Winter 2022-2023 Oregon ESSENCE Hazard Report



For more information on syndromic surveillance and the purpose of seasonal hazard reports, please see the last page of this report.

HOW TO READ THESE CHARTS

Visit counts for each week are color-coded in the charts to the right. Blue dots indicate normal visit counts. Yellow or red dots mean the counts for that week are higher than expected. A warning or alert does not necessarily indicate an event of public health significance. We are looking for sudden or sustained increases in visits.

TOTAL VISITS QUERY includes all visits to EDs and participating urgent care centers across the state. This query shows the total burden to the Oregon healthcare system and provides context for the queries and syndromes shown below.

Published: December 27, 2022

SUMMARY:

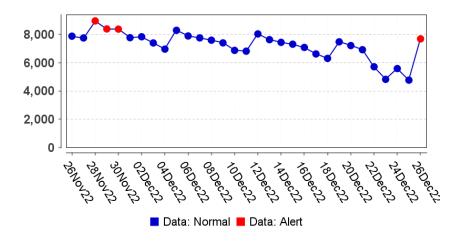
This report includes total daily counts of ED and urgent care visits in Oregon and visits for cold-related illness, falls, carbon monoxide exposures, and asthma-like complaints. This reports includes data through December 26, 2022.

WHAT ARE YOU SEEING?

- Visits for falls remain elevated.
- No increases in total visits or visits related to cold-related illness, carbon monoxide exposure, or asthma.

Winter hazard-related visits can be associated with outdoor conditions, extreme weather events, or recreational activities. The charts below show visit counts matching each query. See the left sidebar for more information on how to read the charts.

TOTAL VISITS QUERY



FINDINGS

In this chart, we see that total visits at emergency departments and urgent care centers are currently at expected levels. We do see a one-day increase following a decrease in total visits over a holiday weekend.



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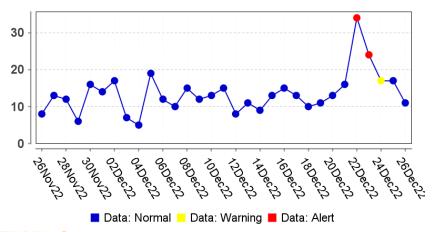
Statewide Surveillance Summary



COLD-RELATED ILLNESS QUERY

looks for the codes for hypothermia and frost bite (including ICD-9 code 991 and E901 and ICD-10 codes T68, X31, T33, and T34) and words like "cold exposure."

COLD-RELATED ILLNESS QUERY



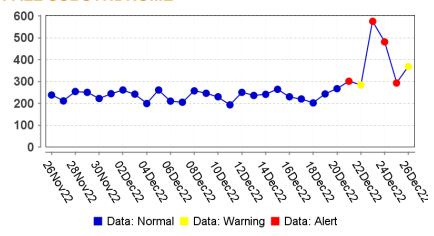
FINDINGS

In this chart, we see that visits for cold-related illness have returned to expected levels. Hypothermia is caused by prolonged exposure to cold temperatures. It can happen at temperatures above freezing if one is wet or submerged in water. Frostbite may go unnoticed because the frozen tissue is numb. It is important to dress warmly and stay dry. If you detect symptoms of frostbite or one's temperature is below 95°F, seek medical attention immediately.

FALL SUBSYNDROME QUERY

looks for dozens of free text terms related to falls, including "slipped," "tripped," and "stumbled." Importantly, this subsyndrome does not look for diagnosis codes.

FALL SUBSYNDROME



FINDINGS

In this chart, we see that visits for falls have decreased after a recent peak, although they remain elevated. Winter weather can create slippery conditions, which in turn can lead to falls and other injuries.



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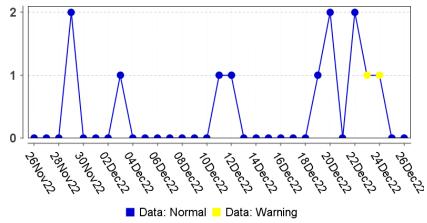
Statewide Surveillance Summary



CARBON MONOXIDE (CO)

EXPOSURE QUERY looks for the codes for the "toxic effect of carbon monoxide" (ICD-9 code 986 and ICD-10 code T58) and words related to CO poisoning.

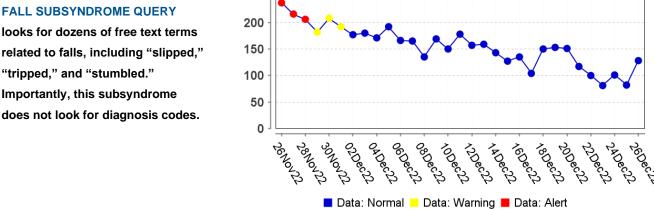
CARBON MONOXIDE (CO) EXPOSURE QUERY



FINDINGS

In this chart, we see that visits related to carbon monoxide (CO) exposure are at expected levels. CO exposure is preventable. Make sure to check your CO detector regularly or install one if you don't have one. Have your furnace inspected yearly. Only use portable generators outside, more than 20 feet away from your home, doors, and windows, and never inside. Signs of CO exposure include headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion. If poisoning is suspected, seek fresh air and medical attention.

ASTHMA-LIKE QUERY



FINDINGS

In this chart, we see that visits for asthma-like complaints are at expected levels. Winter hazards such as poor air quality, smoke from wood stoves, and air inversions can exacerbate asthma. Avoid outdoor activities when air quality is unhealthy.

OREGON ESSENCE

Statewide Surveillance Explanation



VISIT INFORMATION is collected from EDs and urgent care centers across the state. Currently, all 59 eligible hospitals are sending ED data every day for syndromic surveillance. Some urgent care centers are currently reporting, and we are in the process of onboarding more.

SEASONAL HAZARDS for winter include air inversions, windstorms, and winter storms, which can bring cold temperatures, wintry precipitation, and cause extensive damage, including the loss of electricity, slippery surfaces, and flooding throughout the Pacific Northwest.

MONITORING Oregon ESSENCE provides key information on population health during seasonal hazard events. ESSENCE users can now reproduce these queries themselves and look at regional health effects not captured in the statewide view by following instructions posted at

ENVIRONMENTAL DATA are now available in Oregon ESSENCE.

Weather station data (temperature, precipitation, and wind speed) are from the National Weather Service.

Air quality station data (PM 2.5 and ozone) are from EPA/Air Now.

www.healthoregon.org/essence

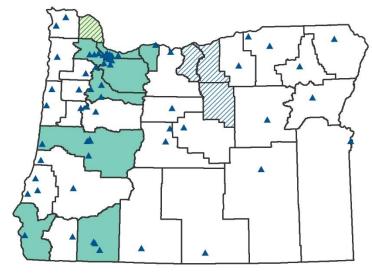
SYNDROMIC SURVEILLANCE is the near real-time monitoring of key health indicators in emergency department (ED) and urgent care visits. Oregon's syndromic surveillance project (Oregon ESSENCE) tracks the number of visits for specific patient symptoms using chief complaints (what the patient says is the reason for their visit) and discharge diagnosis codes. We look at symptoms associated with known health effects of seasonal hazards.

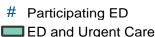
SIMILAR SYMPTOMS are grouped together into "syndrome" categories. For example, "wheezing" and "difficulty breathing" are grouped into the asthma-like query. By comparing the counts, we see against those we would expect to see, we can identify trends in visits.

HEALTH EFFECTS OF FALL AND WINTER HAZARDS

Hazard		Health Effect
*	Cold Temperatures & wintry precipitation	HypothermiaFrostbite
9	Windstorms and Power Outage	 Carbon monoxide exposure from grill or generator use near or inside the home Stomach illnesses due to unrefrigerated food
	Air Inversions and Poor Air Quality	Exacerbated respiratory conditions, such as asthma

SYNDROMIC COVERAGE by county is detailed in the map below.





■ ED, no Urgent Care■ No ED or Urgent Care

Urgent Care, no ED

