



Influenza and Influenza-Like Illness Trends

Edward Yi, MPH, Epidemiologist II at DSHS Region 7

Figure 1: Epi-Curve of Total Aggregate Influenza and ILI Weekly Trend from NOV-DEC 2023

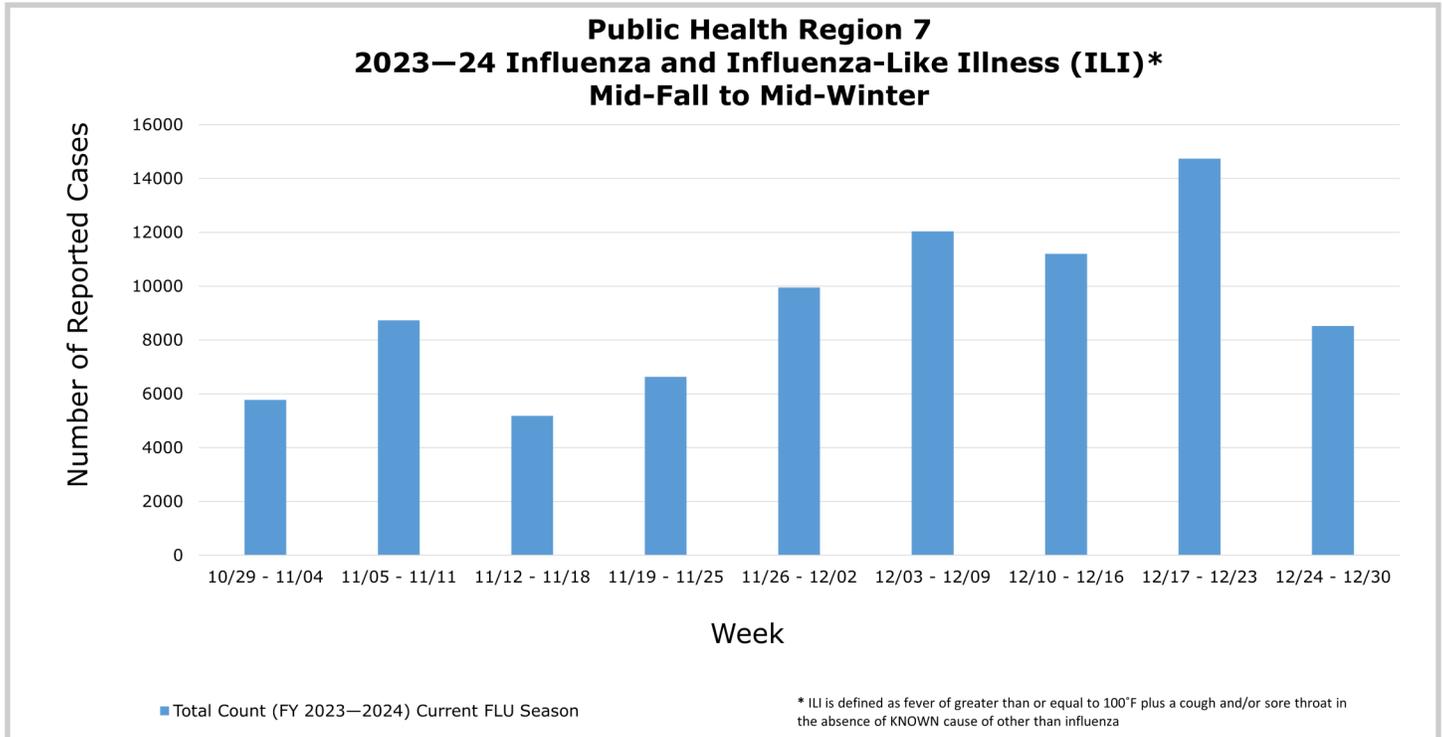


Figure 1 is an epidemiological curve (EPI-curve) from mid-fall (October 29) to mid-winter (December 30). It is a graph based on weekly aggregated influenza and influenza-like-illness (ILI) data that is gathered from various surveillance methods that visually depicts respiratory illness activity within PHR 7.

Starting from the end of October on Week 44 (October 29 – November 11), flu and ILI activity have been steadily circulating within PHR 7. There has been a cycle of increases and decreases of the aggregate reported cases each week. The highest number of reported flu and ILI cases were on Week 51 (December 17–23), with an aggregated total of 14,740 cases reported. The following week (December 24–30) saw a sharp decline of reported cases at 8,516 cases. This decrease may have been attributed to lower participation from flu reporters due to winter holiday breaks. PHR 7 is observing consistent ILI and flu activity levels similar to state levels. [Click here for more information about flu and ILI activity for the State of Texas.](#)

Note on PHR 7 data: The data and results reports are received from multiple sources including the query used in ESSENCE, an electronic bio-surveillance system, and participating sentinel surveillance network from local Health Departments, hospitals and clinics, and Independent School Districts. The reports are received to track and monitor influenza and influenza-like illness activity and may be an overestimation or underestimation of the actual burden of illness. This overestimation or underestimation is due to the nature of the query and the multitude of factors regarding to the participation of the regional influenza surveillance program.



Foodborne | Waterborne Illness Report

Kyle Kimmey, MS, A-IPC, Food and Waterborne Epidemiologist I at DSHS Region 7

Figure 2: Total Foodborne and Waterborne Illness Cases by Month

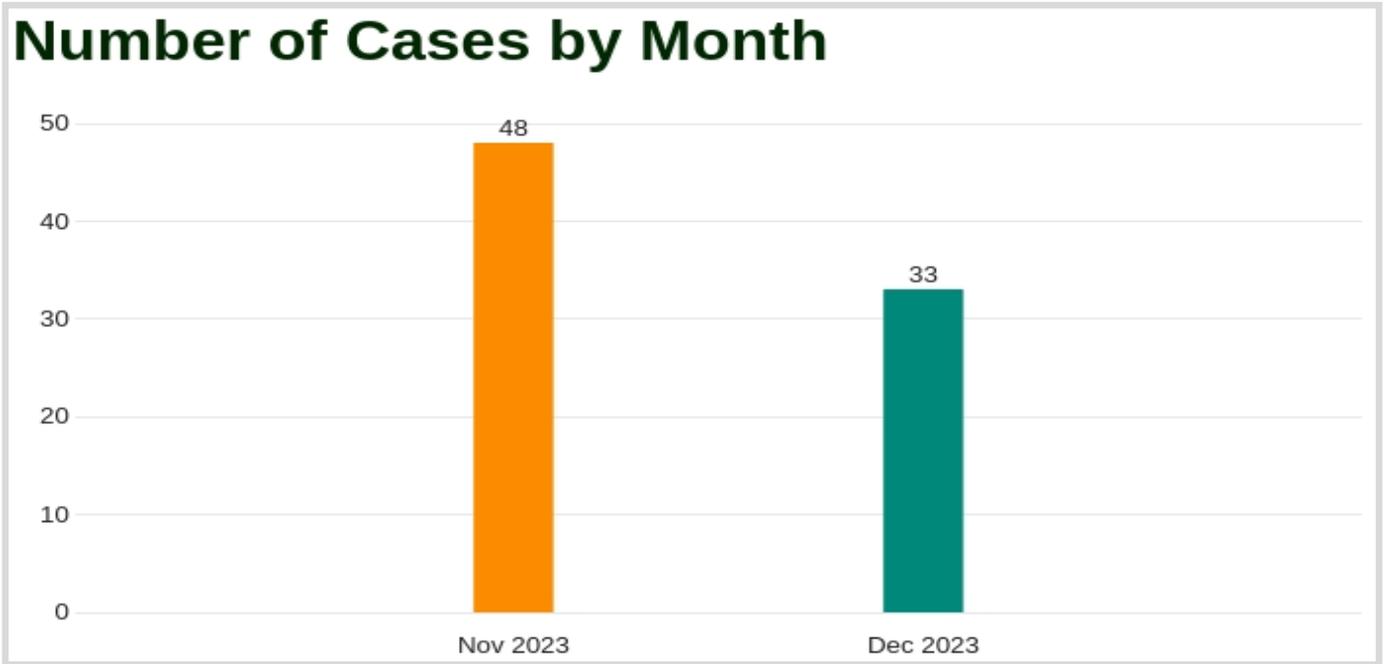
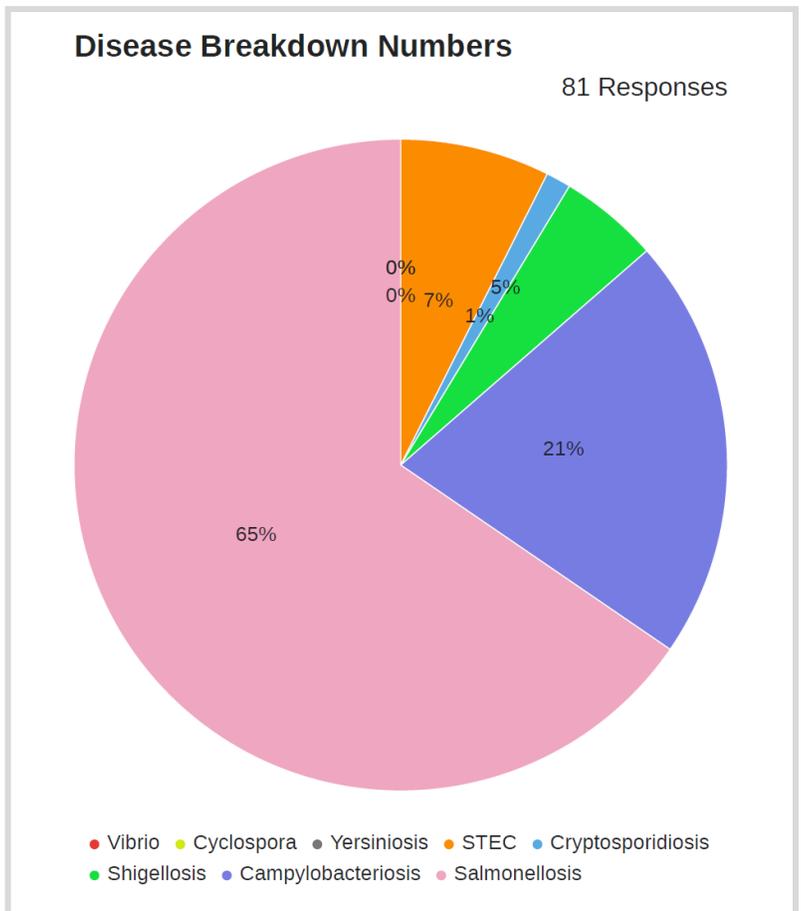


Figure 3: Total Disease Case Breakdown

Here is the case breakdown for November and December 2023.

PHR 7 observed a decrease of the number of cases from November to December. This is expected as we normally see a large number of foodborne illnesses in the summer months.

Salmonellosis made up the majority of our cases, followed by Campylobacteriosis.



Note on PHR 7 data: The results from the data collected through Qualtrics report form, cloud-based software platform tool for online data collection through administering survey form responses and provides quantitative statistical analysis.

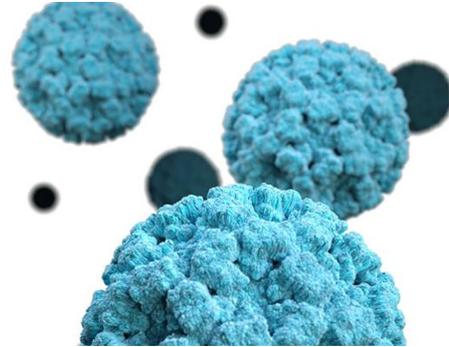


Norovirus Information and Outbreak Case Study

Kyle Kimmey, MS, A-IPC, Food and Waterborne Epidemiologist I at DSHS Region 7

What is Norovirus?

Norovirus is the leading cause of vomiting and diarrhea and foodborne illness in the United States. People of all ages can get infected and sick with norovirus, which spreads very easily and quickly. The virus causes an acute gastroenteritis, which is the inflammation of the stomach or intestines.



CDC. *Norovirus*. [About Norovirus](#)

A person usually develops symptoms 12 to 48 hours after being exposed to norovirus. Most people with norovirus illness get better within one to three days. They can still spread the virus for a few days after.

If you have norovirus illness, you can feel extremely ill and vomit or have diarrhea many times a day. This can lead to dehydration, especially in young children, older adults, and people with other illnesses. Dehydrated children may cry with few or no tears and be unusually sleepy or fussy.

An outbreak

Region 7 received a norovirus outbreak notification on November 17. Four cases were reported. Three PCR positive results and one epidemiologically linked case were investigated and connected to a local restaurant. Inspectors from the county investigated the site and have temporarily closed the facility until further notice. No further cases were reported. However, with the quick incubation period and disease duration, we are unlikely to receive any further reports connected to this restaurant.



CDC Norovirus Prevention. [Prevent Norovirus](#)

Quick Tips: Handle and prepare food safely.

Hand sanitizer does not work well against norovirus!



Information on Mpox Virus

Aishwarya Reddy, MPH, A-IPC, Preparedness Epidemiologist II at DSHS Region 7

What is Mpox?

Mpox, or monkeypox, is a rare disease caused when someone is infected with the monkeypox virus (MPXV). The same family of viruses that causes smallpox causes Mpox, which is milder and less fatal.

A key symptom of Mpox is a rash. It can look like pimples or blisters that can appear anywhere on the body. Please see the **infographic** below for other common symptoms.

Know Mpox Symptoms



CDC. MPOX. [Protect Yourself from Mpox](#)

Mpox spreads through direct contact with infected persons, animals, bodily fluids, or materials (i.e., contaminated sheets, clothes, needles).

As of November 30, 2023, there are currently 31,277 cases in the United States and 92,432 cases globally since the outbreak started.

How can you prevent Mpox?

- Avoid physical contact, including sexual/intimate contact, with people infected with MPXV.
- Avoid touching materials that a person with Mpox has used.
- Wash hands often with soap and water.
- Get vaccinated. Use the CDC's [Mpox Vaccine Locator](#) to find nearby health care locations that provide the vaccine or call your local health department.
- Avoid direct contact with a rash that looks like Mpox.



The Increase in Clade I Mpox Cases in the Democratic Republic of the Congo

Aishwarya Reddy, MPH, A-IPC, Preparedness Epidemiologist II at DSHS Region 7

Clade I MPXV in the Democratic Republic of the Congo (DRC)

The MPXV has two types of genetic clades: clade I and clade II. These clades are endemic to Central and West Africa, respectively. The global outbreak of mpox in 2022-24 is associated with Clade II that has predominately affected men who have sex with men (MSM).

Since January 1, 2023, the DRC has seen a large increase of mpox cases (12,569 suspected cases and 581 deaths). Investigation confirmed that clade I was among the cases and has been associated with sexual contact. Previously, clade I had not been associated with sexual contact and not observed to be more transmissible or severe than clade II. The current threat for clade 1 MPXV in travelers remains low. There are no clade I MPXV infections in the United States thus far. There are also no direct commercial passenger flights from the DRC to the United States.

Diagnostic Testing

Clade II mpox cases continue to occur in Texas. In 2023, there were 146 mpox cases reported in Texas. CDC and DSHS recommends clinicians to be alert for patients presenting with mpox symptoms. For patients with travel to the DRC within 21 days of illness onset, DSHS and CDC recommend that clinicians pursue MPXV clade-specific testing. Providers will need to consult with their local health department to arrange testing by the CDC.

Treatment and Prevention

The medical countermeasures used for clade II are expected to be effective for clade I infections. Tecovirimat can be requested through either the STOMP (Study of Tecovirimat for Human Mpox Virus) trial and Investigational New Drug (IND) protocol. Or, if the patient is ineligible for STOMP trial, submit requests to DSHS at dshsmpxconsult@dshs.texas.gov.

The vaccine is recommended for people 18 years and older with risk factors for mpox. It must be administered before exposure to MPXV with two doses of the JYNNEOS vaccine 28 days apart.

Even if clade I MPXV is suspected, health care facilities should continue following the recommended prevention and control guidance to patients presenting with mpox.

The CDC has issued a Travel Health Notice for people traveling to the DRC. It recommends practicing enhanced precautions. Travelers who develop a new skin rash should avoid close contact with others and seek medical care.



November-December Cold Weather-Related Illness/Injury Surveillance

Edward Yi, MPH, Epidemiologist II at DSHS Region 7

PHR 7 conducted late fall to early winter season cold weather-related illness/injury surveillance using Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). The surveillance report started on November 1, 2023 and will end on February 28, 2024.

The temperatures in the report were collected and obtained from a weather station at Austin-Bergstrom International Airport in Austin and overlaid onto ESSENCE tables. This data weather overlay on each of the EPI-curve chart represents the Central Texas region.



Stock image. Obtained through Microsoft PowerPoint image search result.

Temperatures may differ by a few degrees depending on specific location.

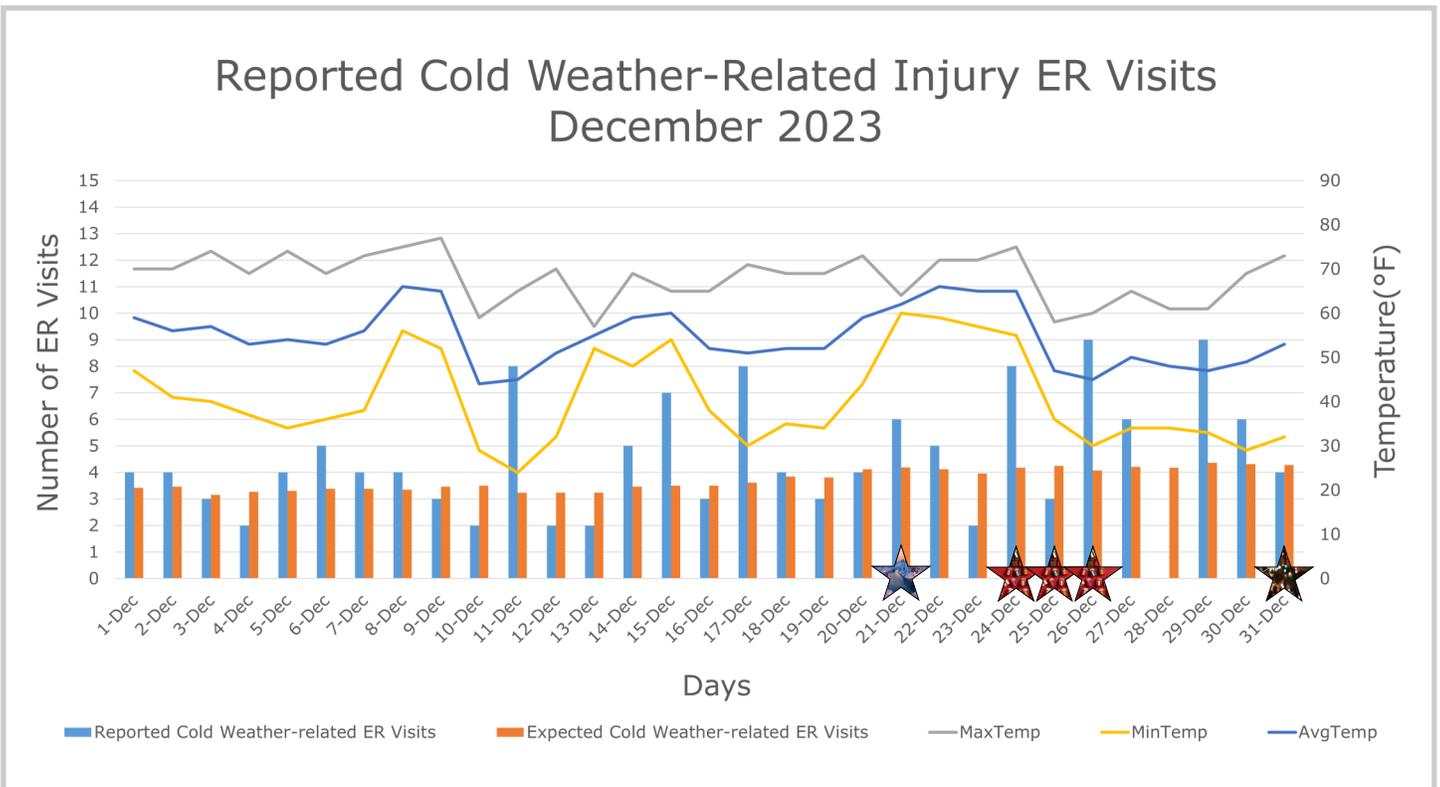
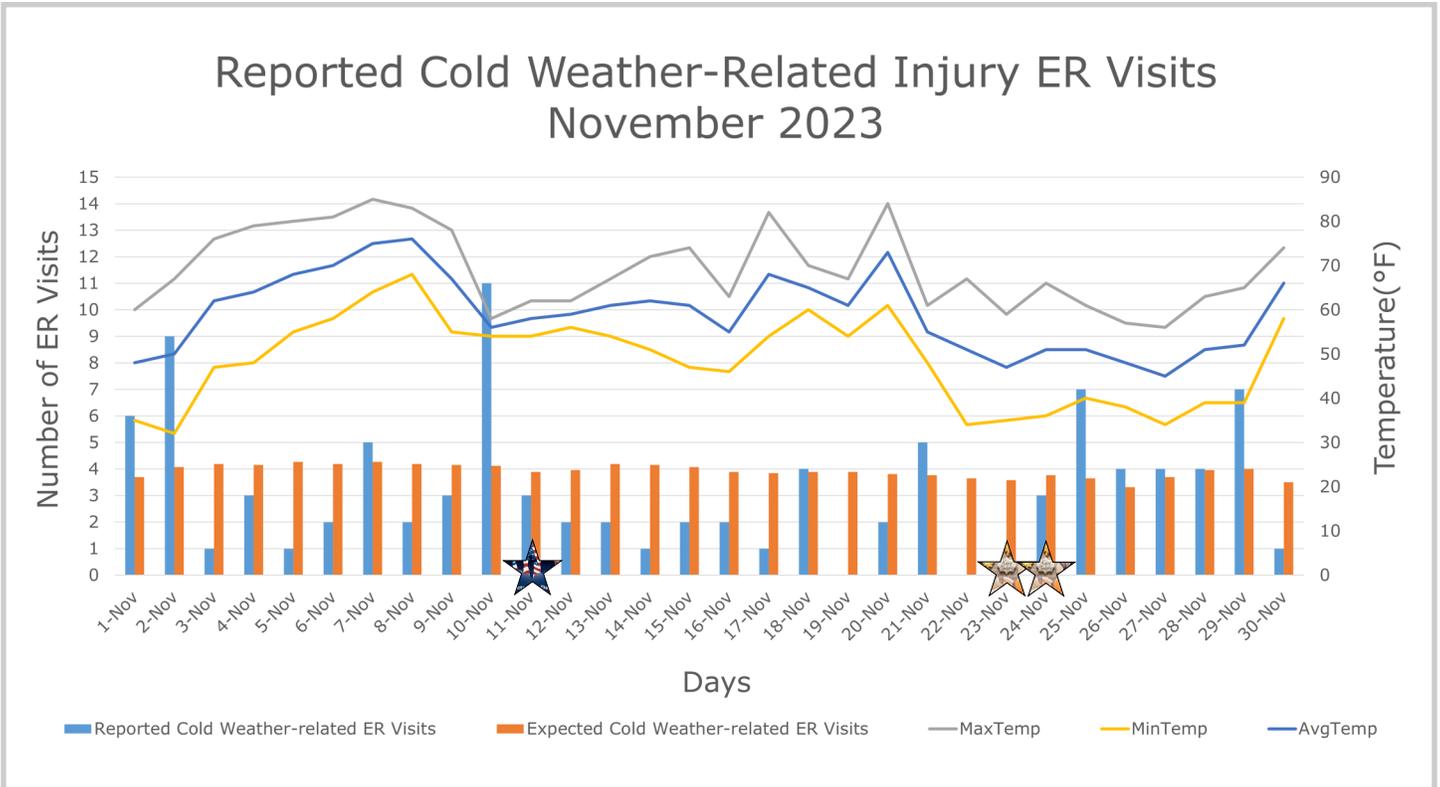
Thursday, December 21, is the last day of fall and the first day of winter solstice. Known as hibernal solstice, the northern hemisphere of the Earth will have its longest nights and shortest days. This is due to Earth's poles reaching their maximum tilt away from the Sun.

In November, the minimum and maximum temperature range observed was between 32-85 F. There was one report of a freezing temperature at 32 F. In December, the minimum and maximum temperature observed was between 24-77 F. There were eight separately reported freezing and/or below freezing temperatures.

Despite cold weather in Central Texas, the NOAA's Climate Prediction Center (CPC) predicts a mild outlook this year for the U.S. With wind chills factoring in for colder temperatures, it is recommended that Central Texas residents prepare for potential winter storms. For more information on winter weather preparedness and safety, please click on this link: [Winter Weather | Ready.gov](#).



Figure 4: Epi-Curve of Cold Weather-Related Injury ER Visits for November-December 2023



Veterans Day

Thanksgiving Day | Day After Thanksgiving Observance

Winter Solstice

Christmas Eve | Christmas Day | Day After Christmas Observance

New Year's Eve

Note on PHR 7 data: The results from the query used in ESSENCE, an electronic bio-surveillance system, to track cold weather-related illnesses and injuries may be an overestimation or underestimation of the actual burden of illness related to the winter weather activities. This is due to the nature of the query, which includes the term hypothermia, a condition that may be caused by factors other than cold weather.



Cold Weather-Related Injuries

Figure 4 shows the two EPI-curves for reported cold weather-related injuries for each month by days for November and December. Based on the overall trend analysis, the spikes or significant increases were observed a day prior and/or after the federal and state holiday observances. Aside from this, other significant increase in reported cold weather-related injuries were also observed at or during significant decreases in temperature.

For November, 11 out of 30 days (37%) of reported cold weather-related ER visits were above the expected ER visits. However, for much of the month, PHR 7 observed a lower rate of reported ER visits compared to the expected rate. Additionally, there were multiple days/nights that experienced a drop in temperature, with the lowest minimum temperature being on Thursday, November 2 at 32 F. The highest reported number of ER visits was on the day before Veterans Day, Friday, November 10 (n=11). Around the Thanksgiving holiday weekend, November 25 and 29, there was an increase in reported ER visits compared to the expected amount of visits for those days.



Stock image. Obtained through Microsoft PowerPoint image search result.

For December, 18 out of 31 days (58%) of reported cold weather-related ER visits were above the expected ER visits. This was in contrast with November. Additionally, there were seven occasions that experienced a decrease in temperature at or below freezing, 32 F, per day/night. The lowest minimum temperature recorded was on December 11 at 24 F, which also observed a spike in the number of ER visits. The highest reported number of ER visits was on December 26 (n=9) and December 29 (n=9). Both days also experienced drops in temperature. This increase was the week between Christmas and New Year's Eve.

Most of the reported cold weather-related injury/illness ER visits were related to prolonged or excessive exposure to colder weather. The majority of patients experienced various symptoms related to hypothermia along with mild cold/flu like illness (i.e., altered mental status, shortness of breath, pneumonia, headache, etc.). Other injuries include frostbite of the hands and feet, including fingers and toes and trench/immersion foot.

The National Weather Service issued winter weather warnings, watches, and advisories, including a wind chill advisory for November and December.



2024 New Year's Holiday Observance Week Fireworks Surveillance



Edward Yi, MPH, Epidemiologist II at DSHS Region 7



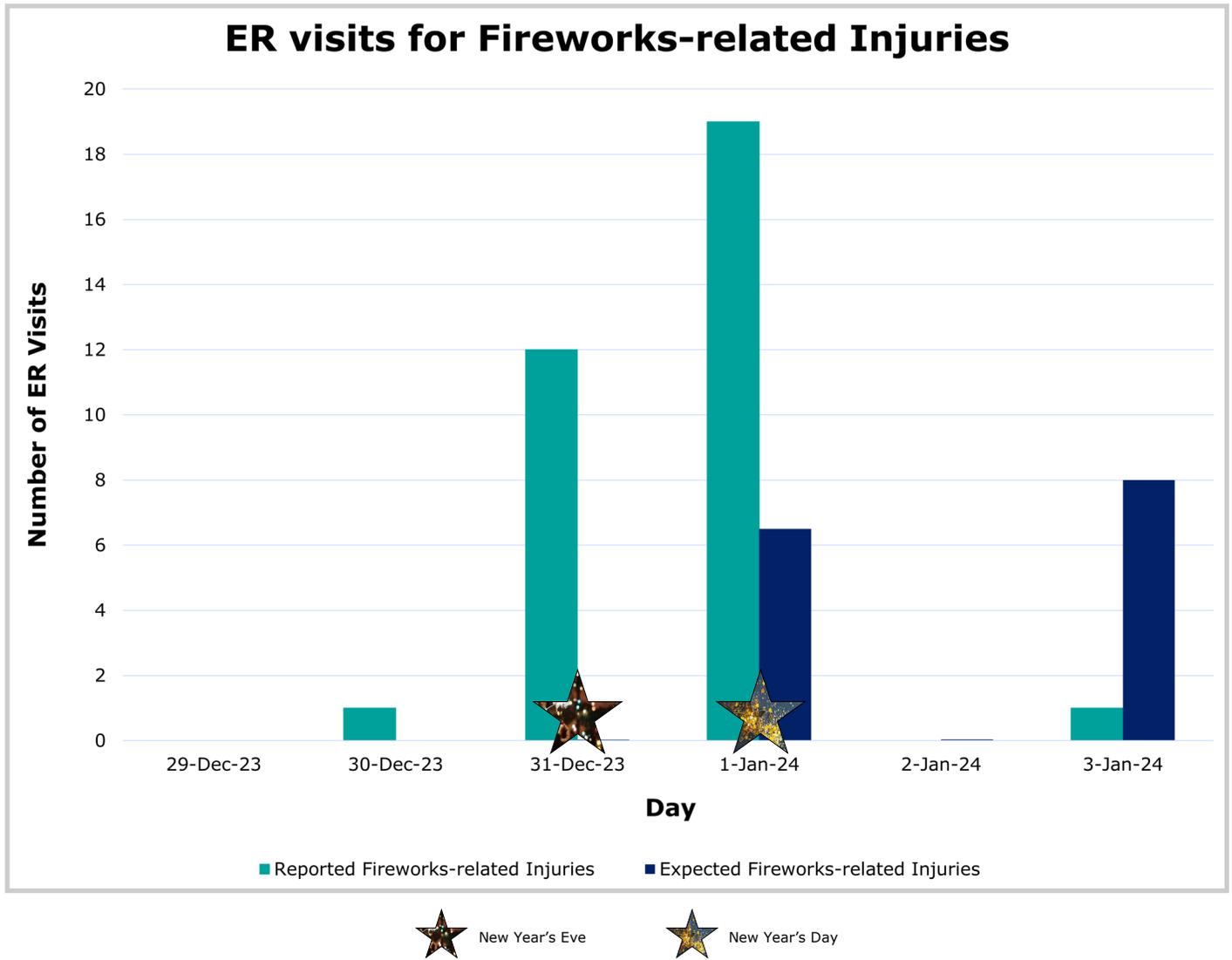
New Year's Eve and New Year's Day is an annual tradition celebrated in most nations. It includes fireworks, concerts, and parties with family, relatives, and friends.

While it is the time for joyous celebration to mark the beginning of the new year, it is important to stay safe during the celebration. From attending crowded areas to fireworks, there are potential hazards that can cause an increased risk for injuries to occur. For tips on firework safety, click on this link: [10 Tips for Firework Safety | Homeland Security \(dhs.gov\)](#).

PHR 7 conducted fireworks-related injury surveillance using ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics). This data reflects December 29, 2023 to January 3, 2024 on the next page.



Figure 5: EPI-Curve ER Visits for New Year's Celebration Fireworks-related Injuries



During New Year's Eve and leading up to New Year's Day, there were numerous reported ER visits for fireworks-related injuries. PHR 7 observed a total of 31 reported ER visits. There were 12 reported ER visits on New Year's Eve and 19 reported ER visits for New Year's Day. This is significantly higher than the expected ER visits.

The time of the injuries reported to the ER were between dusk and dawn. The vast majority occurred one to two hours before or after midnight on New Year's Eve. The most common chief complaint were epidermal burns of upper extremities and face related to fireworks and Roman candles. Other injuries reported were eyes and secondary/indirect injuries.

Note on PHR 7 data: The results from the query used in ESSENCE, an electronic bio-surveillance system, to track fireworks-related injuries may be an overestimation or underestimation of the actual burden of condition related to New Year's Eve- and New Year's Day-related activities due to the nature of the query, which may include indirect/secondary fireworks-related injuries.



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**Remember to report the required notifiable conditions to the DSHS
Region 7 Epidemiology office!**

Epidemiology Program's

Mission Statement:

To develop or enhance regional epidemiology services for the rapid detection and control of disease outbreaks or other adverse health outcomes. This includes evaluating, enhancing, and, when necessary, creating new surveillance and investigation systems, analyzing data, preparing recommendations, and working with appropriate programs to implement interventions for desired outcomes.

Questions, comments, or suggestions for this newsletter should be submitted to: **phr7.episurveillance@dshs.texas.gov**.

