## CHURCH SINGING ADVISORY

# What does the data tell us about group singing during Coronavirus?

#### Scientific

Singing expels droplets 16ft, not 6. No mask is safe to use during singing and any mask could make the singer hypoxic. 15% fatality rate for those 65 and older. Otolaryngologist Dr. Lucinda Halstead, is founder and medical director of the Evelyn Trammell Institute for Voice and Swallowing at the Medical University of South Carolina. She is also President Elect of the Performing Arts Medicine Association (PAMA). https://youtu.be/DFl3GsVzj6Q

Aerosolized particles of the virus are about five microns in size (for reference, a human hair is 100 microns) and can survive in aerosol form for about three hours,. *New England Journal of Medicine* https://www.neim.org/doi/full/10.1056/NEJMc2004973

The aerosol cloud created by singing leaves nearly six times more particles in the air than normal speech does. Source: <a href="https://www.atsjournals.org/doi/abs/10.1164/arrd.1968.98.2.297?journalCode=arrd">https://www.atsjournals.org/doi/abs/10.1164/arrd.1968.98.2.297?journalCode=arrd</a>

Researchers measured the percent of droplet nuclei still airborne 30 minutes after talking, singing, and coughing. Only 6.4 percent were still airborne after talking, but 35.7 percent were airborne after singing, and 48.9 percent after coughing. Other studies have found that saying "aah" for 30 seconds releases twice as many particles as 30 seconds of continual coughing https://www.nature.com/articles/s41598-019-38808-z

#### Anecdotal

Church of Jesus Christ in S. Korea - Hundreds were infected after loudly shouting "amen" throughout the service. <a href="https://www.wsj.com/articles/why-a-south-korean-church-was-the-perfect-petri-dish-for-coronavirus-11583082110">https://www.wsj.com/articles/why-a-south-korean-church-was-the-perfect-petri-dish-for-coronavirus-11583082110</a>

Days after a hymn filled funeral, dozens were dx with Covid-19. Many events detailed, no specific counts. https://www.nytimes.com/2020/03/30/us/coronavirus-funeral-albany-georgia.html

Out of about 60 singers rehearsed for 2 ½ hours, 45 were diagnosed with covid-19 and 2 died. No one was coughing or appeared ill at rehearsal - 75% transmission rate.

Source:https://www.latimes.com/world-nation/story/2020-03-29/coronavirus-choir-outbreak

In Germany, 59 of 78 singers in the choir of Berlin's Protestant cathedral caught the virus. Lothar Wieler, the head of Germany's disease control agency, specifically warned against singing because the virus drops appear to fly particularly far, according to the newspaper - 75% transmission.

https://www.theguardian.com/world/2020/apr/29/germany-to-set-out-rules-for-religious-services-including-singing-ban

In Calgary - <a href="https://calgary.ctvnews.ca/mobile/i-would-do-anything-for-a-do-over-calgary-church-hopes-others-learn-from-their-tragic-covid-19-experience-1.4933461?fbclid=lwAR18FnWhw7X2m3WdpruYEvtyODaRIUrGcjxPDnwveJM8BpQRxMl0qtLiJj</a>

In Amsterdam- On March 8, five days before lockdown, a choir performed Bach's St John Passion in the great hall of the Concertgebouw..

It was announced on Dutch news last night that four people associated with the chorus – one singer and three partners of chorus members – died of Coronavirus after the concert, and 102 more fell sick, some seriously.

The chorus has 130 singers in all. That is a 78% transmission rate. Source (in dutch) <a href="https://www.trouw.nl/verdieping/die-ene-passion-die-wel-doorging-met-rampzalige-gevolgen~b4ced33e/">https://www.trouw.nl/verdieping/die-ene-passion-die-wel-doorging-met-rampzalige-gevolgen~b4ced33e/</a>

### What Guidance has been issued so far?

No spacing solution makes group singing safe.

Masks are ineffective and unsafe for the user when singing.

Current tests have 3-5% false negative, far too risky for large group testing.

Safe singing scenario - widespread vaccination, proven treatment with a 95% cure rate, organic herd immunity/contact tracing.

Best guess is 18-24 months before group singing can resume, Dr. Halstead. Summary of NATS/ ACDA Conversation

https://www.middleclassartist.com/post/nats-panel-of-experts-lays-out-sobering-future-for-singers-no-vaccine-no-safe-public-singing

#### Conclusion

In summary, it is an unnecessary risk to sing in a group for any reason until Covid 19 has been eradicated / tightly controlled. While businesses and other organizations must open to prevent financial catastrophe, , there is no such pressure to return to group singing, therefore our risk tolerance ought to be much lower.

## What might music look like?

- \* Pre-recorded on a screen, as we have been doing throughout the lock down
- \* Live soloist stationed in the balcony with a microphone and plexiglass barrier
- \* Organ only, possibly additional non-wind instruments
- \* No hymns, Doxology, Gloria Patri, Sanctus, no live choir.

### Where do we go from here?

NATS / ACDA is sponsoring another round table next month that will focus on how we can make excellent music. Anne will virtually attend and report back.