

Summer Hazards Report

Rapid Health Information NetwOrk

Washington State Department of Health

Date Prepared: October 11, 2023

Data Date Range: May 01, 2023 to September 30, 2023

Incident Description: Summer hazards are associated with outdoor conditions, extreme weather events, or recreational activities and can cause various adverse health effects resulting in healthcare visits. This report contains weather data and analyses of healthcare encounter data for summer hazards, including suspected Heat-Related Illness (HRI), asthma, smoke-related visits, drowning or submersion events, and boating-related emergency department (ED) visits based on data reported to the Rapid Health Information NetwOrk (RHINO).

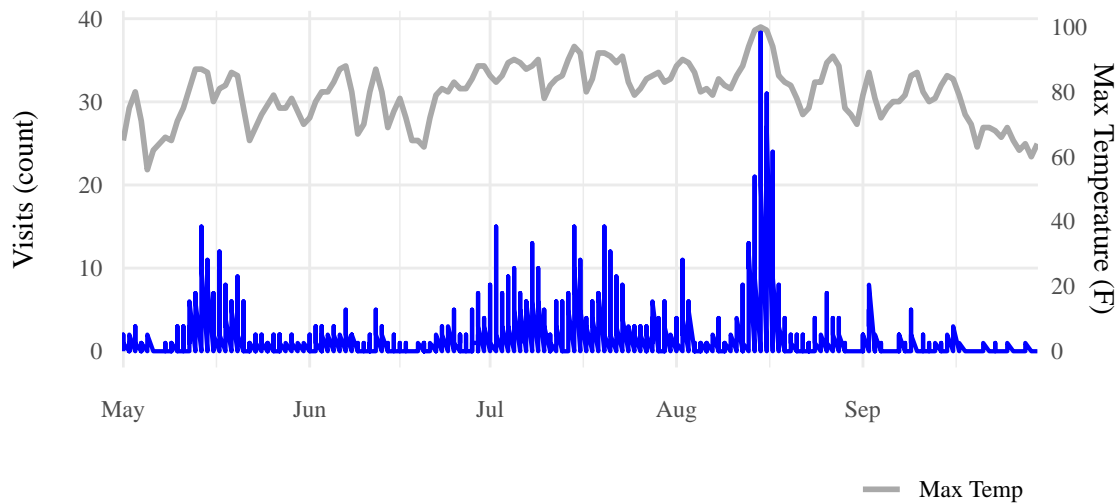
Summary (May 01, 2023 to September 30, 2023)

- 1477 HRI ED visits were identified. The highest volume of ED visits for HRI was 93 visits on Aug 15 .
- 142 HRI hospital admissions were identified.
- Smoke-related visits were identified in 321 ED visits.
- Asthma visits were identified in 32194 ED visits.
- Drowning or submersion visits were identified in 208 ED visits.
- Boating-related visits were identified in 264 ED visits.

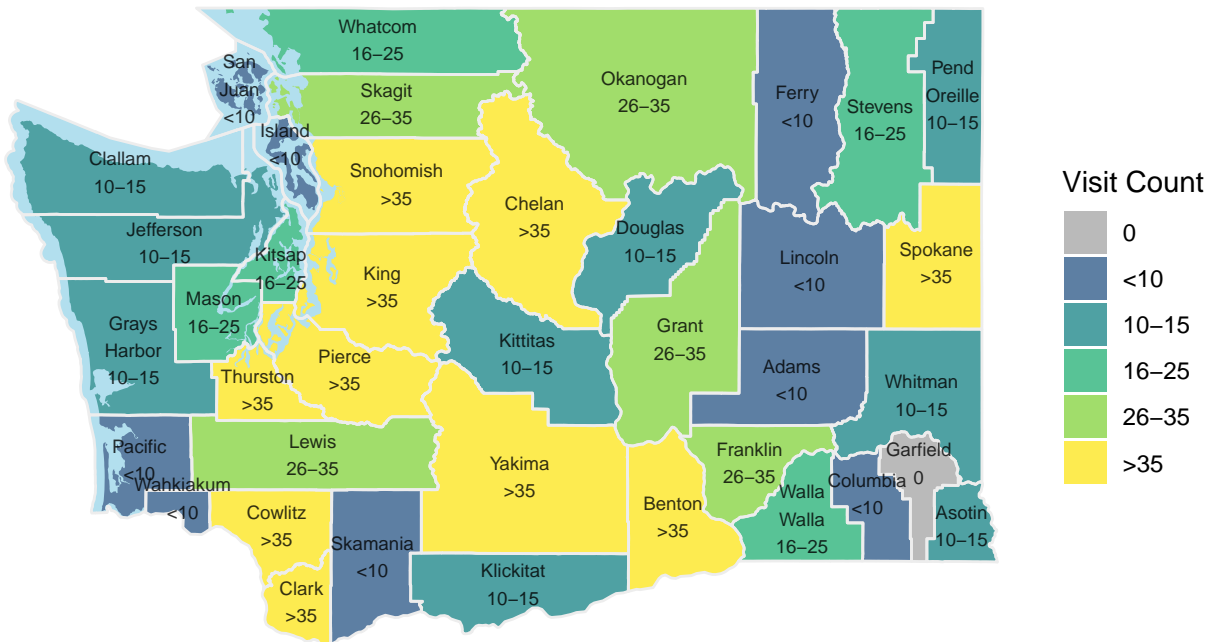
HRI ED Visits

Heat-Related Illness (HRI) ED visits were elevated in mid-May, throughout July, and highest during mid-August. These correspond with heat waves in different areas of the state: Western Washington experienced a heat wave in mid-May, with temperatures in the mid-80s to low 90s. Central and Eastern Washington experienced several days over 90 in July and August. In mid-August areas across Washington had unseasonably warm temperatures and elevated heat risk, with nearly the entire state east of the Cascades experiencing temperatures over 100, and Western Washington experiencing temperatures in the 90s.

Daily Count of HRI ED Visits



Count of HRI ED Visits by Patient County
2023-05-01 to 2023-09-30



Description of Population(s) Affected

Table 1: Demographics of All HRI ED Visits May 01, 2023 - September 30, 2023

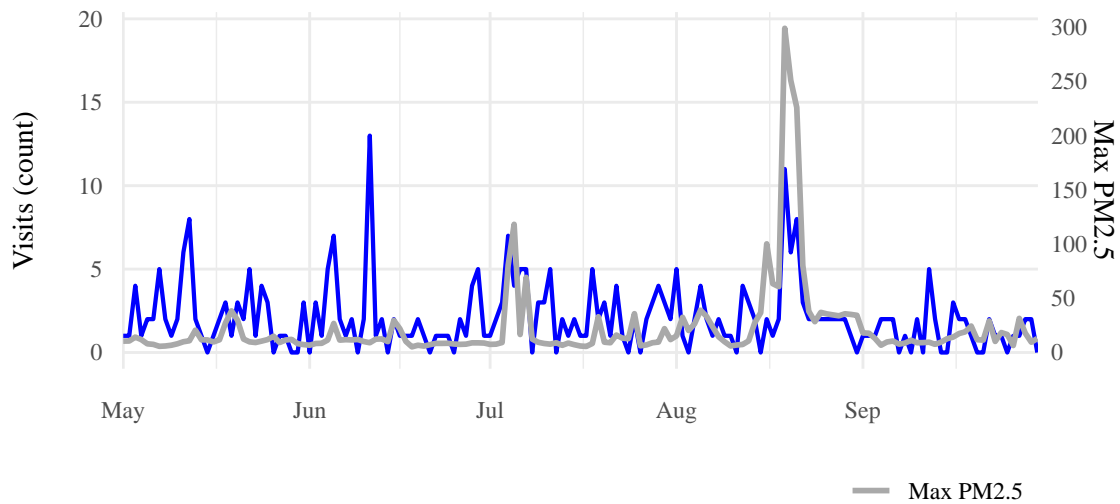
	Count (%)
Age Group	
0-4 years	46 (3.1)
5-17 years	137 (9.3)
18-44 years	599 (40.6)
45-64 years	352 (23.8)
65+ years	342 (23.2)
Sex	
Female	623 (42.2)
Male	852 (57.7)
Race	
Asian	26 (1.8)
Black or African American	64 (4.3)
American Indian or Alaska Native	53 (3.6)
Native Hawaiian or Other Pacific Islander	13 (0.9)
White	1090 (73.8)
Multiracial	<10 (0.4)
Other Race	156 (10.6)
Unknown	69 (4.7)
Ethnicity	
Hispanic or Latino	178 (12.1)
Not Hispanic or Latino	1228 (83.1)
Unknown	71 (4.8)

*Visits with unknown age and sex were <10.

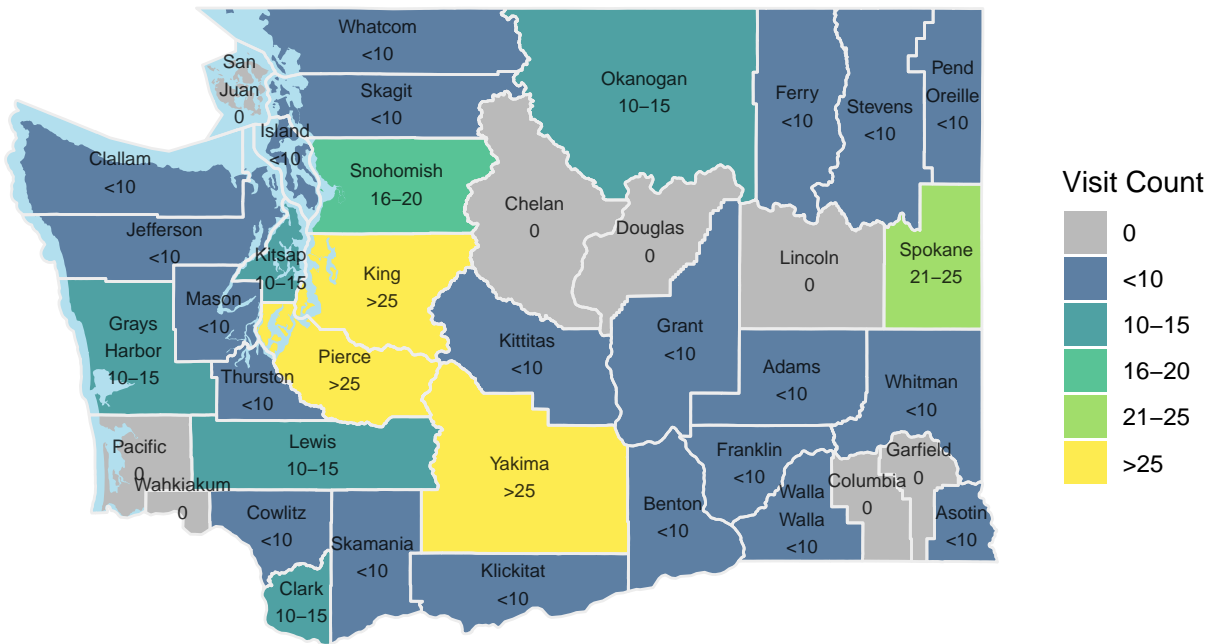
Smoke-related ED Visits

Smoke-related ED visits were elevated on and after the fourth of July due to fireworks, during mid-August likely due to the presence of wildfire smoke, and at other times due to localized events (such as house fires). Most of Washington experienced wildfire smoke from 8/19-21, while North-Central and Eastern Washington experienced smoky conditions for longer. There were periods of more localized wildfire smoke in areas near major fires at different points throughout the summer.

Daily Count of Smoke-Related ED Visits



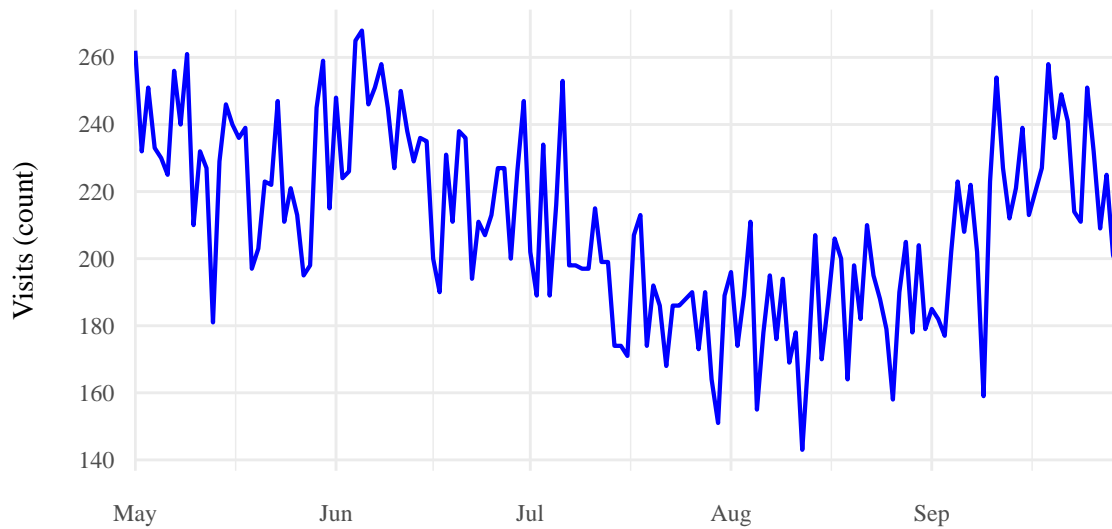
Count of Smoke-Related ED Visits by Patient County 2023-05-01 to 2023-09-30



Asthma ED Visits

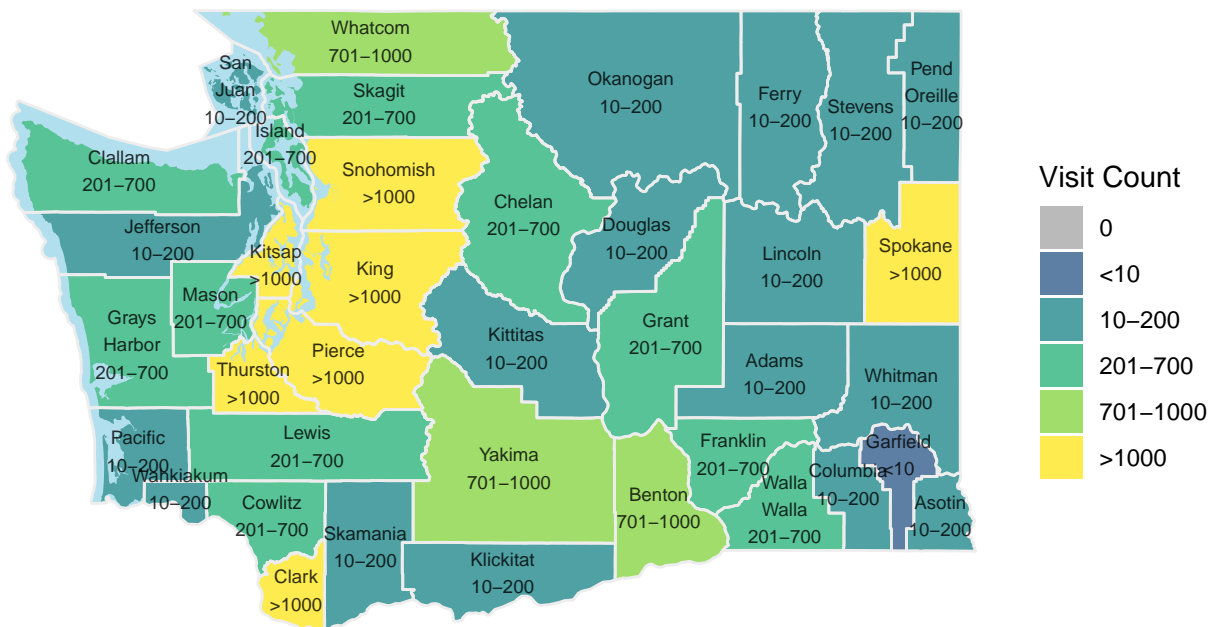
Asthma visits slightly declined in July and August.

Daily Count of Asthma ED Visits



Count of Asthma ED Visits by Patient County

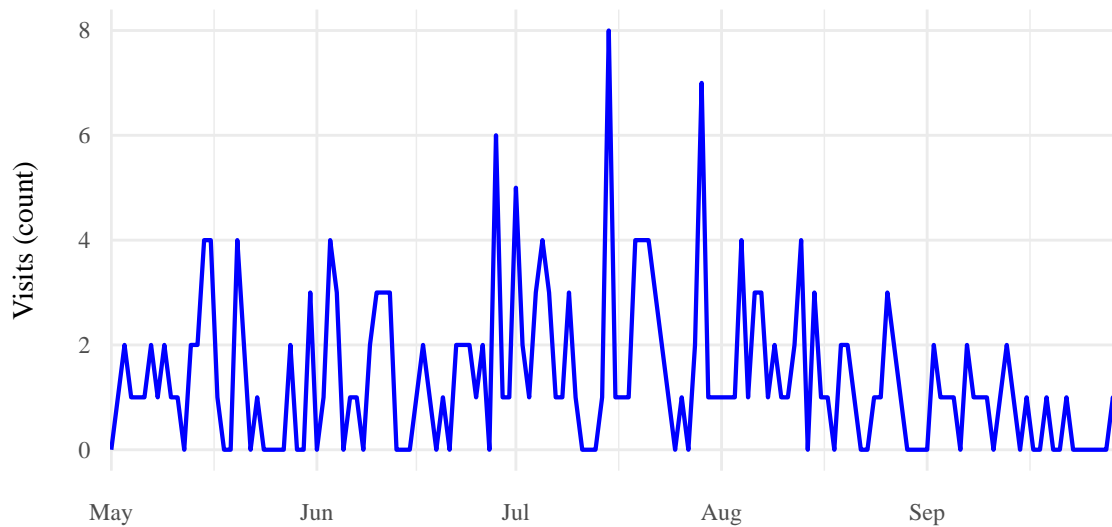
2023-05-01 to 2023-09-30



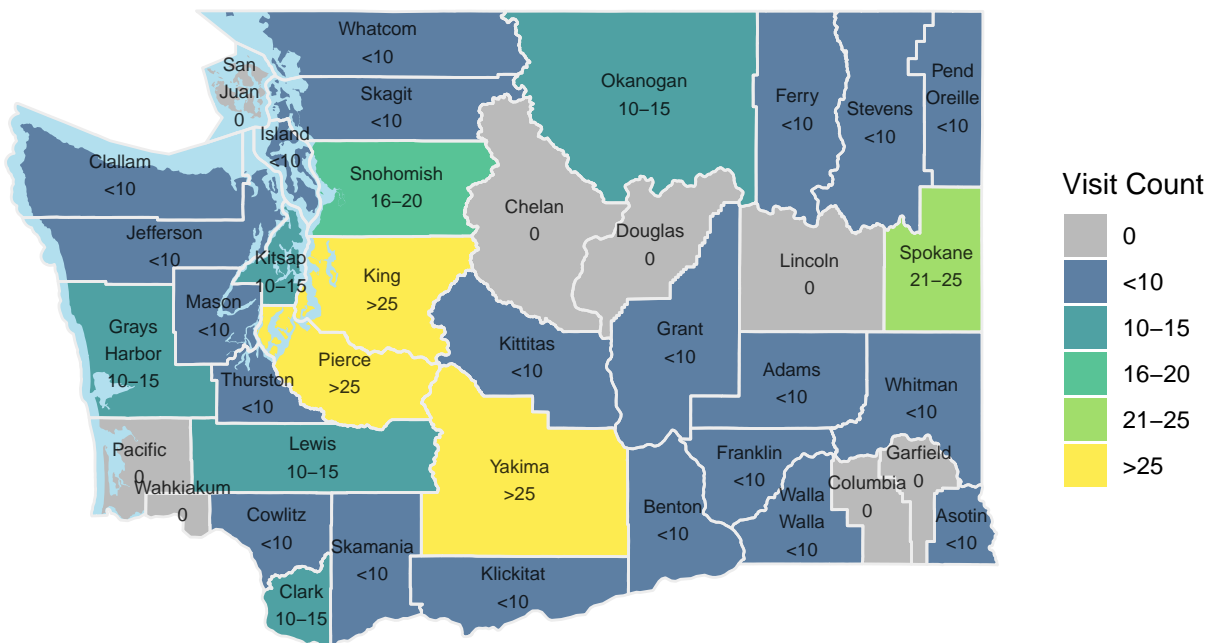
Drowning or Submersion ED Visits

Drowning and submersion ED visits were elevated in July and August.

Daily Count of Drowning or Submersion ED Visits



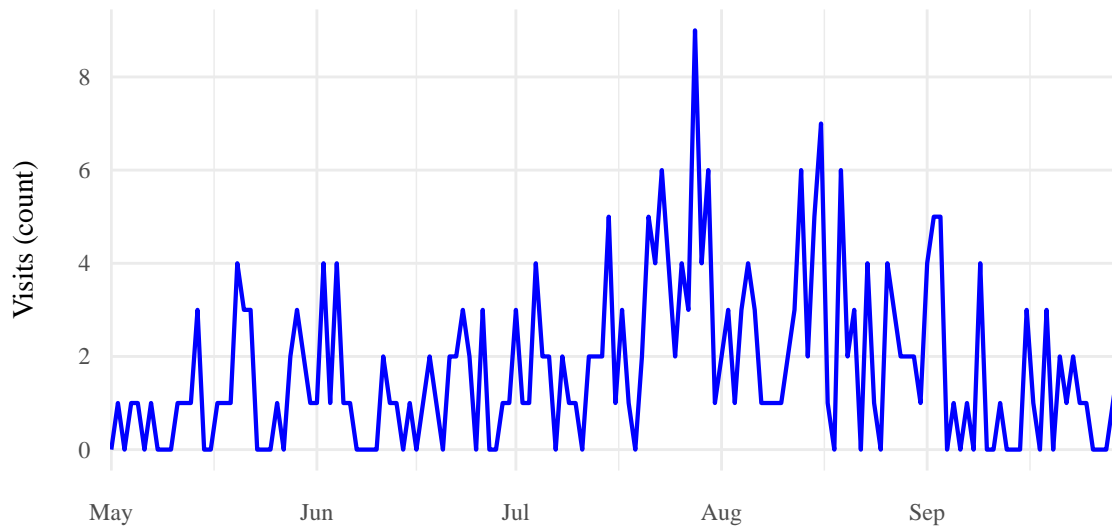
Count of Drowning or Submersion ED Visits by Patient County
2023-05-01 to 2023-09-30



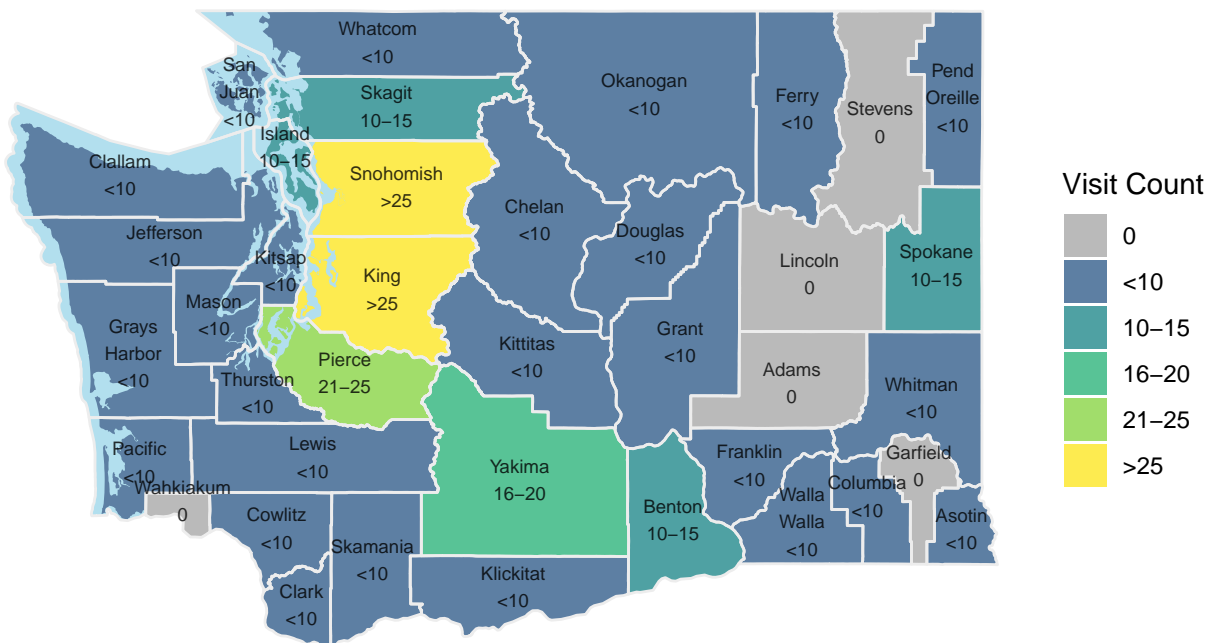
Boating-Related ED Visits

Boating-related ED visits were elevated from mid-July through August.

Daily Count of Boating-related ED Visits



Count of Boating-Related ED Visits by Patient County
2023-05-01 to 2023-09-30



Data Notes

100% of non-federal EDs in Washington State submit data to RHINO. There are no EDs located in Douglas, Skamania, or Wahkiakum counties. These data are intended to be used for surveillance purposes only. Analyses are based on preliminary information that may change over time. Counts are ED visits or hospitalization events, not unique individuals. Dates are the date that a healthcare encounter began. Maximum temperature and PM2.5 levels are the maximum values across the state on each day.

Visit Definitions

Heat-related illness: Identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, Heat-Related Illness V2, using free text terms such as “heat,” “sun stroke,” and “hyperthermia” and ICD-10-CM diagnosis codes (including E900, T67, X30, W92) among ED chief complaints and discharge diagnoses.

Smoke-related: Identified using ICD-10-CM diagnosis codes (J70.5, T59.81, X01.1, X08.8) among ED discharge diagnoses. This query is not specific to wildfire smoke.

Asthma: Identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, Asthma V1, using free text terms such as “asthma,” and ICD-10-CM diagnosis code J45 among ED chief complaints and discharge diagnoses.

Drowning or submersion: Identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, Unintentional Drowning V1, using free text terms such as “drown”, “under water” and ICD-10-CM diagnosis codes (including T751, V90, V91, V92, W16, W22.041) among ED chief complaints and discharge diagnoses.

Boating-related: Identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, Recreational Boating Incidents V1, using free text terms such as “boat”, “jet ski”, and ICD-10-CM diagnosis codes (including V90-94, W16.7) among ED chief complaints and discharge diagnoses.

Contact Information

Point of Contact for Follow-Up

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