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 week, which always end on Saturday. In 2018, examples include:
- Week 20, May 19
- Week 24, June 16
- Week 28, June 14

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.

SUMMARY: Week 22 (June 2) – Week 34 (August 25)
This report includes total weekly counts of ED and urgent care visits in Oregon and counts for heat-related illness, asthma-like complaints, submersion events, and harmful algal bloom exposures.

WHAT ARE YOU SEEING?
- Increases for heat-related illness, submersion events, and harmful algal blooms.
- No increases for total visits or asthma-like visits.

Summer hazard-related visits can be associated with outdoor conditions, extreme 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 are not currently above expected levels.
FINDINGS

In this chart, we see that visits for asthma-like complaints are not currently above expected levels. Summer hazards such as poor air quality, smoke, extreme heat, and even thunderstorms can trigger asthma attacks. Avoid outdoor activities when air quality is unhealthy.

HEAT-RELATED ILLNESS (HRI) QUERY

FINDINGS

In this chart, we see some increases in HRI visits, consistent with hot weather in most of the state. Visits were highest during week 30, when 184 visits were observed, an excess of 174 visits over the expected number. More recently, in weeks 33 and 34, visit numbers have returned to expected levels, probably because of cooler temperatures. To reduce the risk of HRI, drink plenty of fluids, wear light colored clothing and sunscreen, and schedule outdoor activities during cooler times of the day.
HOW TO READ THESE CHARTS
Counts are reported by CDC MMWR week, which always end on Saturday. In 2018, examples include:
- Week 20, May 19
- Week 24, June 16
- Week 28, June 14

SUBMERSION AND NON-FATAL DROWNING QUERY looks for the codes for “non-fatal drowning” (ICD-9 code 994.1 and ICD-10 code T751) or words like “drown” or “under water” as long as the patient doesn’t say it “feels like drowning.”

HARMFUL ALGAL BLOOM looks for the GI syndrome along with words like “lake” or “swim” or “river”. This query 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

FINDINGS
In this chart, we see that visits for submersion events have been at higher than expected levels for most of the past 13 weeks. Many visits are for children. Most drowning deaths and injuries are predictable and preventable. Supervise children when in and around water. Learn how to swim and how to perform CPR. Never swim alone, and always wear a personal floatation device when boating.

HARMFUL ALGAL BLOOMS (HABS)

FINDINGS
In this chart, we see that visits for HABs are fairly consistently above expected levels. This is a new query currently being piloted by Oregon ESSENCE, looking at visits that include a subset of symptoms that may be related to recreational exposure to HABs. Be on the watch for algae blooms when recreating in Oregon lakes, rivers and reservoirs.
VISIT INFORMATION is collected from EDs and urgent care centers across the state. Currently, all 60 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 summer include elevated temperatures and dry conditions, which can lead to wildland fires and unhealthy air quality in the Pacific Northwest. Water-related activities include the risk of submersion, drowning, or exposure to harmful algal blooms.

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

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 SUMMER HAZARDS
- Extreme heat makes many groups, including people with chronic disease, young children, older adults, and outdoor workers, vulnerable to heat-related illness (HRI). HRI refers to a variety of conditions resulting from elevated body temperatures such as heat stroke, heat syncope (fainting), heat exhaustion, and heat cramps.
- Wildfire smoke, air pollution, and pollen can exacerbate respiratory conditions such as asthma.
- Recreational activities in pools and natural waterways can lead to an increase in submersion and near-fatal drownings.
- As temperatures heat up during spring and summer, algae blooms may form in lakes, rivers, and reservoirs. Exposure to cyanobacteria can result in symptoms including skin rash, diarrhea, cramps, vomiting, numbness, and fainting.

SYNDROMIC COVERAGE by county is detailed in the map below.

OREGON PUBLIC HEALTH DIVISION
Acute & Communicable Disease Prevention