Summary of Skagit County, Washington COVID-19 Choir Cluster Investigation

On March 17, 2020, a member of a Skagit County, Washington choir group contacted Skagit County Public Health (SCPH) to report that many members of the group had fallen ill and three had tested positive for COVID-19 (two Skagit County residents and one out-of-county resident). SCPH initiated an investigation on March 18, 2020. All members were interviewed at either initial notification of the cluster (March 18-20) or for an follow-up interview (April 7-10).

SCPH identified one known symptomatic and infectious individual at the March 10 practice who was later lab-confirmed to have SARS-CoV-2 (the virus that causes COVID-19.) After the practice, 52 out of 61 attendees fell ill (86.7% attack rate); 32 were lab-confirmed to have COVID-19 and 20 had consistent COVID-19 symptoms. Among all people ill, three were hospitalized (4.9%) and two died (3.3%).

Though members reported no physical contact between attendees, there were several opportunities for exposure during the 2.5 hour singing practice on March 10. These activities include a choir practice in a large room, breakout group practice in smaller rooms, shared snack breaks, and use of two restrooms and entrance/exit doors. During these activities, many individuals were within 1-6 feet of one another, which constitutes close contact where droplet transmission can occur. Shared items like chairs or snacks could have enabled fomite transmission. The act of singing, itself, might have contributed to transmission through emission of aerosols, which is affected by how loudly someone speaks. These factors likely contributed to making this a high-risk event.

The singing group was able to mitigate further spread through proactive action. Prior to notifying SCPH, the choir group had communicated internally beginning March 15 and nearly all individuals who attended the practice reported that they were already self-isolating or quarantining prior to initial contact by SCPH between March 18 and March 20.

The results of this investigation illustrate the critical importance of physical distancing. While the Skagit County Health Officer issued social distancing recommendations on March 10, SCPH would not have expected widespread community knowledge of these recommendations that same day.

By contrast, today everyone in the community should be aware that the Governor’s Stay Home Stay Healthy order and Skagit County Health Officer recommendations are essential to preventing situations that can put people at risk of serious illness. People should avoid face-to-face contact with others, not gather in groups, avoid crowded places, and maintain physical distancing of at least 6 feet to reduce transmission. People should also wash their hands often, cover coughs and sneezes, stay home when ill, frequently clean and disinfect high-touch surfaces, and wear cloth face coverings. Additional information is available at https://coronavirus.wa.gov/

A detailed outbreak report and epidemiological will be published in the Center for Disease Control and Prevention Morbidity and Mortality Weekly Report (MMWR).