

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.

Counts are reported by CDC MMWR weeks, which begin on a Sunday and always end on Saturday. In 2018 and 2019, examples include:

- Week 44, Nov 3
- Week 48, Dec 1
- Week 1, Jan 5
- Week 5, Feb 2
- Week 8, Feb 23

**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: January 4, 2019

### SUMMARY: Week 40 (October 6) – Week 52 (December 29)

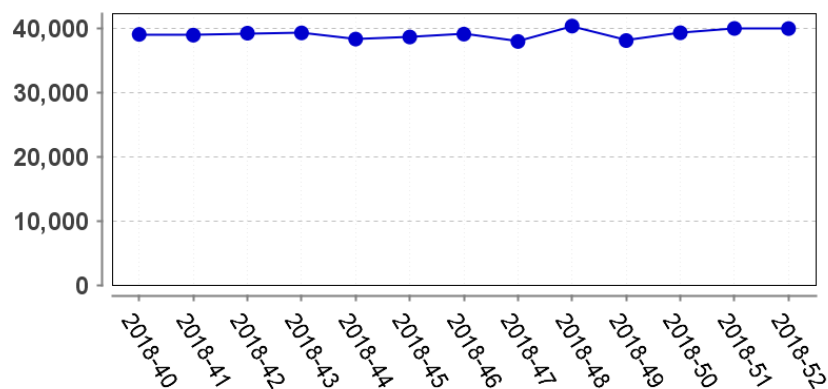
This report includes total weekly counts of ED and urgent care visits in Oregon and counts for asthma-like complaints, hypothermia and frost bite related visits, visits for carbon monoxide exposure, and visits for nausea, vomiting and diarrhea.

### WHAT ARE YOU SEEING?

- Increases nausea, vomiting, diarrhea and hypothermia and frost bite
- No increases for total visits, asthma-like visits, or carbon monoxide

Fall and 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



■ Data: Normal

### FINDINGS

In this chart, we see that total visits are not currently above expected levels.

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- Week 44, Nov 3
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## HYPOTHERMIA AND FROST BITE

**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.”

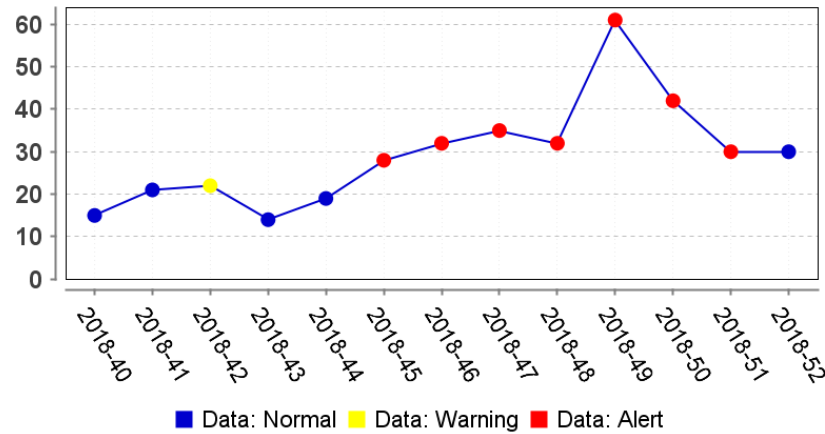
**ASTHMA-LIKE QUERY** looks for the codes for asthma (ICD-9 code 493 and ICD-10 codes J45 and R06) or words like “asthma,” “wheezing,” and “shortness of breath.”

**CRISIS AND EMERGENCY RISK COMMUNICATION TOOLKITS** provide messaging for public health hazards such as Winter Weather and Seasonal Influenza.

Access them here:

[healthoregon.org/cerc](http://healthoregon.org/cerc)

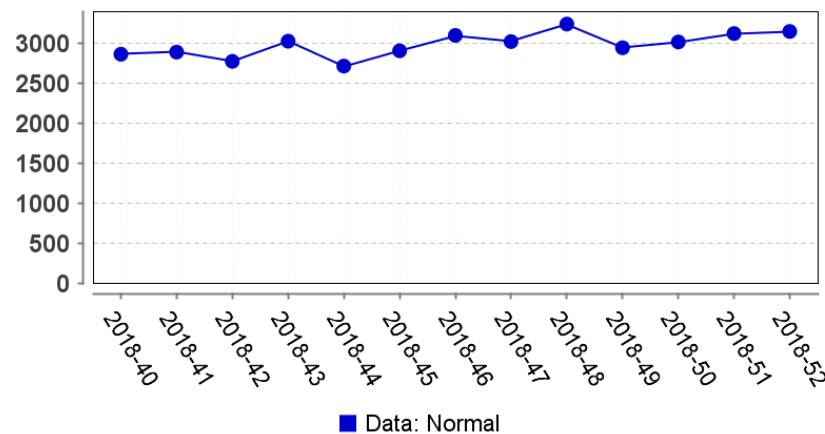
## HYPOTHERMIA AND FROST BITE QUERY



## FINDINGS

In this chart, we see that while visits for hypothermia and frost bite were not elevated for the last week of December, the overall trend for the past few weeks has been upward. This is consistent with colder temperatures experienced across the state. 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.

## ASTHMA-LIKE QUERY



## FINDINGS

In this chart, we see that visits for asthma-like complaints are not currently above 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.

## CARBON MONOXIDE (CO) EXPOSURE QUERY

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### CARBON MONOXIDE (CO)

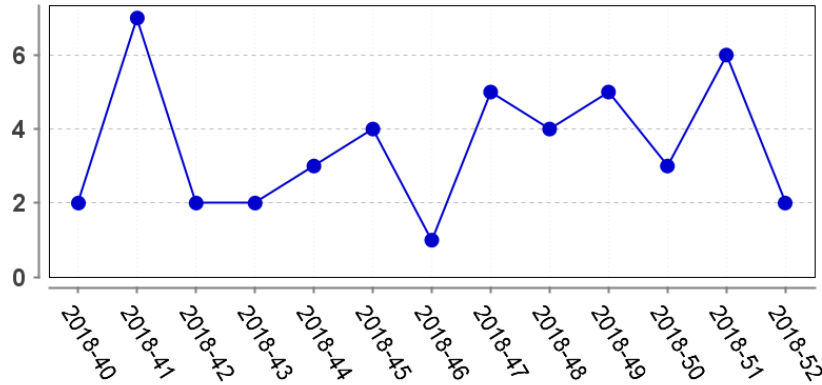
**EXPOSURE QUERY** looks for the codes for the “toxic effect of carbon monoxide” (ICD-9 code 986 and ICD-10 code T58) and words related to unintentional, non-fire related CO poisoning.

**NAUSEA, VOMITING, AND DIARRHEA SUBSYNDROME** looks for hundreds of free text terms related to GI illness. Importantly, this syndrome does not look for diagnosis codes.

### SYNDROMIC SURVEILLANCE FOR PUBLIC HEALTH ACTION

Local and tribal health departments and participating healthcare facilities may request access to Oregon ESSENCE to produce these types of reports for their jurisdictions. Visit our website to learn more:

[www.healthoregon.org/essence](http://www.healthoregon.org/essence)

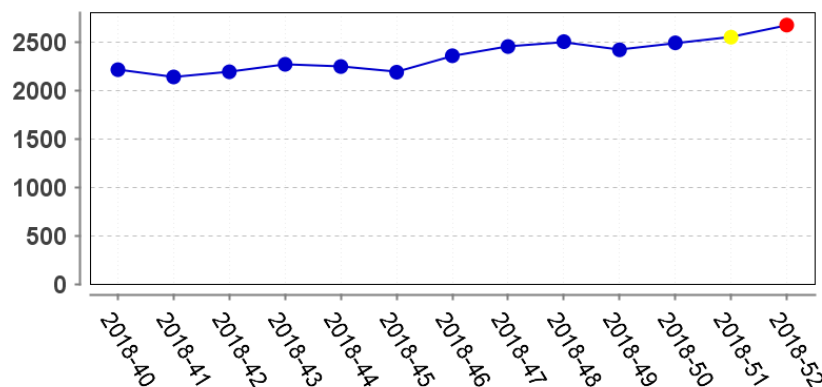


### FINDINGS

■ Data: Normal

In this chart, we see that visits for carbon monoxide exposure are not currently above 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.

## NAUSEA, VOMITING, AND DIARRHEA SUBSYNDROME



### FINDINGS

■ Data: Normal ■ Data: Warning ■ Data: Alert

In this chart, we see that visits for nausea, vomiting, and diarrhea are increasing. In winter, we often see increases in gastroenteritis illness due to norovirus. Wash your hand thoroughly with soap and water, especially after using the toilet and before eating or preparing foods. If you are sick with norovirus, do not prepare food for others while you have symptoms and for at least 2 days after symptoms go away. Clean with a bleach-based household cleaner as directed on the label or with a solution made with 1 cup of household bleach per 1 gallon of water.

**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 fall and 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 [www.healthoregon.org/essence](http://www.healthoregon.org/essence)

**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.




**OREGON PUBLIC HEALTH DIVISION**  
Acute & Communicable Disease Prevention  
Injury & Violence Prevention



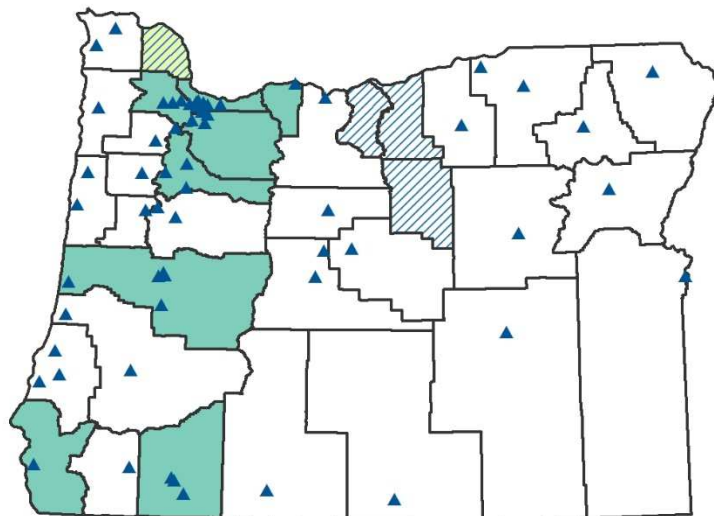
**SYNDROMIC SURVEILLANCE** is the near real-time monitoring of key health indicators in emergency department (ED) and urgent care visits. Oregon’s syndromic surveillance project (Oregon ESSENCE) tracks the number of visits for specific patient symptoms using chief complaints (what the patient says is 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	<ul style="list-style-type: none"> <li>Hypothermia</li> <li>Frostbite</li> </ul>
 Windstorms and Power Outage	<ul style="list-style-type: none"> <li>Carbon monoxide exposure from grill or generator use near or inside the home</li> <li>Stomach illnesses due to unrefrigerated food</li> </ul>
 Air Inversions and Poor Air Quality	<ul style="list-style-type: none"> <li>Exacerbated respiratory conditions, such as asthma</li> </ul>

**SYNDROMIC COVERAGE** by county is detailed in the map below.



- ▲ Participating ED
- ED, no Urgent Care
- ▨ Urgent Care, no ED
- ED and Urgent Care
- ▨ No ED or Urgent Care