

# Salt Lake County Annual Influenza Report 2020-21 Season Epidemiology Bureau

### Season Overview

The 2020-21 influenza season saw an unprecedented low number of confirmed hospitalizations, with only 10 influenza-associated hospitalizations reported from October 1, 2020 to April 30, 2021. Salt Lake County influenza trends followed that of the global community, where influenza spread was almost non-existent. This was due to the circulation of the SARS-CoV-2 novel virus (COVID-19), which dominated as the primary respiratory virus, as well as mitigation measures that included masking, public closures and social distancing. Typing among hospitalized cases was very mixed, with five influenza A, three influenza B, and two unknown type. Initial testing included five rapid antigen tests, two rapid molecular assays and three positives were found in medical record documentation. Unfortunately, no specimens among the 10 hospitalized patients were subtyped.

Due to the low count of hospitalizations for the 2020-21 season, this report will provide a brief, descriptive assessment of the season.

#### Severity Facility Mechanical Vasopressor Deaths ICU ECMO Threshold Outbreaks Ventilation Use 0 0 0 0 Low 0 0



## Season Snapshot





Due to the low case count, a statistically significant difference between age groups was not found.



Compared to past seasons, the influenza-like illness (ILI) percentage remained low.





Pneumonia and influenza mortality for Salt Lake County was elevated for 13 consecutive weeks from October 2020 to January 2021. This was primarily due to the surge in COVID-19 related deaths that had pneumonia also listed on their death certificate. Seasonal elevations during the respiratory season are considered normal, however 13 consecutive weeks of elevations is not typically observed.

There were three influenza-associated hospitalized cases this season that were also co-infected with COVID-19. The age range for these cases was 40-60 years of age. All had underlying health conditions, with the most common being metabolic conditions. Typing included one influenza A, one influenza B and one unknown influenza type. Zero cases needed additional oxygen requirements like BiPAP or nasal cannula. All three co-infected individuals had a discharge diagnosis of acute renal failure, where two of the three cases also had a discharge diagnosis of pneumonia.

As for vaccine, two cases were vaccinated against influenza and one was unvaccinated. One case acquired COVID prior to COVID vaccine availability, one was partially vaccinated for COVID during infection, and one received the second dose of COVID vaccine less than 14 days from positive COVID result.

Below is a model that assesses influenza burden throughout Salt Lake County by accounting for the underreporting of hospitalized influenza cases. By accounting for this underreporting, the model allows for the projection of how many cases of influenza were attended to in an outpatient clinic and how many individuals were sick with influenza in Salt Lake County but never received medical care.

Due to such historically low hospitalized case counts, the model did not project that more influenzaassociated hospitalizations occurred during the season. However, the model projected that 1,000 residents may have been sick with influenza and sought medical care and 1,000 residents may have been sick with influenza and did not seek care.



The 2020-21 influenza season was unlike past seasons, with an unbelievably low case count of hospitalized cases and low community transmission. With the co-circulation of COVID and influenza, it will be interesting to observe how future influenza seasons behave and if the introduction of COVID will drastically change the picture of influenza's influence on the community. Mitigation measures such as masks, public closures, social distancing and vaccination were all key players in reducing the spread of influenza. If these mitigation measures continue into future seasons, it may be common place to see lower hospitalized case counts than in seasons past.

### Data Notes

Severity thresholds assess the severity of an influenza season, by categorizing a season as low, moderate, high and very high severity. These thresholds were created by a CDC Epi-Aid team in 2018 that uses the Moving Epidemic Method (MEM) to set thresholds for Salt Lake County specific surveillance indicators. Severity in Salt Lake County is assessed real-time and an overall seasonal assessment is provided at the end of the season. Immediate assessments allow for situational awareness and planning in real-time compared to other modalities of influenza reporting. This allows the Salt Lake County Health Department to communicate with community partners in order to assist in planning and allocating resources in the midst of the season.