Alaska Influenza Surveillance Summary, 2020–21 Season

Background
The Alaska Section of Epidemiology (SOE) conducts routine influenza surveillance throughout the year, with heightened surveillance occurring October through May. Influenza surveillance provides information on where influenza activity is happening, tracks influenza-related illness (ILI) and influenza-associated mortality and detects changes in the viral genome. Weekly surveillance reports are posted on the SOE influenza webpage.1 The purpose of this Bulletin is to provide an epidemiologic summary of the 2020–21 influenza season.

Alaska 2020–21 Influenza Activity
The SARS-CoV-2 prevention and control measures instituted in Spring 2020 dramatically decreased influenza transmission, resulting in a season with very little activity (Figure). The intent of surveillance data is to demonstrate trends (rather than absolute numbers) as there is marked variability each year in who seeks testing and how many facilities offer testing. However, only 124 positive tests were reported in the 2020–21 season, which compares to approximately 4,000–7,000 cases during each of the past five influenza seasons. Influenza A and B viruses were seen simultaneously throughout the season (Figure).

Figure, Positive Influenza Laboratory Tests (PCR and Rapid), Emergency Department Syndromic Surveillance, and Outpatient ILI Reports — Alaska, September 2020–August 2021

Laboratory Surveillance
Alaska implements a sentinel surveillance system for respiratory viruses annually, which attempts to strategically characterize specimens that represent Alaska’s vast geography and dispersed population. Only 522 specimens were tested for influenza at the Alaska State Virology Laboratory (ASVL) during the 2020–21 respiratory virus season; none were positive for influenza. This represents about 10% of typical surveillance volumes at the Alaska public health laboratories due to the large workloads associated with SARS-CoV-2 diagnostics.

A subset of positive influenza specimens is routinely sent to the Centers for Disease Control and Prevention (CDC) for further characterization using antigen and sequencing methodologies, which are critical for establishing vaccine match data and the prevalence of antiviral resistance.2 However, ASVL did not have any specimens to send to CDC for the 2020–21 season.

Other Alaska providers, whether using rapid tests only for influenza or testing simultaneously for other pathogens (i.e., SARS-CoV-2) in a hospital setting, were the source for the influenza virus detections in the state.

Syndromic Surveillance
SOE participates in the national U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). Data from participating outpatient providers in Alaska are pooled to create a state-wide estimate for the weekly percent of health care visits due to influenza-like illness (ILI). Patients presenting with a fever of 100°F or greater and a cough and/or sore throat are considered to have ILI. For more information on state and national ILINet data, see FluView Interactive. While ILI activity is not the same as lab-confirmed influenza, the two usually match well unless there is another notable respiratory pathogen circulating or there are notable changes in health care seeking behavior. During the 2020–21 season, a large COVID-19 surge was occurring. The symptoms of COVID can be similar to ILI, but the ILI search terms are narrow enough to exclude the majority of COVID visits. Note that ILI increased during the Fall (November 2020) SARS-CoV-2 surge.

Influenza-Associated Mortality
During the 2020–21 season, two adult and no pediatric influenza-associated deaths were identified from health care provider reports and Alaska death certificate reviews.

Summary
Compared to the 2019–20 season, the 2020–21 season saw very little influenza activity. Low volumes of reported influenza cases likely represented low burden of influenza circulating in Alaska overall. This was consistent across the US and world, due to extensive community mitigation measures undertaken in response to the COVID-19 pandemic. However, it is likely that testing specifically for influenza was occurring at lower levels than during a typical season.

Recommendations
1. Health care providers should strongly urge all eligible patients aged 6 months to receive influenza vaccine by the end of October every year. Influenza vaccine is the most effective tool available to prevent influenza-associated morbidity and mortality.

2. Providers can submit respiratory specimens from patients with ILI to ASVL for influenza testing; supplies can be obtained free of charge by calling 907-371-1000. Laboratory request forms are available at: http://www.dhss.alaska.gov/dph/Labs/Documents/publications/FbxSupplyReq.pdf

3. Laboratories must report all positive influenza test results (including rapid test results) to SOE per 7 AAC 27.007. Laboratories are also encouraged to report the total number of tests performed and the number of positive results directly to CDC to help meet Alaska’s National Respiratory and Enteric Virus Surveillance System goals;3 call ASVL at 907-371-1000 for more information.

4. Health care providers must report suspected and confirmed influenza-associated deaths and unusual clusters of respiratory illness to SOE; (call 907-269-8000 during business hours, or 800-478-0084 after hours).

References
3. CDC. The National Respiratory and Enteric Virus Surveillance System. Available at: https://www.cdc.gov/surveillance/nivss/index.html

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