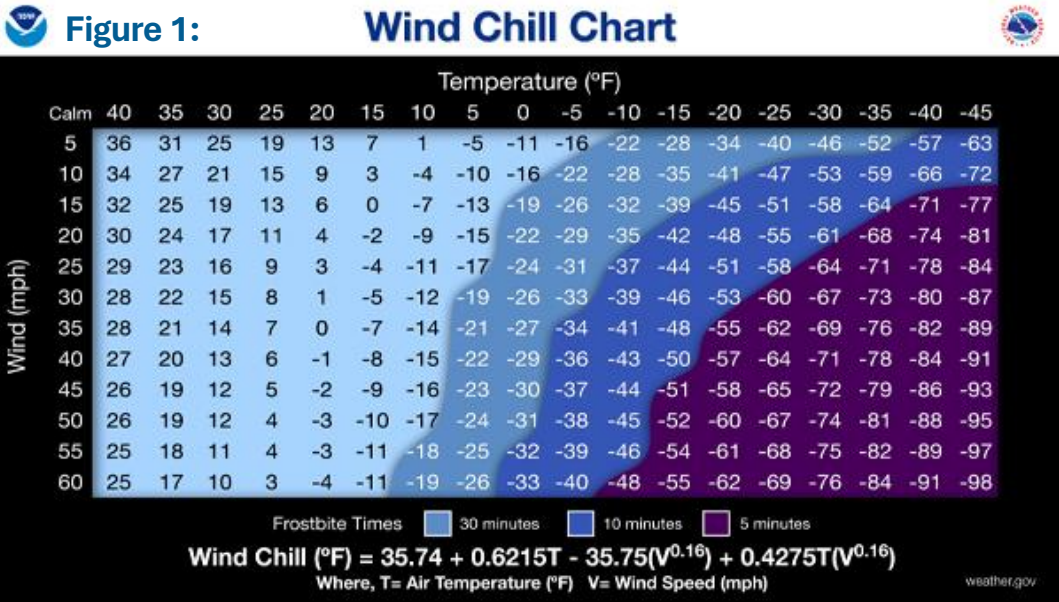
Emergency visits: Any emergency department or urgent care clinic visit from a Marion County resident at any Oregon hospital or hospital affiliated clinic.

Hospitalizations: An in-patient designation linked to an emergency visit in Oregon ESSENCE. In-patient visits show that the severity of the emergency visit required more intensive care.⁶

Homeless: An individual is identified as homeless if they were described as homeless, houseless, unhoused, or unsheltered in Oregon ESSENCE.⁶

Wind chill temperature: The wind chill temperature is how cold people and animals feel when outside. Wind chill is based on the rate of heat loss from exposed skin caused by wind and cold. As the wind increases, it draws heat from the body, driving down skin temperature and eventually the internal body temperature. Therefore, the wind makes it feel much colder. If the temperature is 0°F and the wind is blowing at 15 mph, the wind chill is -19°F. At this wind chill temperature, exposed skin can freeze in 30 minutes.³

Wind chill temperature will be used in this report to compare temperature to cold-related illness.



Cold weather months: Months from October through April each season. This timeframe was used to filter out cold-related illnesses caused by exposure to natural bodies of water during summer months.



Average Temperatures (°F) in Salem, Oregon

What am I reading?

The figures show the 5-year daily average wind chill temperatures between 1975-2025 during seasonal cold months between October and April. A 5-year average is used to show trends without fluctuations from daily changes. The data was collected from the NOAA weather station at the McNary Field Airport in Salem, Oregon.¹

Figure 2a: 5-Year Average Low Wind Chill Temperatures (°F), Oct-April, 1975-2025, Salem, OR ¹

The figure shows the 50-year change of daily 5-year average low wind chill temperatures in Salem, Oregon during seasonal cold months between 1975-2025. The recorded low temperatures have increased over time.

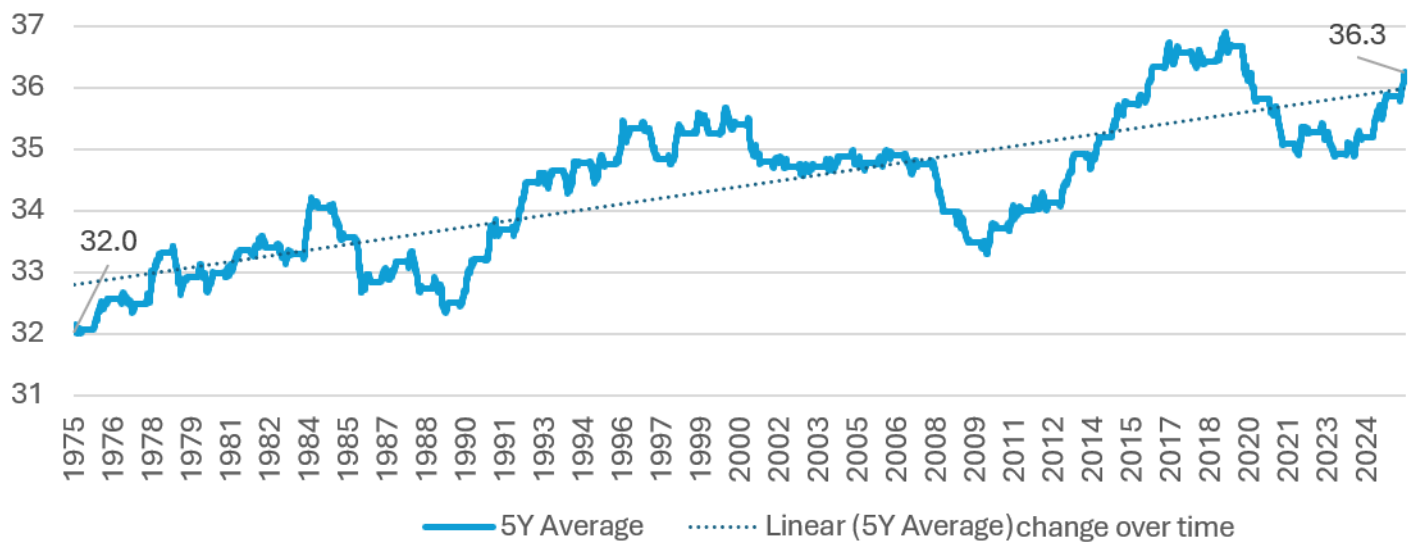
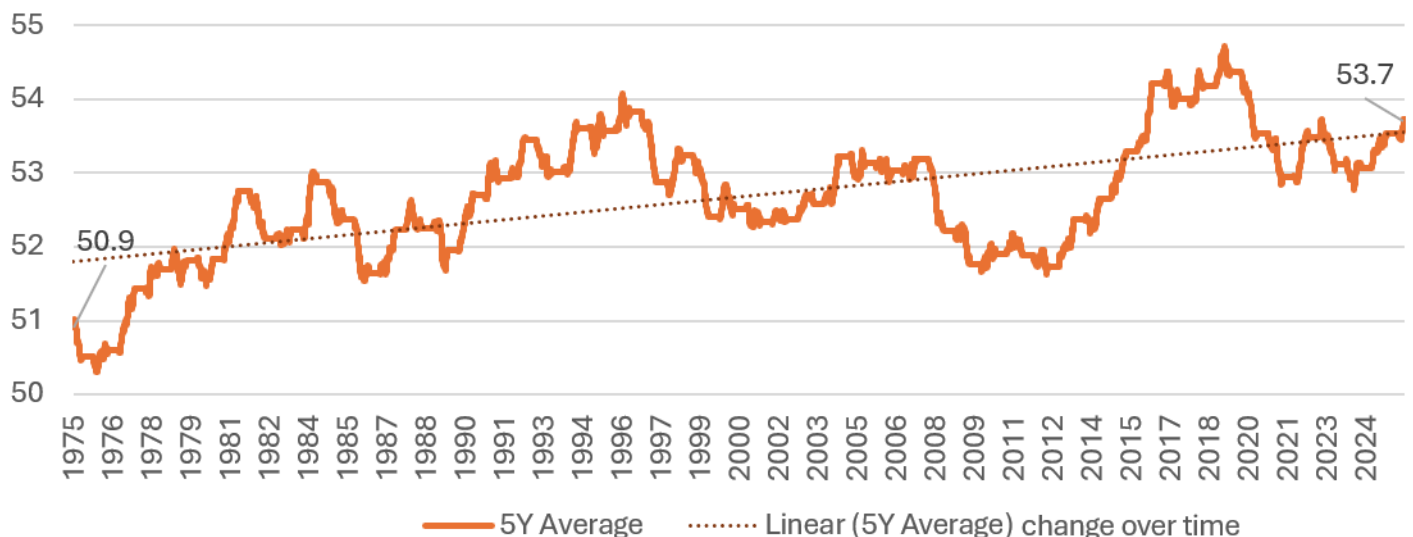


Figure 2b: 5-Year Average High Wind Chill Temperatures (°F), Oct-April, 1975-2025, Salem, OR ¹

The figure shows the 50-year change of daily 5-year average high wind chill temperatures in Salem, Oregon during seasonal cold months between 1975-2025. The recorded high temperatures have increased over time.



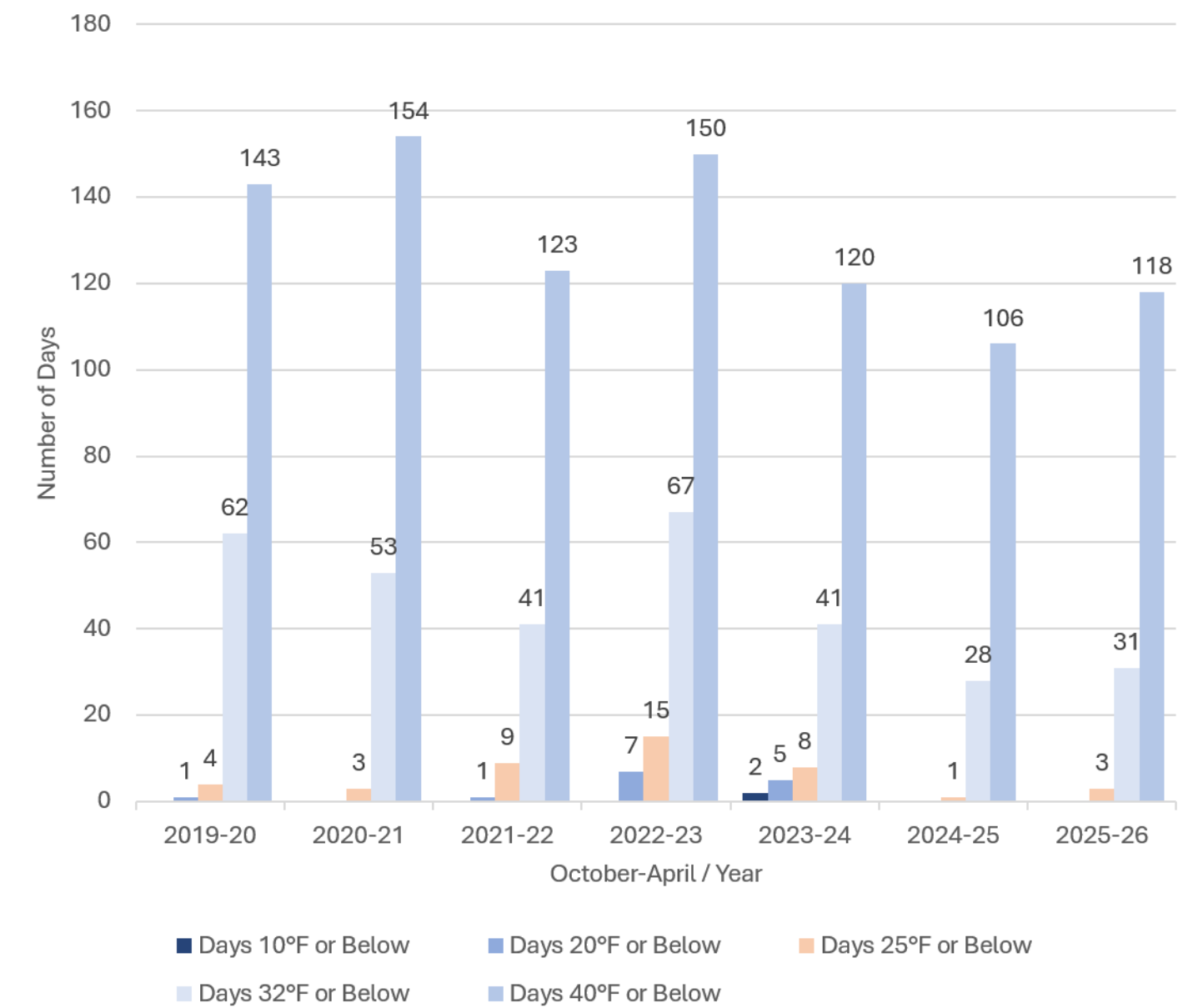
Seasonal Temperature Days in Marion County by Temperature Threshold

What am I reading?

The following figures show the identified cold days for Marion County by cold weather season (October-April). The data was collected from NOAA weather station at the McNary Field Airport in Salem, Oregon.

Figure 3a: Wind Chill Temperature Days 40°F, 32°F, 25°F, 20°F, and 10°F or Below, Oct-April, 2019-2026, Salem, Oregon ¹

The figure shows the number of wind chill temperature days per year during seasonal cold months with each temperature category measured in Salem, Oregon. Overall, cold temperatures decreased in recent years.



** Data has changed from the previous report due to a change in the data source and conversion methods to match NOAA recommendations.*



Figure 3b: Wind Chill Temperature Days 40°F or Below and Precipitation, Oct-April, 2019-2025, Salem, OR ¹

The figure shows the number of wind chill temperature days per year during seasonal cold months with a wind chill of 40°F or below in Salem, Oregon. Rainy or snowy wind chill days of 40°F or below peaked at 82 in the 2022-23 season.

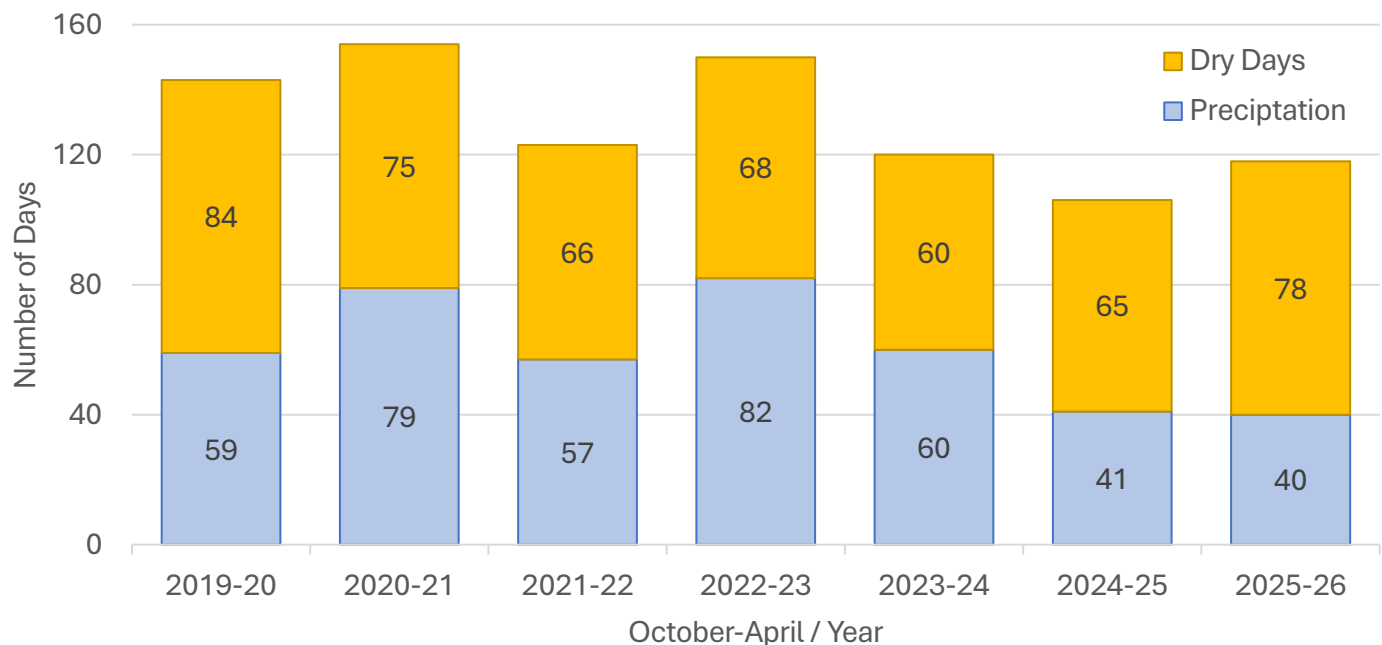
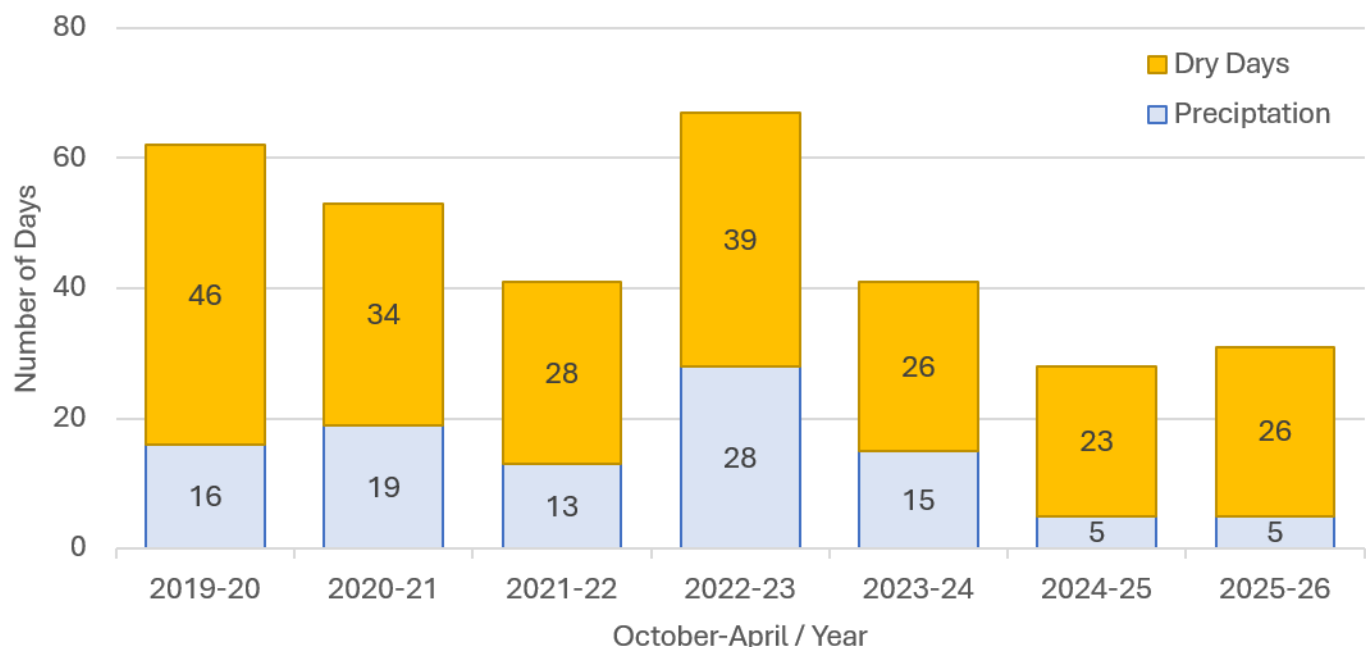


Figure 3c: Wind Chill Temperature Days 32°F or Below and Precipitation, Oct-April, 2019-2026, Salem, OR ¹

The figure shows the number of wind chill temperature days per year during seasonal cold months with wind chill of 32°F or below in Salem, Oregon. Rainy or snowy wind chill of 32°F or below peaked at 28 in the 2022-23 season.



Emergency Visits

What am I reading?

Emergency visits are the number of visits to a hospital or urgent care clinic associated with a hospital among Marion County residents. This data is from the Oregon ESSENCE database. The figures below demonstrate the surveillance of these trends in Marion County within the seasonal period of October through April each year.^{4,8}

Figure 4a: Cold-Related Illness Emergency Visit Counts, Oct-April, 2019-2026, Marion County ⁴

The figure shows the number of cold-related illness emergency visits during seasonal cold months from 2019-2026 in Marion County. In recent years, the 2022-2023 cold season had the most cold-related illnesses and days 32°F wind chill or below. Since 2022-2023, cold-related illness visits have steadily decreased. Overall, the average emergency visit rate per year over the past seven cold weather seasons was 214.4 per year.

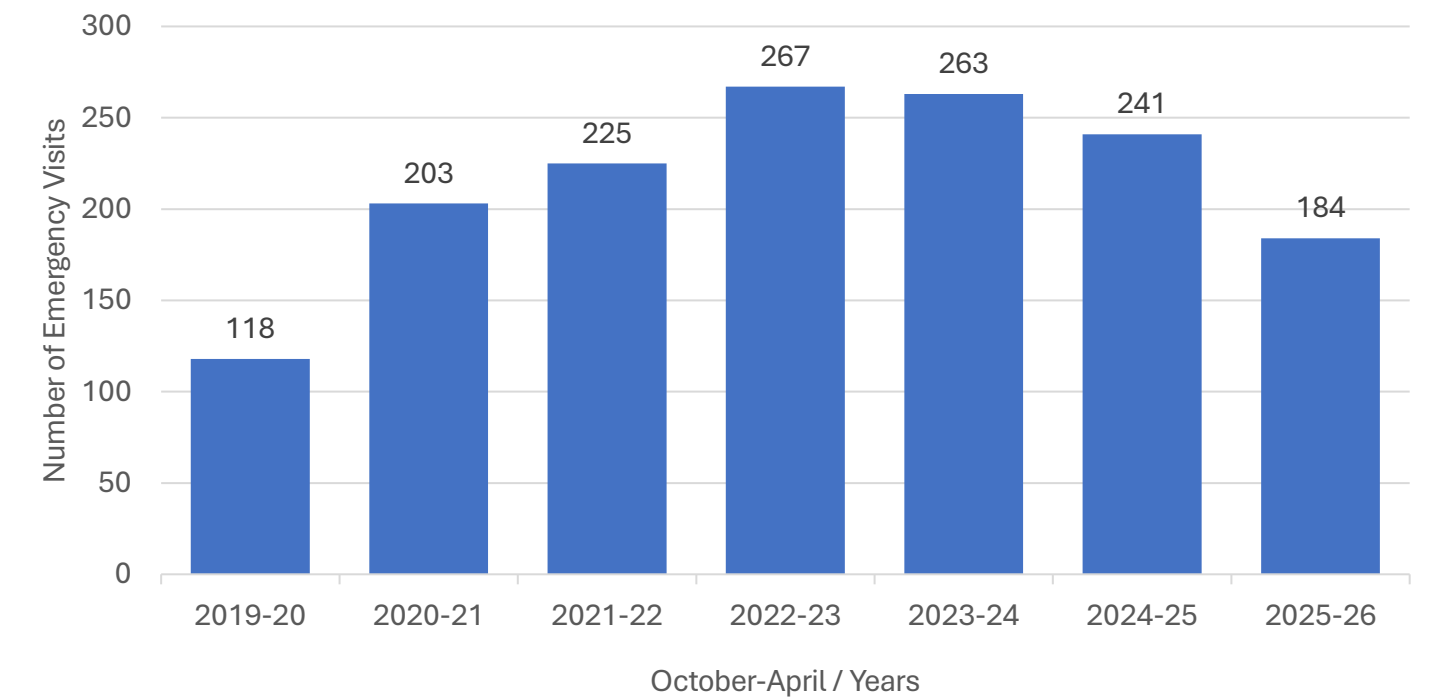


Figure 4b: Cold-Related Illness Emergency Visit Counts on Days with 32°F Wind Chill or Below, Climate & Health Adaptation Plan Metric, 2019-2026, Marion County ^{1,4}

The figure shows the number of cold-related illness emergency visits on days with a wind chill reaching a low of 32°F or below before and during the [2025-2030 Marion County Climate & Health Adaptation Plan](#). The goal is to “reduce Marion County cold-related illness emergency visits on days with a wind chill of 32°F or lower by 20%.” This would mean a reduction from the pre-planning average (2019-2024) of 1.3 emergency visits per day to 1.1 emergency visits per day (July 2025-June 2030). In the first year of the plan, Marion County met this target.

Climate & Health Adaptation Plan: 32°F Wind Chill,				
	Count	Days	Average	Status
Pre-plan Average: 2019 - 2024	447	341	1.3	MEETING TARGET
Plan Average: July 2025 - June 2026	35	41	0.9	
Plan Average Target: July 2025 – June 2030			1.1	



Figure 4c: Cold-Related Illness Emergency Visit Counts and Wind Chill Monthly Average Temperature, Oct-April, 2019-2026, Marion County ^{1,4}

The figure shows the monthly emergency visits for cold-related illness and winter storm events during seasonal cold months from 2019-2026 in Marion County. While wind chill temperatures do affect cold-related illness, winter storm occurrences had a greater impact on spikes to emergency visits.

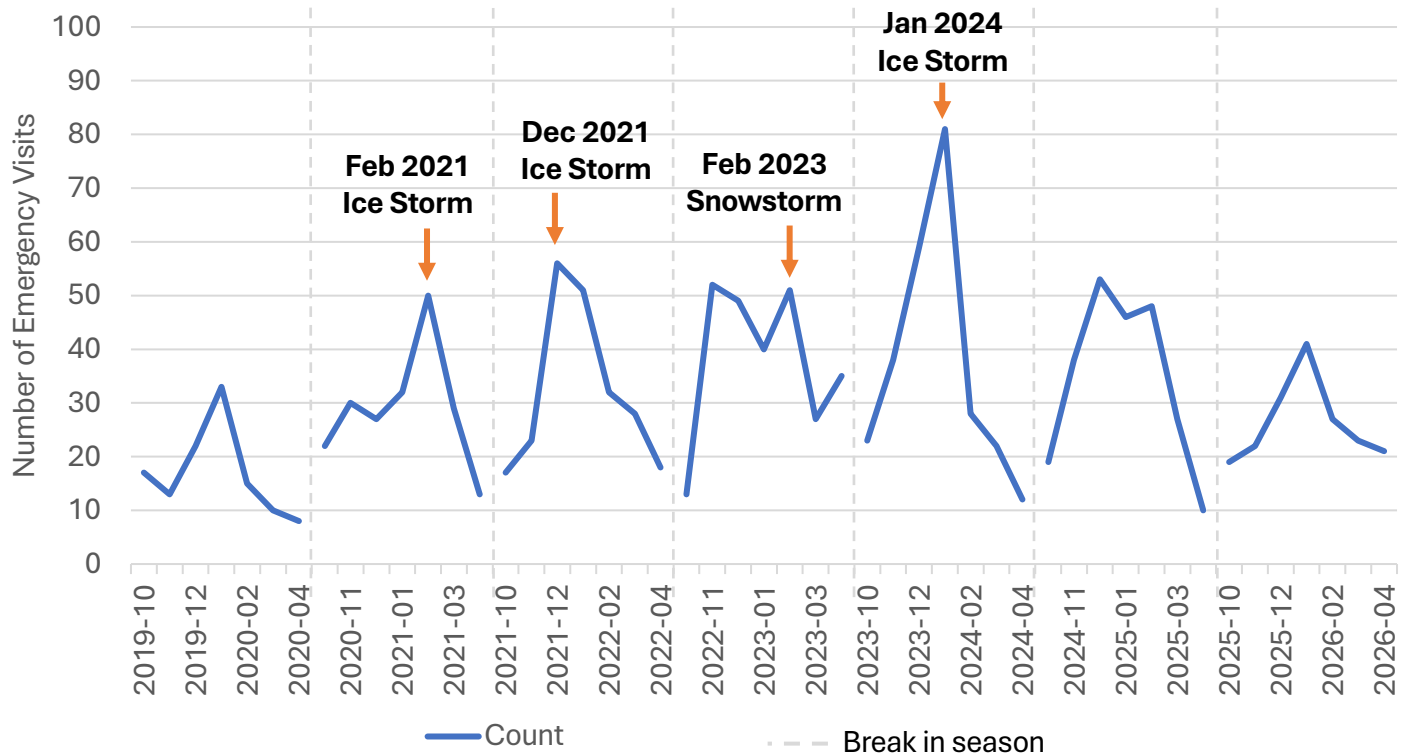


Figure 4d: Cold-Related Illness Emergency Visits per Day by Precipitation and Wind Chill Temperature Range, Oct-April, 2019-2026, Marion County ^{1,4}

The figure shows the average cold-related illness emergency visits per day by wind chill temperature range and precipitation during seasonal cold months from 2019-2026 in Marion County. Overall, precipitation has a 47% higher CRI emergency visit rate (leading to an average of 49 excess CRI visits/year) compared to dry days.

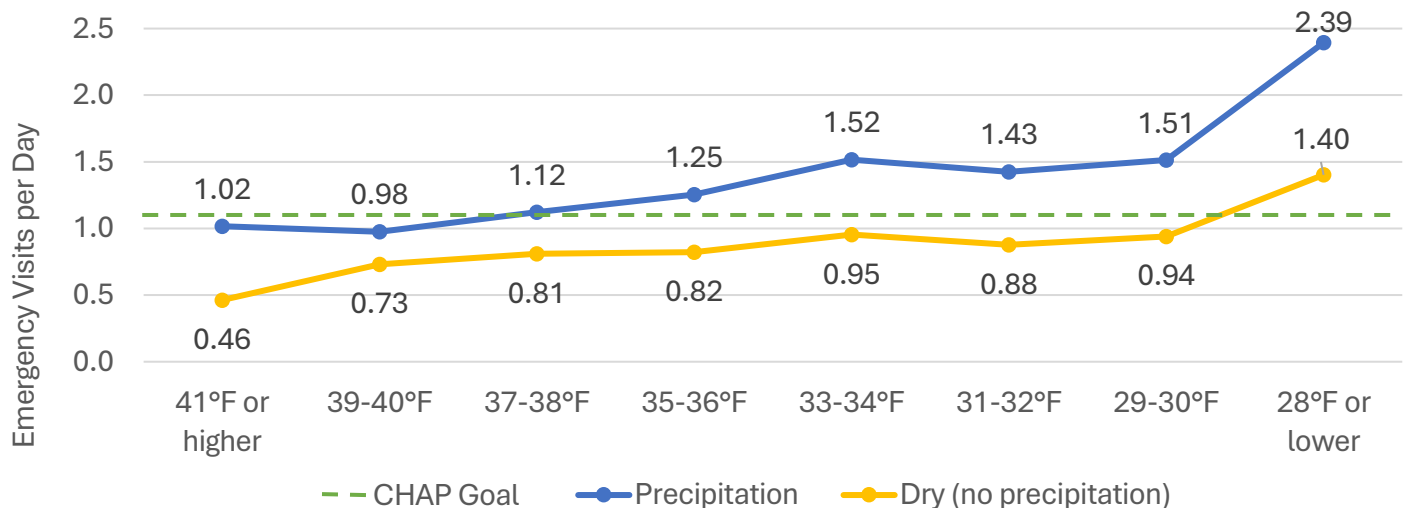
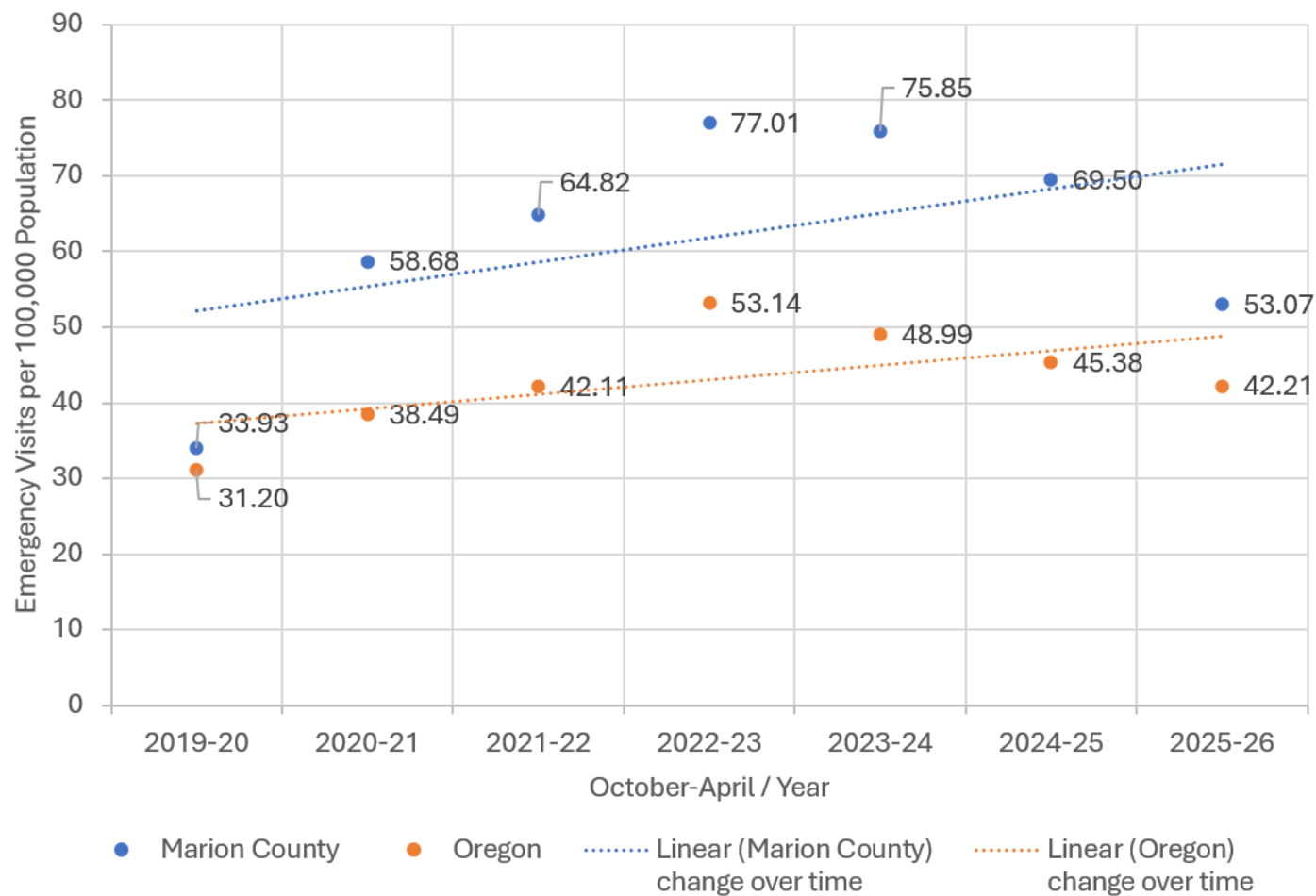


Figure 4e: Cold-Related Illness Emergency Visit Rates per 100,000 Population, Oct-April, 2019-2026, Marion County and Oregon ^{4,8}

The figure shows the rate of cold-related illness emergency visits per 100,000 population during seasonal cold months from 2019-2026 in Marion County and Oregon. The trend lines show change over time. Marion County's trend line is higher than the state of Oregon.





Hospitalizations (In-patient)

What am I reading?

Hospitalizations are the number of emergency visits that resulted in an in-patient visit caused by Cold-Related Illness in Marion County.^{4,6,8}

Figure 5a: Cold-Related Illness Hospitalization Counts, Oct-April, 2019-2026, Marion County⁴

The figure shows the yearly number of cold-related illness hospitalizations (in-patient) during seasonal cold months from 2019-2026 in Marion County. In recent years, the 2022-2023 cold season had the most hospitalizations and days 32°F wind chill or below. Since 2022-2023, hospitalizations have steadily decreased. Overall, the average hospitalization rate per year over the past seven cold weather seasons was 67 per year.

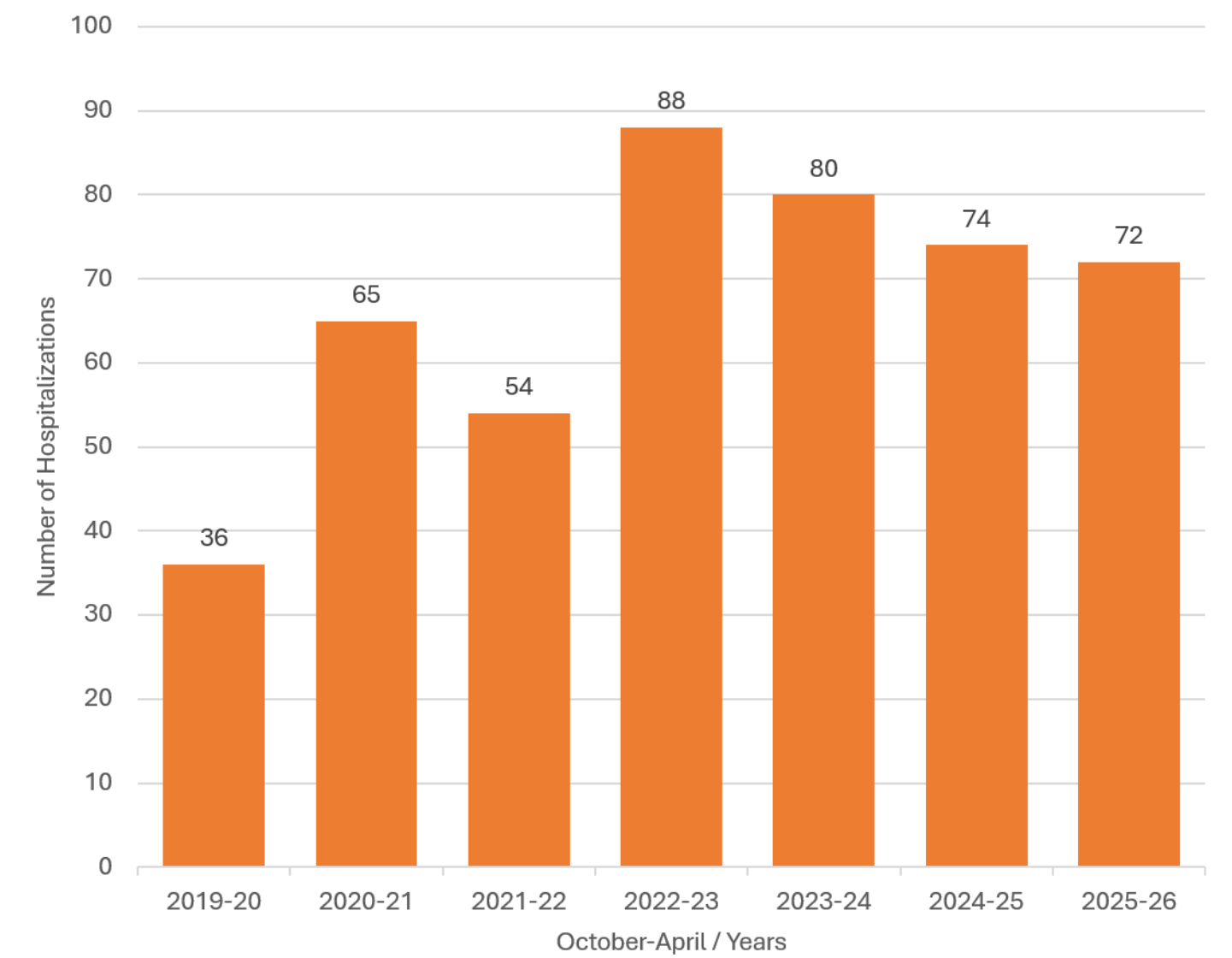


Figure 5b: Monthly Cold-Related Illness Hospitalization Counts, Oct-April, 2019- 2026, Marion County ⁴

The figure shows the monthly cold-related illness hospitalizations (in-patient) during seasonal cold months from 2019-2026 in Marion County. In recent years, cold-related illnesses peaked during January 2024 with 24 hospitalizations, coinciding with an ice storm and a temperature drop below 10°F wind chill for four straight days.

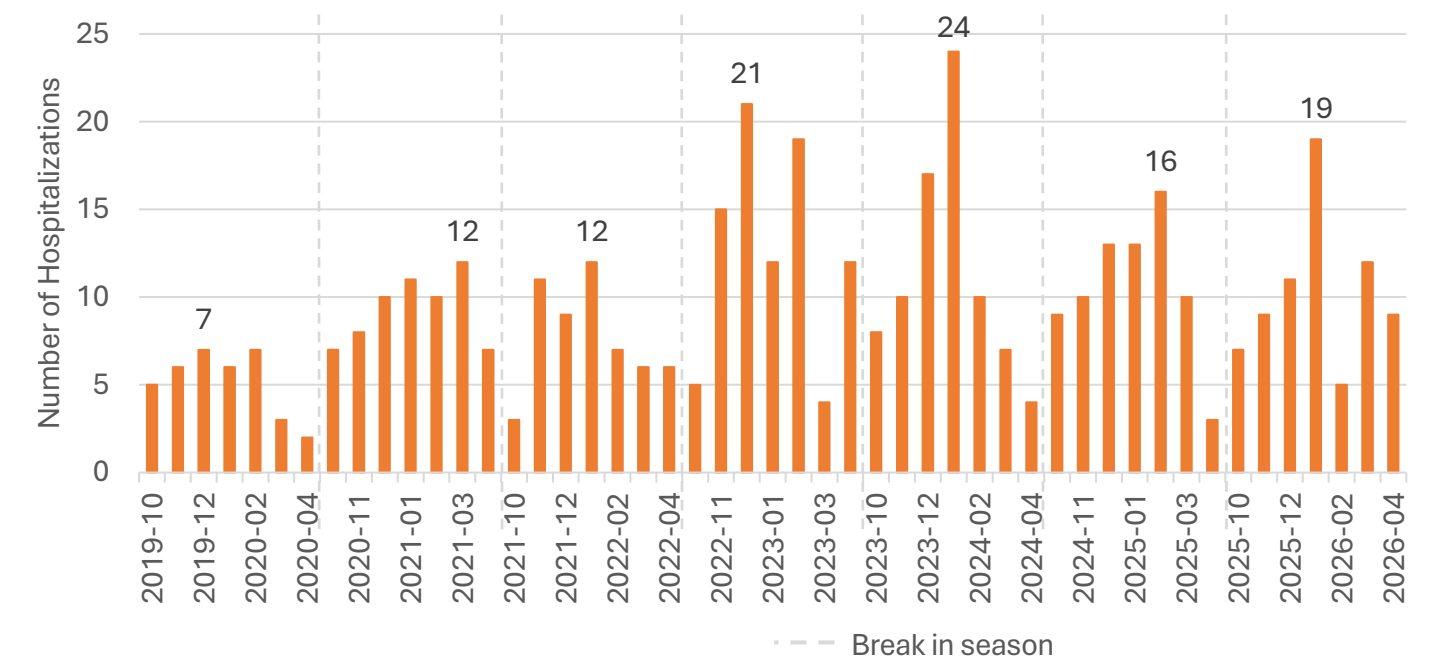
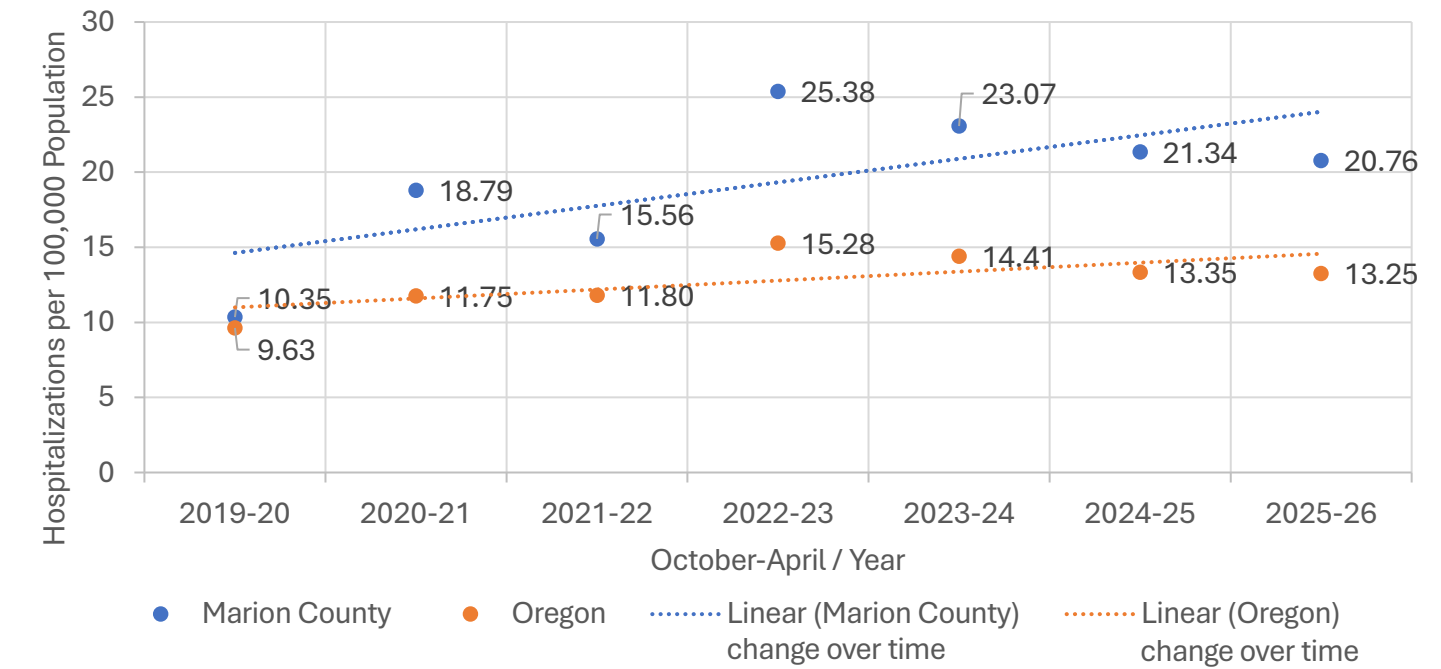


Figure 5c: Cold-Related Illness Hospitalization Rates per 100,000 Population, Oct-April, 2019-2026, Marion County and Oregon ^{4,8}

The figure shows the cold-related illness hospitalization (in-patient) rate per 100,000 population during seasonal cold months from 2019-2026 in Marion County and Oregon. The trendline shows an increase of hospitalizations from 2019 to 2026 for Marion County and Oregon. Marion County’s trend line is higher than the state of Oregon.





Injury Deaths – Excessive Natural Cold

What am I reading?

The number of recorded deaths due to excessive natural cold exposure that occurred in Marion County and Oregon. These deaths are documented and available to view from the Oregon Health Authority Center for Health Statistics website.

Table 1: Total Deaths and Rates per 100,000 persons from Natural Exposure to Excessive Cold, 2019 – 2024, Marion County and Oregon ⁵

From 2019-2024, 12 deaths were identified among Marion County residents due to excessive natural cold exposure, with a rate per 100,000 people of 0.69. Oregon totaled 119 deaths due to excessive cold exposure, with a rate per 100,000 people of 0.56. Oregon data shows death from natural cold exposure remains low, with steady increases between 2019-2023, dropping in 2024. As of the release of this report, data was unavailable for 2025.

Year	Marion County		Oregon	
	Count	Rate per 100,000	Count	Rate per 100,000
2019	1	0.29	18	0.43
2020	1	0.29	17	0.40
2021	2	0.58	29	0.68
2022	3	0.87	31	0.73
2023	5	1.44	24	0.57
2024	2	0.58	35	0.83
Total	14	0.69	154	0.56

Demographics

What am I reading?

The following sections show cold-related illness data among different populations of interest in Marion County, Oregon. Each section explains the association between the ESSENCE recorded characteristics (sex, age, race, ethnicity, geographic designation, and zip code, and identified housing status) related to emergency visits and hospitalizations (in-patient) between the seasonal cold months between October to April from 2019-2026.^{4,8}

By Sex

Figure 6a: Cold-Related Illness Emergency Visit Rates by Sex (Female and Male) per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the rate of cold-related illness emergency visits per 100,000 population for males and females during seasonal cold months from 2019-2026 in Marion County. Males had an emergency visit rate 2.5 times higher than females.

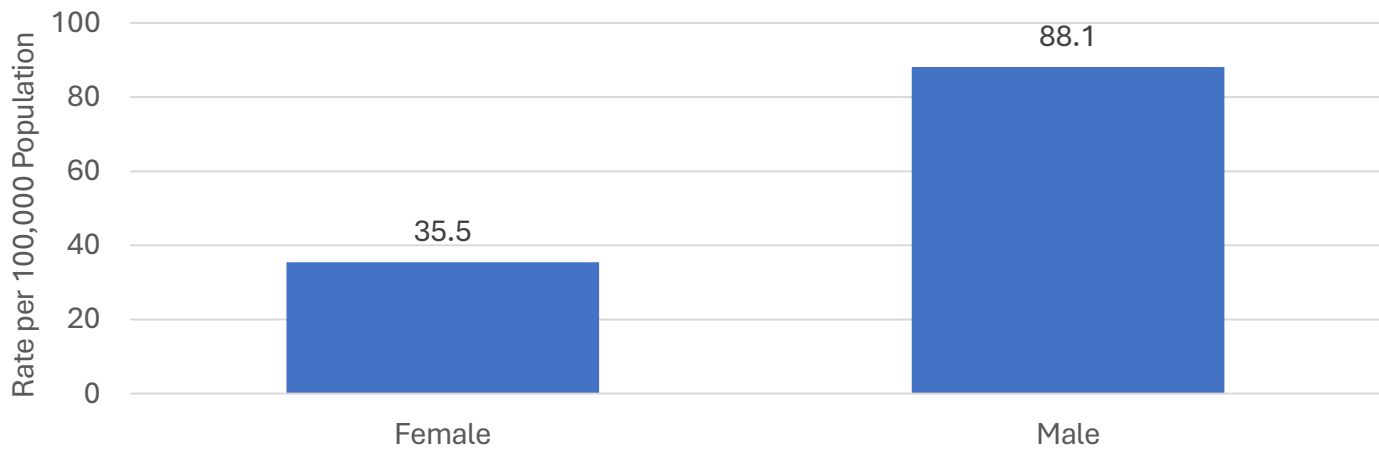
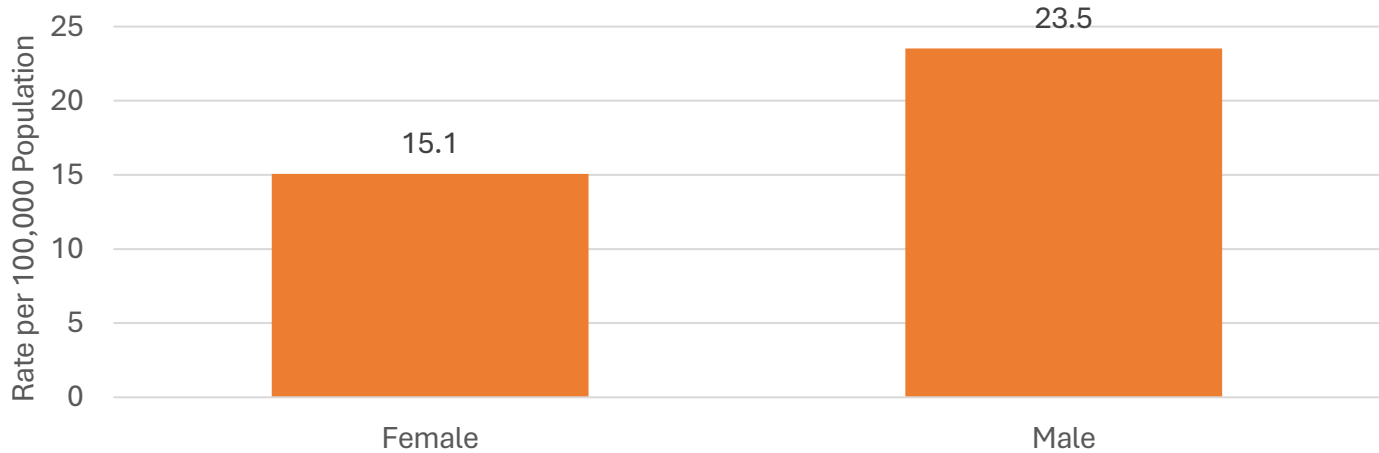


Figure 6b: Cold-Related Illness Hospitalization Rates by Sex (Female and Male) per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the rate of cold-related illness hospitalizations (in-patient) per 100,000 population for males and females during seasonal cold months from 2019-2026 in Marion County. Males had a hospitalization rate 1.6 times higher than females.

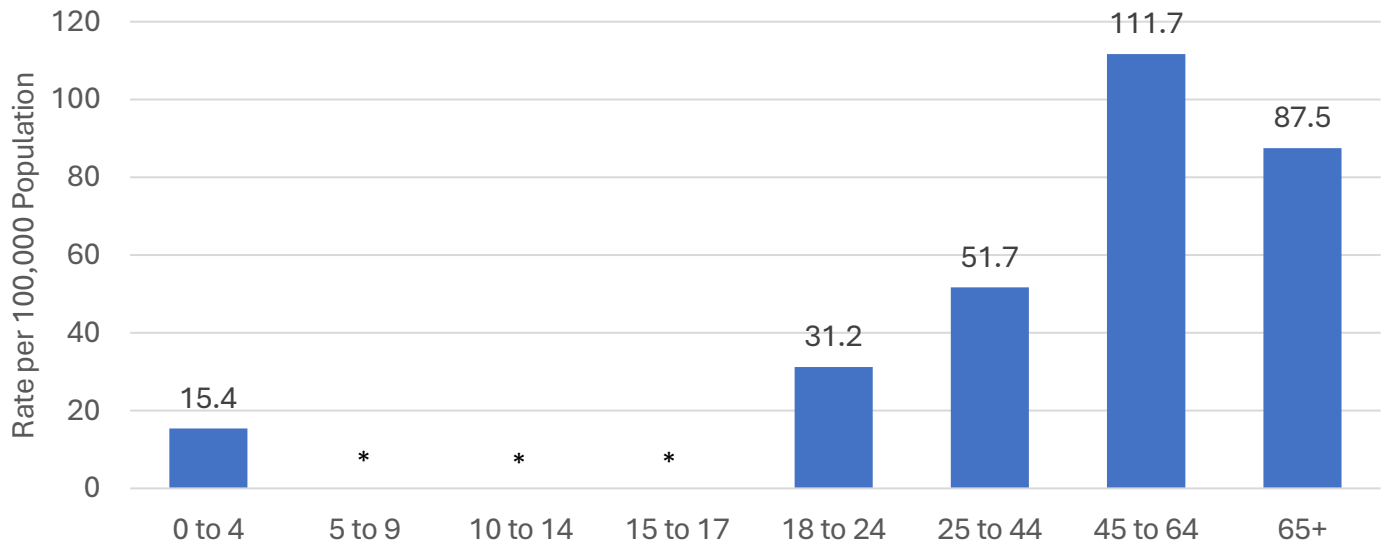




By Age

Figure 7a: Cold-Related Illness Emergency Visit Rates by Age Groups per 100,000 population, Oct-April 2019-2026, Marion County ^{4,8}

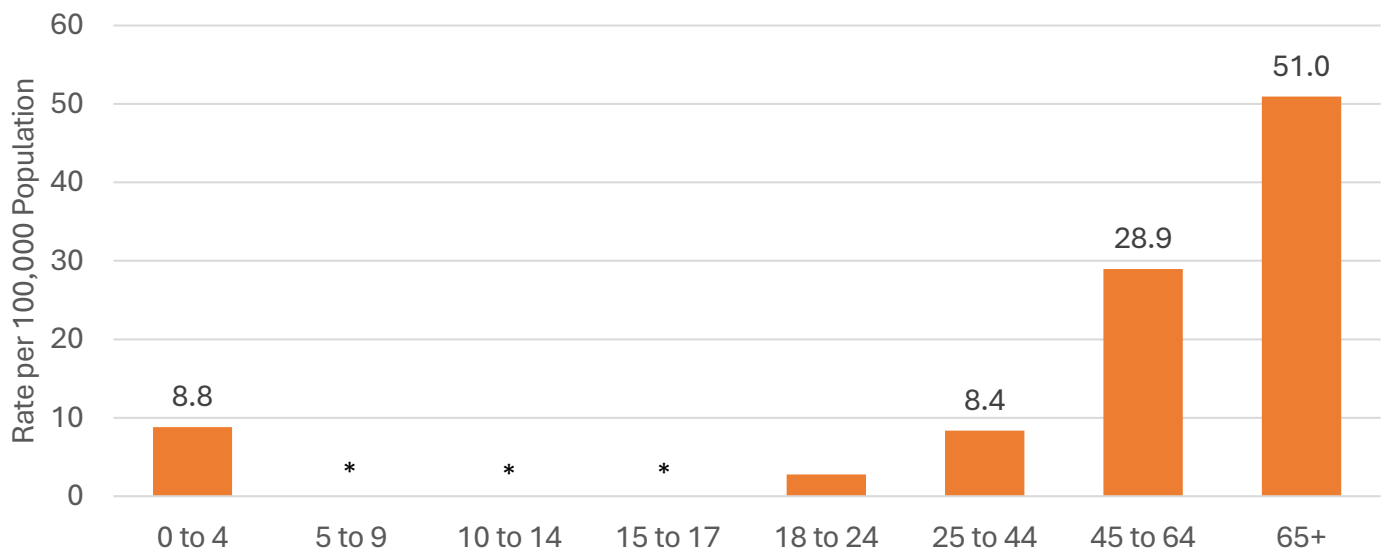
The figure shows the rate of cold-related illness emergency visits per 100,000 population by age groups during seasonal cold months from 2019-2026 in Marion County. CRI emergency visits increased with age. The 45 to 64 age group have the highest rate of emergency visits compared to other age groups.



* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Figure 7b: Cold-Related Illness Hospitalization Rates per 100,000 population by Age Groups, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the rate of cold-related illness hospitalizations (in-patient) per 100,000 population by age group during seasonal cold months from 2019-2026 in Marion County. CRI hospitalizations increased with age. The 65+ age group had the highest rate of hospitalizations compared to other age groups.

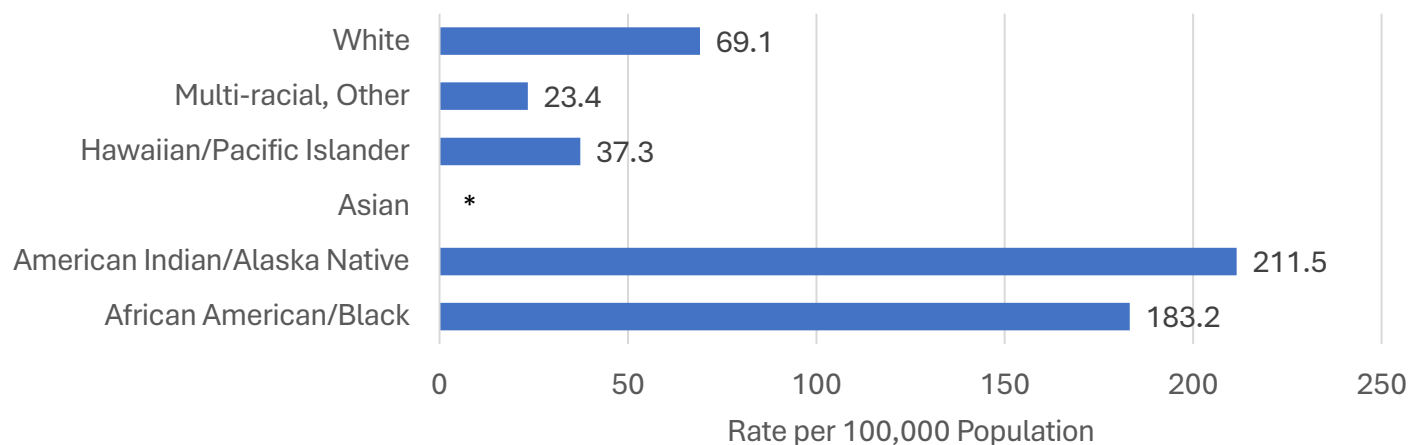


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By Race

Figure 8a: Cold-Related Illness Emergency Visit Rates by Race per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

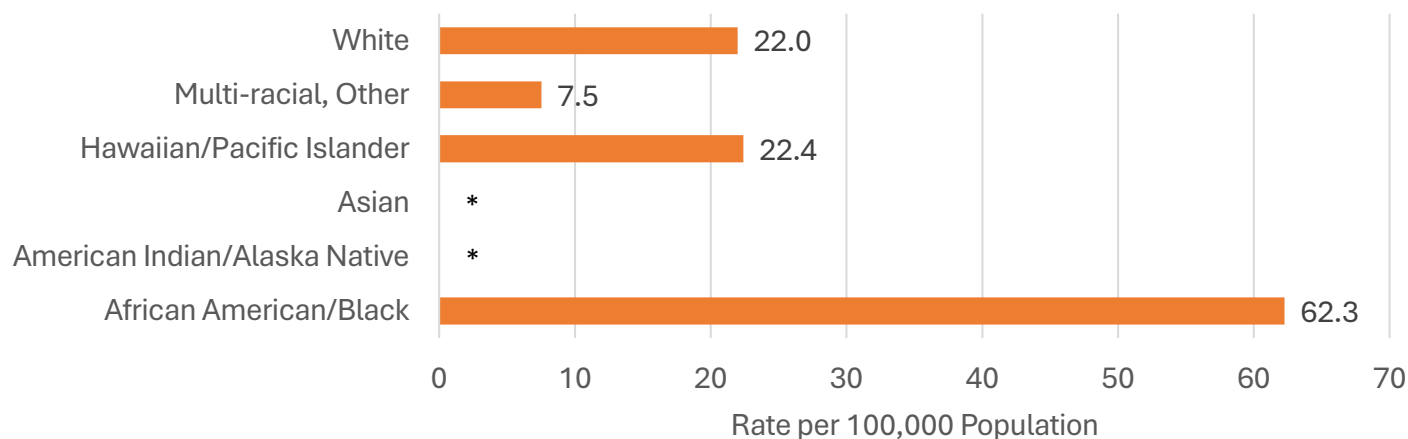
The figure shows the cold-related illness rate per 100,000 population for emergency visits by racial group during seasonal cold months from 2019-2026 in Marion County. Racial groups in this report match those used in the Oregon ESSENCE system. People who identified as American Indian/Alaska Native and African American/Black had the highest emergency visit rate among all racial groups; compared to previous cold seasons, these rates increased in the 2025-2026 season while White and Hawaiian/Pacific Islander rates decreased.



* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Figure 8b: Cold-Related Illness Hospitalization Rates by Race per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness rate hospitalization (in-patient) rate per 100,000 population by racial group during seasonal cold months from 2019-2026 in Marion County. Racial groups in this report match those used in the Oregon ESSENCE system. People who identified as African American/Black had the highest hospitalization rate among all racial groups. Compared to previous cold seasons, all racial group rates increased in the 2025-2026 season.



* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality



By Ethnicity

Figure 9a: Cold-Related Illness Emergency Visit Rates by Ethnicity per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness emergency visit rate per 100,000 population by ethnicity during seasonal cold months from 2019-2026 in Marion County. Ethnicity groups in this report match those used in the Oregon ESSENCE system. People who identified as Not Hispanic or Latino had an emergency visit rate 3.1 times higher than people who identified as Hispanic or Latino.

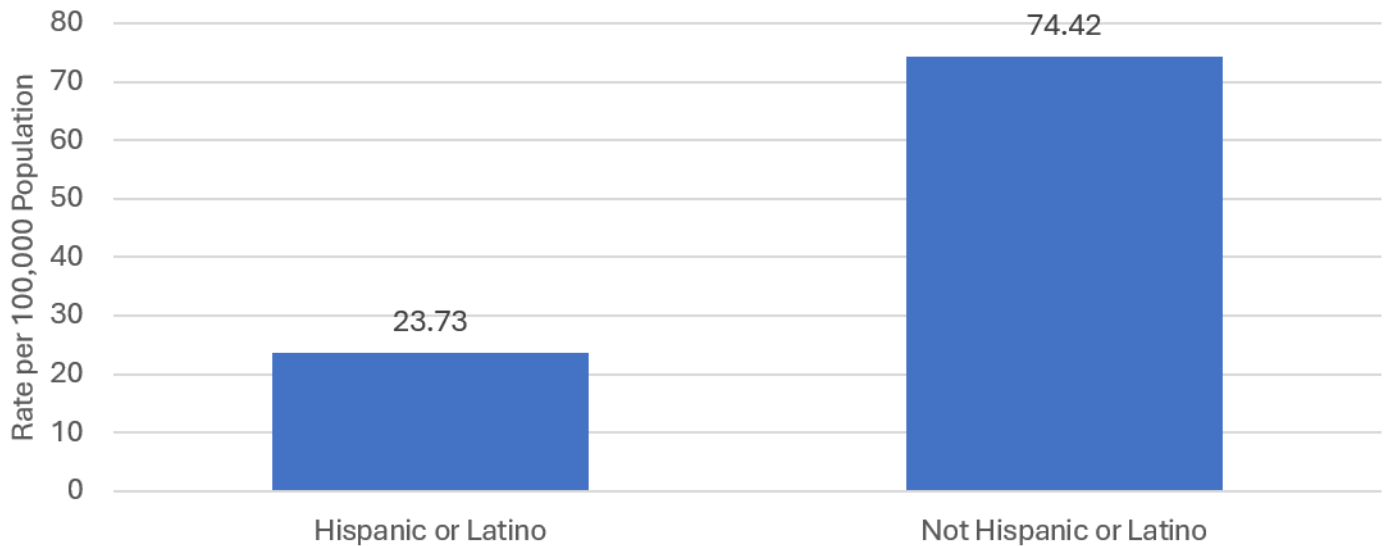
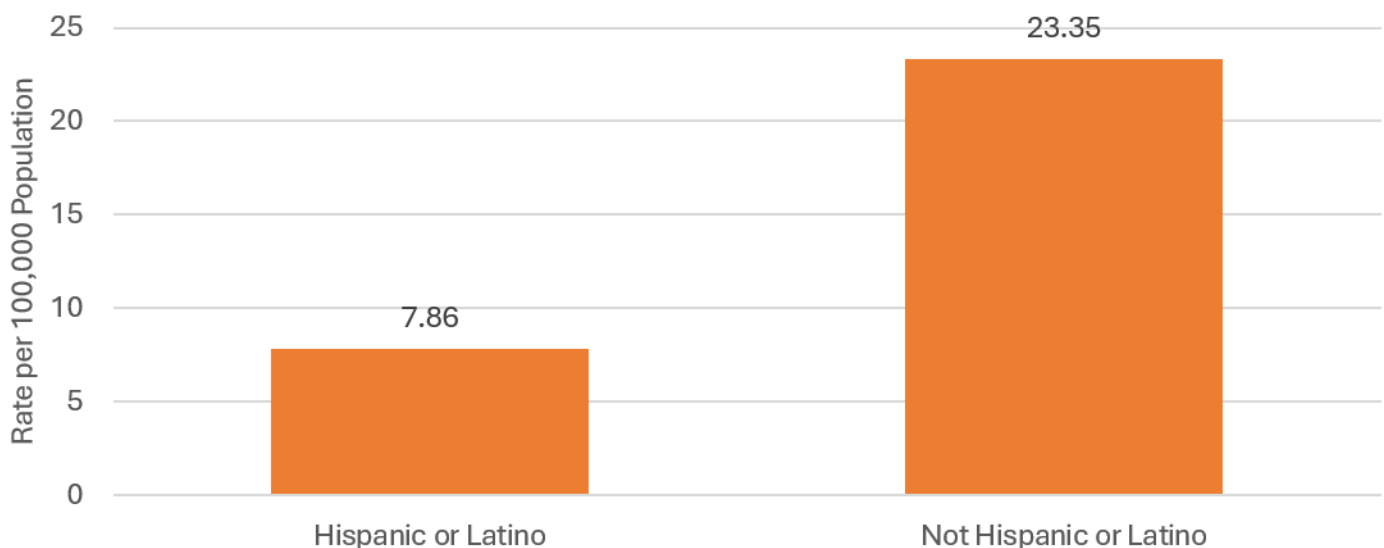


Figure 9b: Cold-Related Illness Hospitalization Rates by Ethnicity per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness hospitalizations (in-patient) rate per 100,000 population by ethnicity during seasonal cold months from 2019-2026 in Marion County. Ethnicity groups in this report match those used in the Oregon ESSENCE system. People who identified as Not Hispanic or Latino had a hospitalizations rate 3.0 times higher than people who identified as Hispanic or Latino.



Geographic Designation – Rural & Urban Communities

Rural areas are defined as locations situated ten or more miles from the center point (centroid) of a population center with at least 40,000 residents.

Figure 10a: Cold-Related Illness Emergency Visit Rates by Geographic Designation per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness emergency visit rate per 100,000 population by the type of geographic residence (rural or urban) during seasonal cold months from 2019-2026 in Marion County. Urban designated areas had an emergency visit rate 3.6 times higher than rural designated areas.

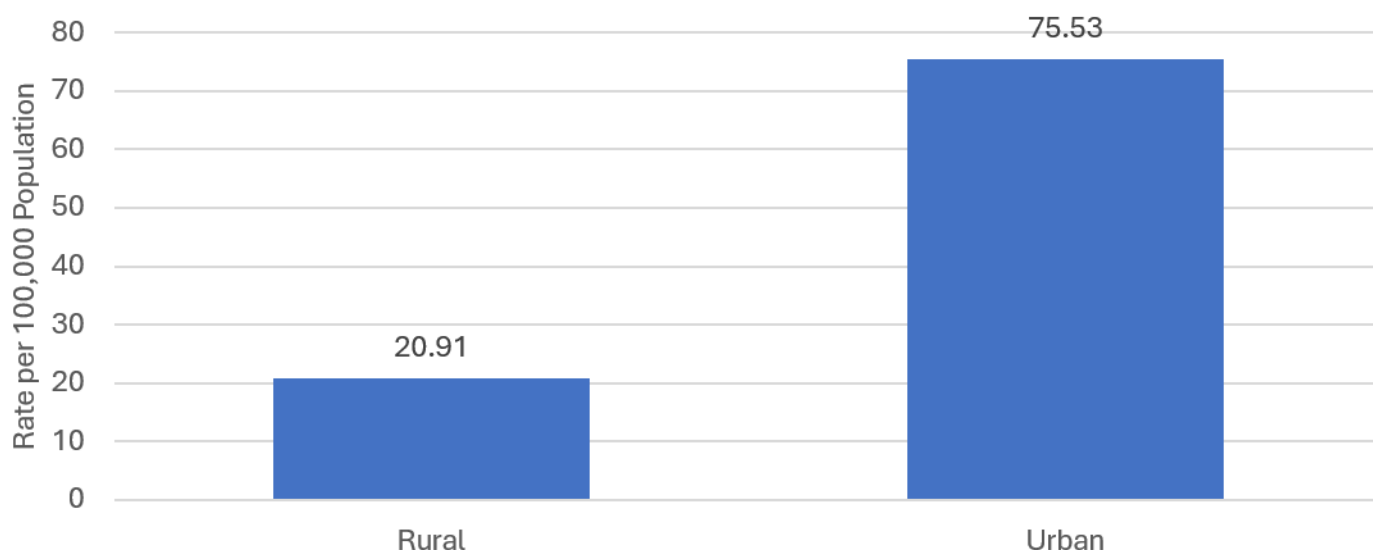
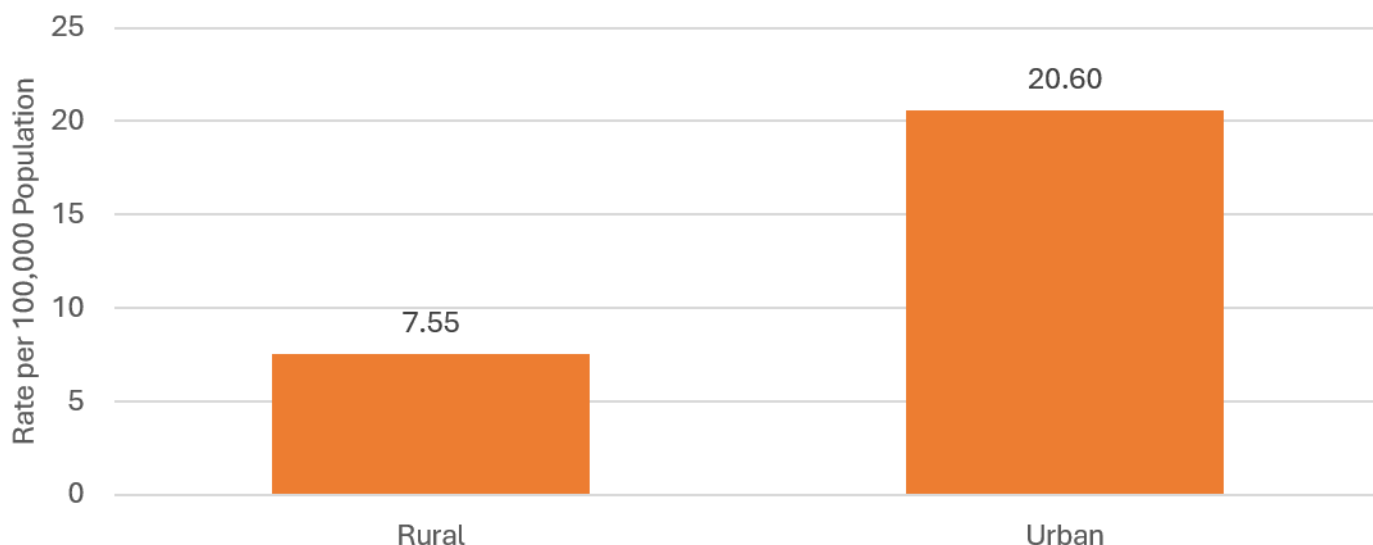


Figure 10b: Cold-Related Illness Hospitalization Rates by Geographic Designation per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness hospitalizations (in-patient) rate per 100,000 population by the type of geographic residence (rural or urban) during seasonal cold months from 2019-2026 in Marion County. Urban designated areas had a hospitalization rate 2.7 times higher than rural designated areas.

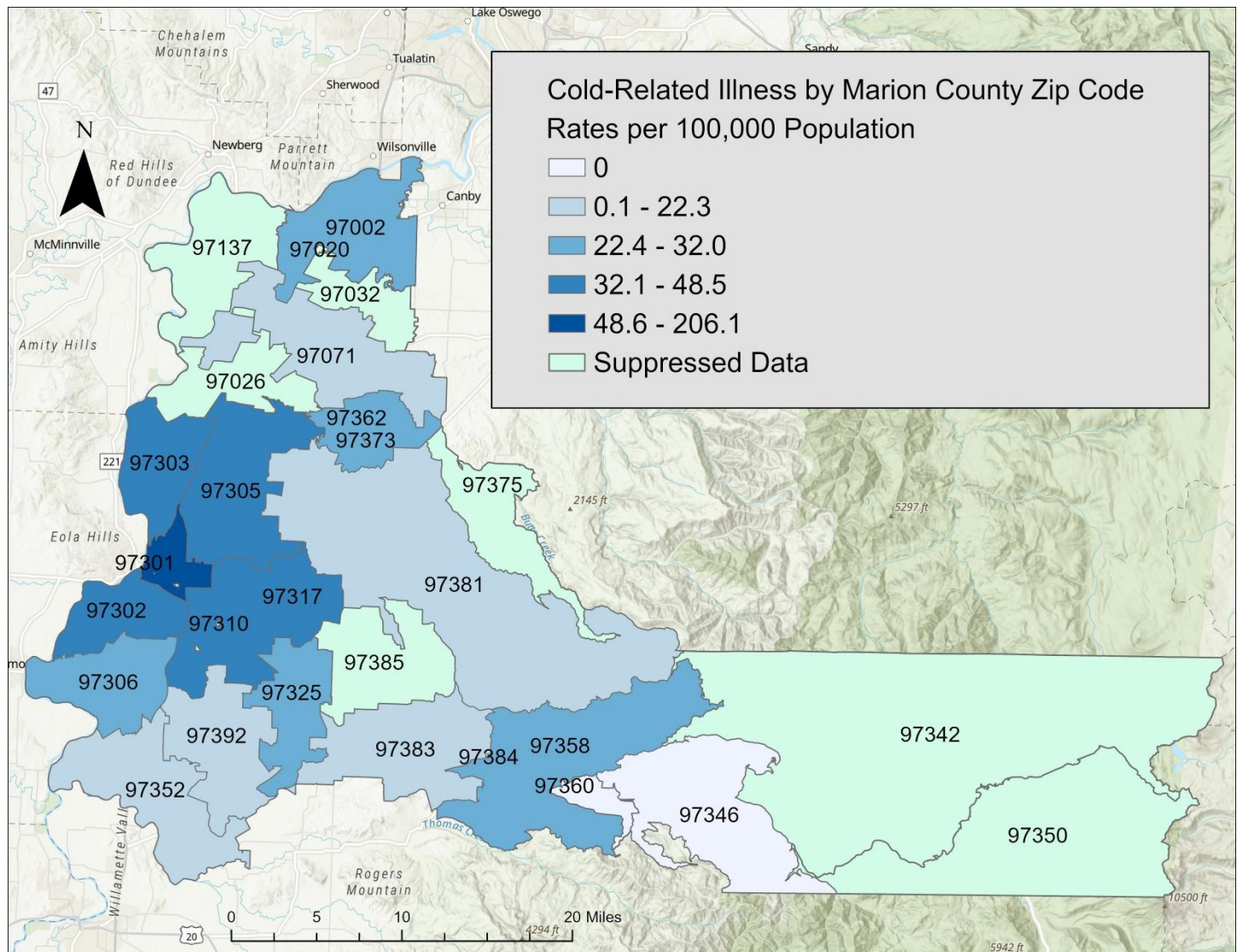




ZIP Code – Spatial Analysis

Figure 11: Cold-Related Illness Emergency Visit Rates by ZIP Code per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The map below shows the cold-related illness emergency visit rate per 100,000 population by ZIP code during seasonal cold months from 2019-2026 in Marion County. These are expressed with different colors to represent different values. The ZIP codes with the highest rates include 97301 and 97305.



Mint green color = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Identified Homeless

What am I reading?

The following sections describe the associations of emergency visits and hospitalizations (in-patient) due to cold-related illness and people identified as homeless during cold weather months between October to April from 2019-2026 in Marion County.^{4,7,8}

Figure 12a: Number of Cold-Related Illness Emergency Visits among People Identified as Homeless during cold weather months, Oct-April, 2019-2026, Marion County⁴

The figure shows the yearly number of cold-related illness emergency visits among groups identified as homeless during seasonal cold months from 2019-2026 in Marion County. The number of cold-related illness visits among people identified as homeless continually increased between the 2019-2020 and 2024-2025 season before dropping substantially in the 2025-2026 season.

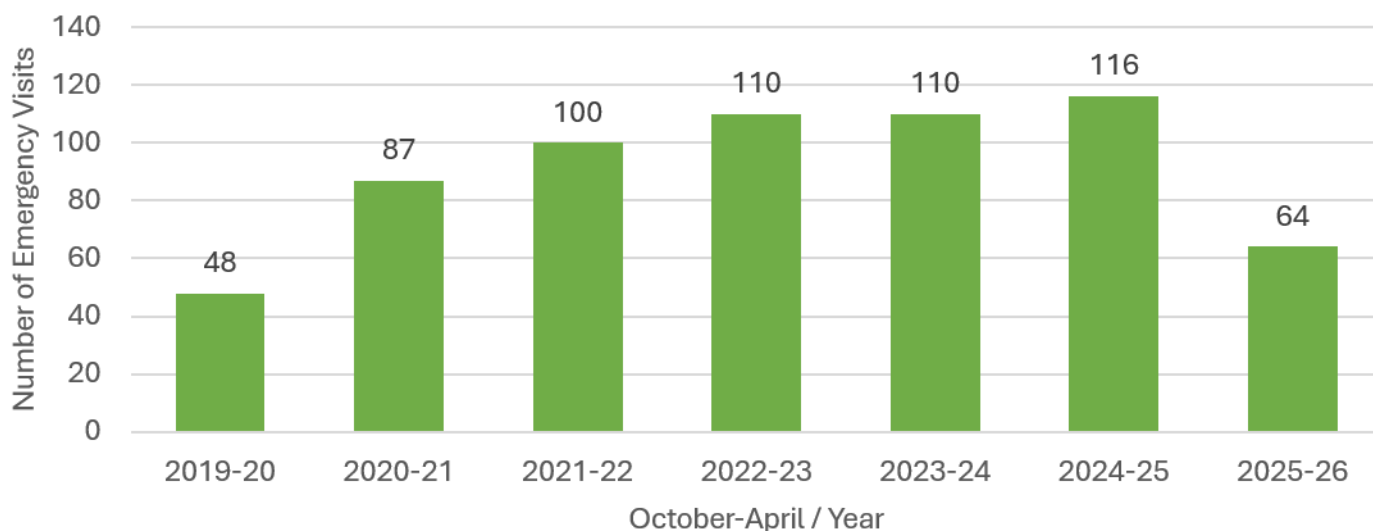


Figure 12b: Percentage of Cold-Related Illness Emergency Visits by Identified Housing Status, Oct-April, 2019-2026, Marion County^{4,8}

The figure shows the percentage of cold-related illness emergency visits by identified housing status during seasonal cold months from 2019-2026. According to the Oregon Housing and Community Services, an estimated 1,428 Marion County residents (0.4% of the population) were identified as homeless.⁷ This shows that the proportion of emergency visits among people identified as homeless was very high.

In total, 635 cold-related illness emergency visits occurred among people identified as homeless during seasonal cold months (October to April) from 2019-2026, compared to 866 emergency visits not identified as homeless.

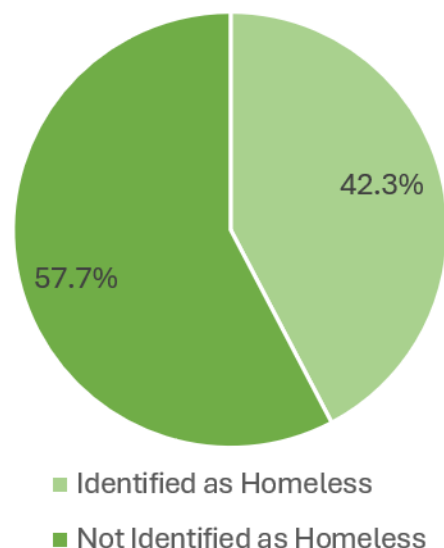
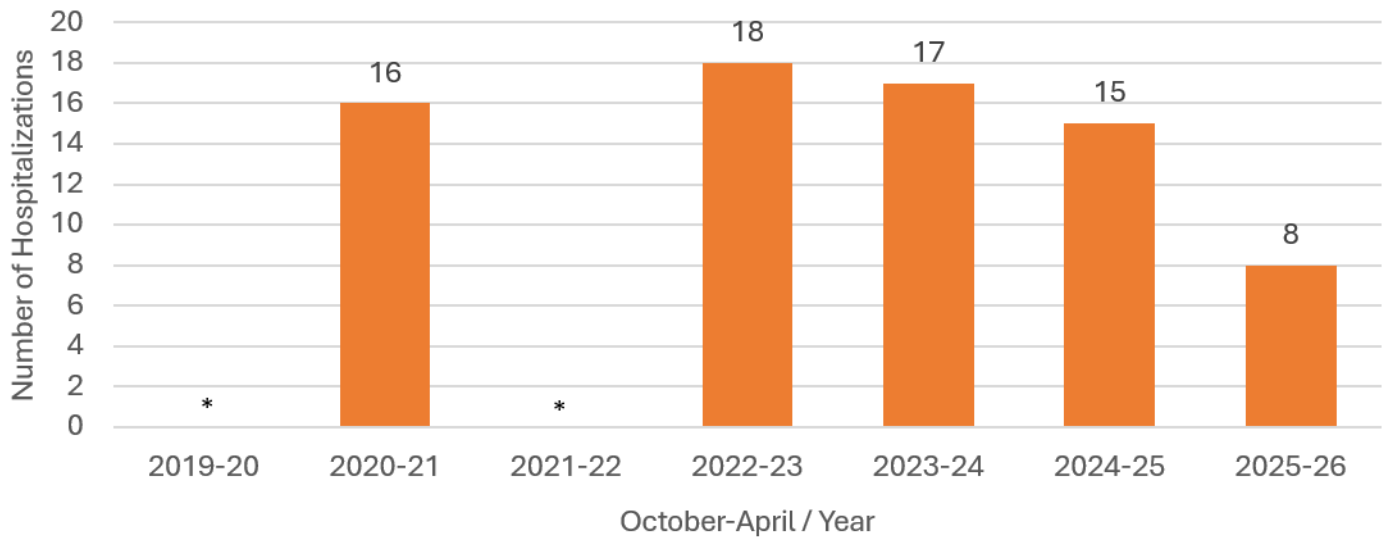




Figure 12c: Cold-Related Illness Hospitalization Counts among People Identified as Homeless, Oct-April, 2019-2026, Marion County ⁴

The figure shows the yearly number of cold-related illness hospitalizations (in-patient) among people identified as homeless during seasonal cold months from 2019-2026 in Marion County. While the trend of hospitalizations increased over the past six seasons for people identified as homeless, hospitalizations have declined since their peak in the 2022-2023 season.

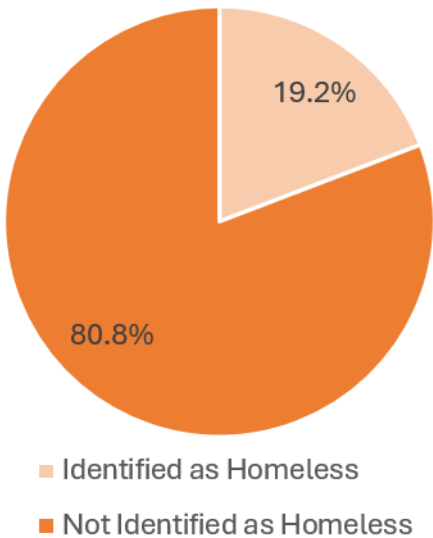


** = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality*

Figure 12d: Percentage of Cold-Related Illness Hospitalizations by Identified Housing Status, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the percentage of cold-related illness hospitalizations (in-patient) by identified housing status during seasonal cold months from 2019-2026 in Marion County. According to the Oregon Housing and Community Services, an estimated 1,428 Marion County residents (0.4% of the population) were identified homeless.⁷ This shows that the proportion of hospitalizations among people identified as homeless is very high.

In total, 90 cold-related illness hospitalizations occurred among people identified as homeless during seasonal cold months (October to April) from 2019-2026, compared to 379 hospitalizations not identified as homeless.



Identified Housing Status - Demographics

What am I reading?

The following sections show demographic information by housing status in Marion County, Oregon. Each section shows the association between the characteristics in the identified housing status with emergency visits and hospitalizations (in-patient) during the seasonal cold months of October to April from 2019-2026.

By Housing Status and Sex

Figure 13a: Cold-Related Illness Emergency Visit Rates by Identified Housing Status and Sex (Female and Male) per 100,000 population, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness emergency visit rate per 100,000 population by patient identified housing status and sex during seasonal cold months from 2019-2026 in Marion County. Males had a higher proportion of emergency visits among people identified as homeless compared to females.

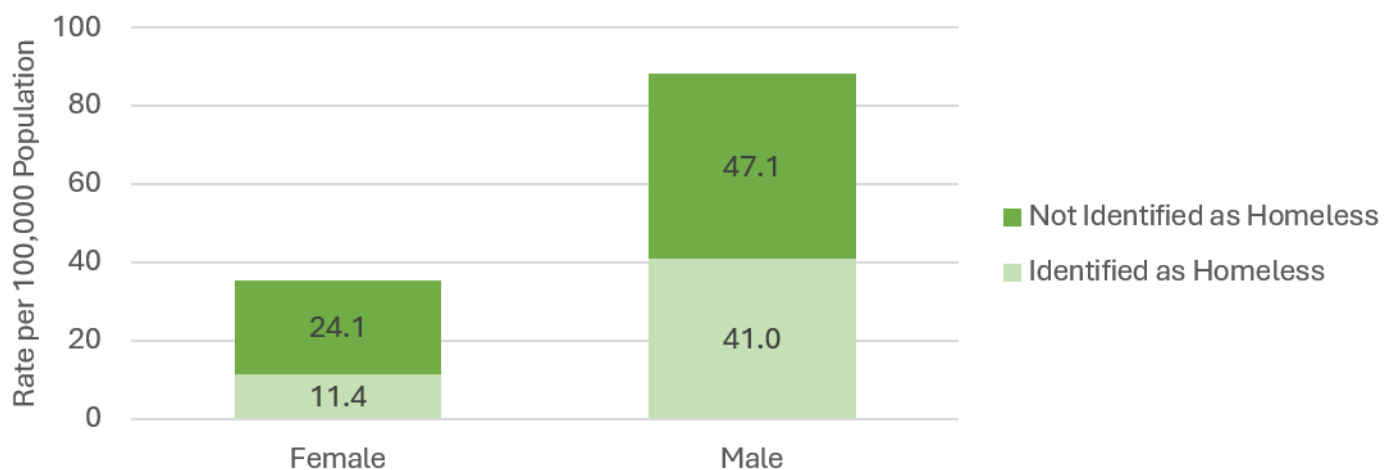
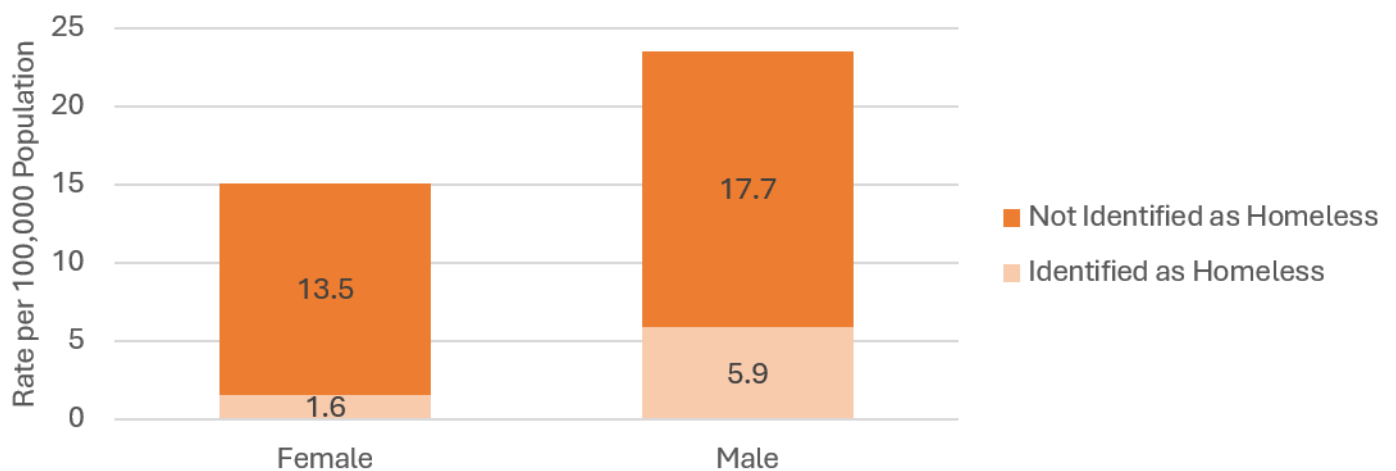


Figure 13b: Cold-Related Illness Hospitalization Rates per 100,000 population by Identified Housing Status and Sex (Female and Male), Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness hospitalization (in-patient) rate per 100,000 population by patient identified housing status and sex during seasonal cold months from 2019-2026 among Marion County residents. Males had a higher proportion of hospitalizations among people identified as homeless compared to females.

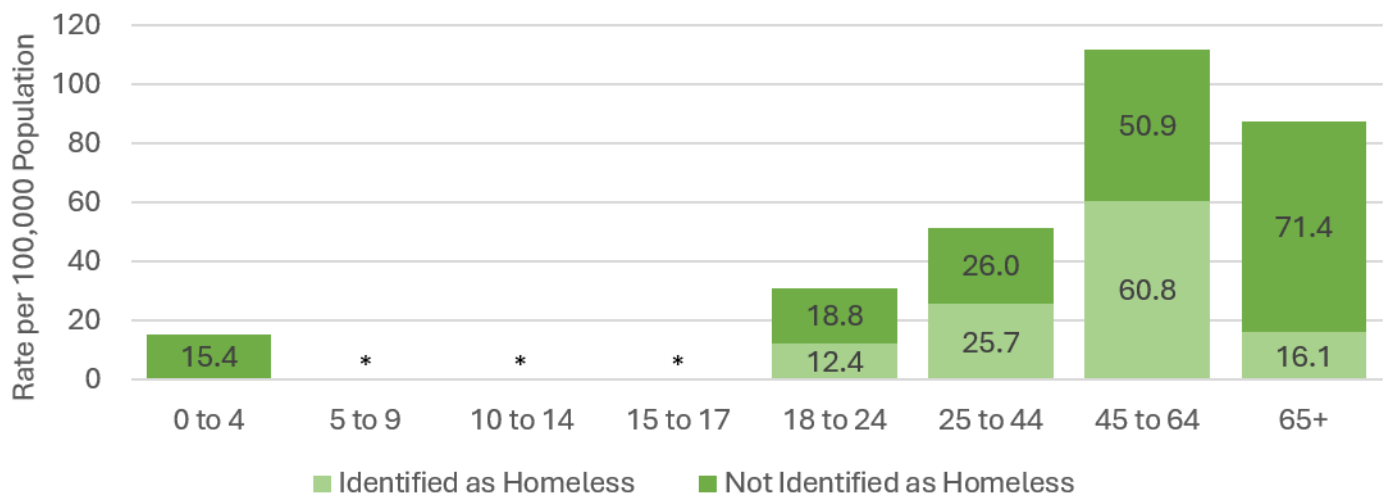




By Housing Status and Age

Figure 14a: Cold-Related Illness Emergency Visit Rates per 100,000 population by Identified Housing Status and Age group, Oct-April, 2019-2026, Marion County ^{4,8}

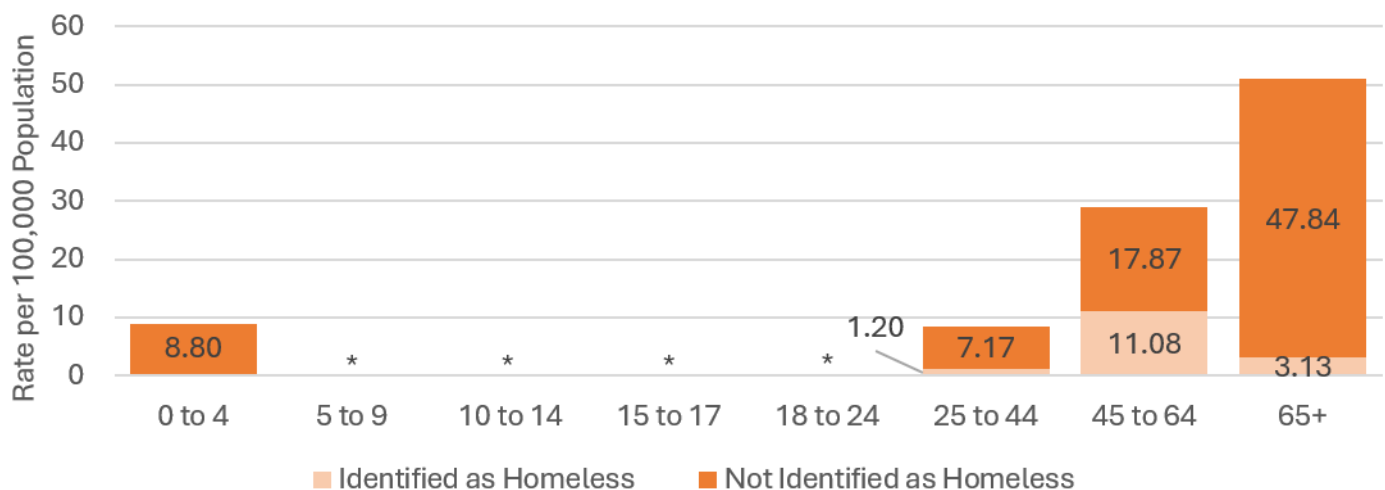
The figure shows the cold-related illness emergency visit rate per 100,000 population by patient identified housing status and age group during seasonal cold months from 2019-2026 in Marion County. The group with the highest emergency visit rate was 65+ and not identified as homeless. The group identified as homeless and 45 to 64 had the highest emergency visit rate among homeless groups, making up 54.3% of the age group.



* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Figure 14b: Cold-Related Illness Hospitalization Rates per 100,000 population by Identified Housing Status and Age group, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness hospitalization (in-patient) rate per 100,000 population by identified housing status and age group during seasonal cold months from 2019-2026 in Marion County. The group with the highest hospitalization rate was 65+ and not identified as homeless. The group identified as homeless and 45 to 64 had the highest hospitalization rate among homeless groups.



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By Housing Status and Ethnicity

Figure 15a: Cold-Related Illness Emergency Visit Rates per 100,000 population by Identified Housing Status and Ethnicity, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness emergency visit rate per 100,000 population by identified housing status and ethnicity during seasonal cold months from 2019-2026 in Marion County. The groups identified as Not Hispanic or Latino had the highest emergency visit rate among all the observed groups, with 43.6% identified as homeless.

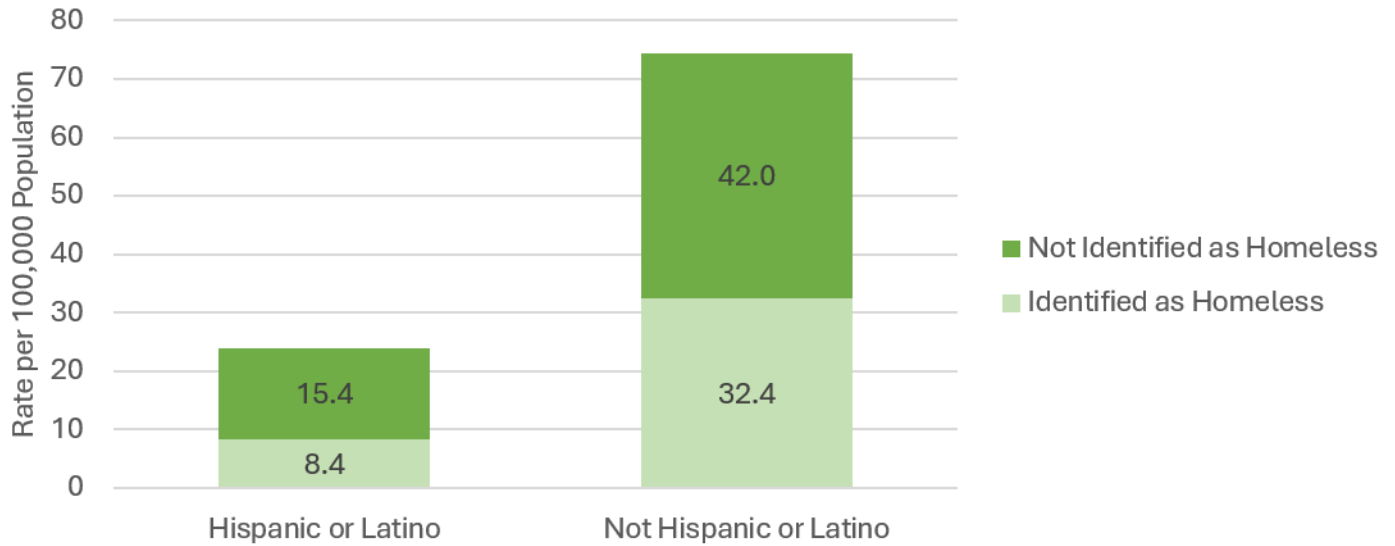
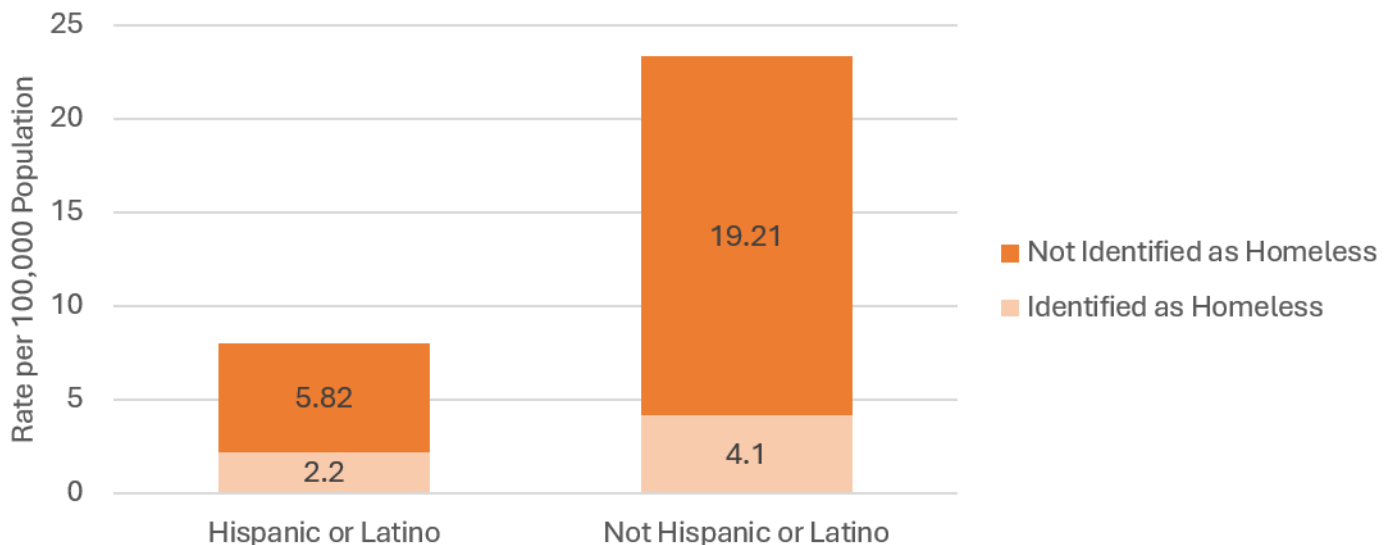


Figure 15b: Cold-Related Illness Hospitalization Rates per 100,000 population by Identified Housing Status and Ethnicity, Oct-April, 2019-2026, Marion County ^{4,8}

The figure shows the cold-related illness hospitalization (in-patient) rate per 100,000 population by identified housing status and ethnicity during seasonal cold months from 2019-2026 in Marion County. The group with the highest hospitalization rate was Not Hispanic or Latino and not identified as homeless.





Appendix A. Data Tables – Counts

Wind Chill Days Marion County, Oregon, October-April, 2019-2026 (Figures 3a-3c)					
Year	Days Below 40°F	Days Below 32°F	Days Below 25°F	Days Below 20°F	Days Below 10°F
2019-20	143	62	4	1	0
2020-21	154	53	3	0	0
2021-22	123	41	9	1	0
2022-23	150	67	15	7	0
2023-24	120	41	8	5	2
2024-25	106	28	1	0	0
2025-26	118	31	3	0	0

Precipitation Days by Wind Chill Degrees in Marion County, Oregon, October-April, 2019-2026 (Figures 3b-3c)				
Year	40°F and Below Precipitation Days	40°F and Below Dry Days (no rain)	32°F and Below Precipitation Days	32°F and Below Dry Days (no rain)
2019-20	59	84	16	46
2020-21	79	75	19	34
2021-22	57	66	13	28
2022-23	82	68	28	39
2023-24	60	60	15	26
2024-25	41	65	5	23
2025-26	40	78	5	26

Yearly Cold-Related Illness Emergency Visits Marion County, Oregon, October-April, 2019-2026 (Figure 4a)	
Year	Count
2019-20	118
2020-21	203
2021-22	225
2022-23	267
2023-24	263
2024-25	241
2025-26	184

Monthly Cold-Related Illness Emergency Visits Marion County, Oregon, October-April, 2019-2026 (Figures 4b-4c)					
Month 2019-20 cold season	Counts	Month 2020-21 cold season	Counts	Month 2021-22 cold season	Counts
Oct-19	17	Oct-20	22	Oct-21	17
Nov-19	13	Nov-20	30	Nov-21	23
Dec-19	22	Dec-20	27	Dec-21	56
Jan-20	33	Jan-21	32	Jan-22	51

Feb-20	15	Feb-21	50	Feb-22	32
Mar-20	10	Mar-21	29	Mar-22	28
April-20	8	April-21	13	April-22	18
Month 2022-23 cold season	Counts	Month 2023-24 cold season	Counts	Month 2024-25 cold season	Counts
Oct-22	13	Oct-23	23	Oct-24	19
Nov-22	52	Nov-23	38	Nov-24	38
Dec-22	49	Dec-23	59	Dec-24	53
Jan-23	40	Jan-24	81	Jan-25	46
Feb-23	51	Feb-24	28	Feb-25	48
Mar-23	27	Mar-24	22	Mar-25	27
April-23	35	April-24	12	April-25	10
Month 2025-26 cold season	Counts				
Oct-25	19				
Nov-25	22				
Dec-25	31				
Jan-26	41				
Feb-26	27				
Mar-26	23				
April-26	21				

Yearly Cold-Related Illness Hospitalizations (in-patient), Marion County, Oregon, October-April, 2019-2026 (Figure 5a)	
Year	Count
2019-20	36
2020-21	65
2021-22	54
2022-23	88
2023-24	80
2024-25	74
2025-26	72

Monthly Cold-Related Illness Hospitalizations (in-patient), Marion County, October-April, 2019-2026 (Figure 5b-5c)					
Month 2019-20 cold season	Counts	Month 2020-21 cold season	Counts	Month 2021-22 cold season	Counts
Oct-19	5	Oct-20	7	Oct-21	3
Nov-19	6	Nov-20	8	Nov-21	11
Dec-19	7	Dec-20	10	Dec-21	9
Jan-20	6	Jan-21	11	Jan-22	12
Feb-20	7	Feb-21	10	Feb-22	7
Mar-20	3	Mar-21	12	Mar-22	6
April-20	2	April-21	7	April-22	6
Month 2022-23 cold season	Counts	Month 2023-24 cold season	Counts	Month 2024-25 cold season	Counts



Oct-22	5	Oct-23	8	Oct-24	9
Nov-22	15	Nov-23	10	Nov-24	10
Dec-22	21	Dec-23	17	Dec-24	13
Jan-23	12	Jan-24	24	Jan-25	13
Feb-23	19	Feb-24	10	Feb-25	16
Mar-23	4	Mar-24	7	Mar-25	10
April-23	12	April-24	4	April-25	3
Month 2025-26 cold season	Counts				
Oct-25	7				
Nov-25	9				
Dec-25	11				
Jan-26	19				
Feb-26	5				
Mar-26	12				
April-26	9				

**Cold-Related Illness Counts by Sex, Marion County, Oregon, October-April, 2019-2026
(Figures 6a-6b)**

Sex	Emergency Visit Counts	Hospitalizations (In-patient) Counts
Female	431	183
Male	1067	284

**Cold-Related Illness Counts by Age Group, Marion County, Oregon, October-April, 2019-2026 (Figures
7a-7b)**

** = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality*

**Cold-Related Illness Counts by Race Group, Marion County, Oregon, October-April 2019-2026 (Figures
8a-8b)**

** = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality*

**Cold-Related Illness Counts by Ethnicity Group, Marion County, Oregon, October-April, 2019-2026
(Figures 9a-9b)**

Ethnicity	Emergency Visit Counts	Hospitalizations (In-patient) Counts
Hispanic or Latino	163	54
Not Hispanic or Latino	1294	406

**Cold-Related Illness Emergency Visits by Zip code Group, Marion County, Oregon, October-April, 2019-
2026 (Figures 10a-10b, 11)**

Zip code	Emergency Visit Counts	Emergency Visit Rates per 100,000 Population	Rate Change Over Time (Seasons between 2019-25 vs. 2025-26 season)
97002	*	26.50410814	-4.4 decrease
97020	*	*	-
97026	*	*	-
97032	*	*	-
97071	*	17.04578588	-
97137	*	*	-
97301	*	206.1342716	-7.1 decrease
97302	*	40.81233998	1.3 increase
97303	*	35.63306329	-
97305	*	48.84113311	-3.3 decrease
97306	*	30.11040482	-2.1 decrease
97310	*	*	-
97317	*	37.6730092	2.0 increase
97325	*	29.95327289	-
97342	*	*	-
97346	*	0	-
97350	*	*	-
97352	*	21.53084293	3.9 increase
97358	*	31.98294243	-
97360	*		-
97362	*	25.30364372	-4.2 decrease
97373	*	0	-
97375	*	*	-
97381	*	22.25766962	2.8 increase
97383	*	22.28428809	-
97384	*	0	-
97385	*	*	-
97392	*	20.41107913	-1.0 decrease

* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Yearly Cold-Related Illness Emergency Visits by Identified Housing Status, Marion County, October-April, 2019-2026 (Figure 12a-12b)		
October – April Cold Weather Season Year	Emergency Visit Counts of People Identified as Homeless	Emergency Visit Counts of People Not Identified as Homeless
2019-20	48	70
2020-21	87	116
2021-22	100	125
2022-23	110	157
2023-24	110	153
2024-25	105	136
2025-26	64	120



Total	635	866
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Yearly Cold-Related Illness Hospitalizations (in-patient) by Identified Housing Status, Marion County, October-April, 2019-2026 (Figure 12c-12d)		
October – April Cold Weather Season Year	Hospitalization Counts of People Identified as Homeless	Hospitalization Counts of People Not Identified as Homeless
2019-20	*	*
2020-21	16	49
2021-22	*	*
2022-23	18	70
2023-24	17	63
2024-25	13	19
2025-26	14	58
Total	90	379

* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Cold-Related Illness Counts by Identified Housing Status and Sex, Marion County, Oregon, October-April, 2019-2026 (Figure 13a-13b)				
Sex	Emergency Visit Counts of People Identified as Homeless	Hospitalization Counts of Identified as Homeless	Emergency Visit Counts of People Not Identified as Homeless	Hospitalization Counts of People Not Identified as Homeless
Female	138	19	293	164
Male	496	71	571	214

Cold-Related Illness Counts by Identified Housing Status and Age Groups, Marion County, Oregon, October-April 2019-2026 (Figure 14a-14b)

* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

Cold-Related Illness Counts by Identified Housing Status and Ethnicity, Marion County, Oregon, October-April 2019-2026 (Figures 15a-15b)

* = Suppressed due to low counts (less than 6) or secondary suppression to protect confidentiality

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- ⁸ United States Census Bureau. (2025). American Community Survey, 2017-2025. *United States Census Bureau*. <https://data.census.gov>

For more information, please contact:

Michael Keuler
Environmental Health Resiliency Coordinator
Marion County Health & Human Services
3160 Center Street NE, Salem, OR 97301
mkeuler@co.marion.or.us or MCHDPrevention@co.marion.or.us

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