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

SUMMARY: Week 13 (March 30) – Week 25 (June 22)
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 cyanobacteria bloom exposures.

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

Summer 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 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

HEAT-RELATED ILLNESS (HRI) QUERY looks for the codes for HRI (including ICD-9 code 992 and ICD-10 code T67) or words like “heat,” “sun stroke,” and “hyperthermia.”

ASTHMA-LIKE QUERY

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

CRISIS AND EMERGENCY RISK COMMUNICATION TOOLKITS provide messaging for public health hazards such as Wildfire Smoke and Extreme Heat. Access them here:
http://healthoregon.org/cerc

OREGON SMOKE BLOG

OREGON SMOKE BLOG is a resource for tracking communities affected by wildfire smoke. Access it here:
http://oregonsmoke.blogspot.com/

FINDINGS
In this chart, we see some increases. Visits were much higher than expected in week 24, probably because of particularly hot weather experienced in some parts of the state on June 11 and June 12. 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.

HEAT-RELATED ILLNESS (HRI) QUERY

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.
HOW TO READ THESE CHARTS
Counts are reported by CDC MMWR weeks, which always end on Saturday. In 2019, examples include:

- Week 20, May 18
- Week 24, June 15
- Week 28, June 13

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.”

CYANOBACTERIA 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

SUBMERSION AND NON-FATAL DROWNING QUERY

FINDINGS
In this chart, we see that visits for submersion events are starting to rise, probably because temperatures are also rising and people are spending more time outside. Many visits were 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.

CYANOBACTERIA (HARMFUL ALGAL) BLOOMS

FINDINGS
In this chart, we see that visits for cyanobacteria blooms are currently above expected levels, but there is no consistent trend. This query looks at visits that include a subset of symptoms that may be related to recreational exposure to cyanobacteria blooms. Be on the watch for cyanobacteria 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.