



# *A conversation*

Singing in Church  
In the midst of COVID19

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*How shall we sing  
the Lord's song*

*in a strange land?*

*Psalm 137:4*

# A Difficult Conversation

- **Collective desire** *for communities of faith to get together and experience their church families in the ways that have been familiar for generations*
- **Contradictory messaging** *about what is and isn't safe causes frustration and confusion*
- **Singing's uniqueness as a super-spreading activity**, *and its falling outside common safety guidance regarding distancing, etc.*
- **Slowly developing Data** *specific to COVID because of its recent emergence as a known virus*
- **Painful for those connected to singing in life and faith**

# What research and data tell us

## National Webinar

### Chorus America

**ACDA** (American Choral Directors Association)

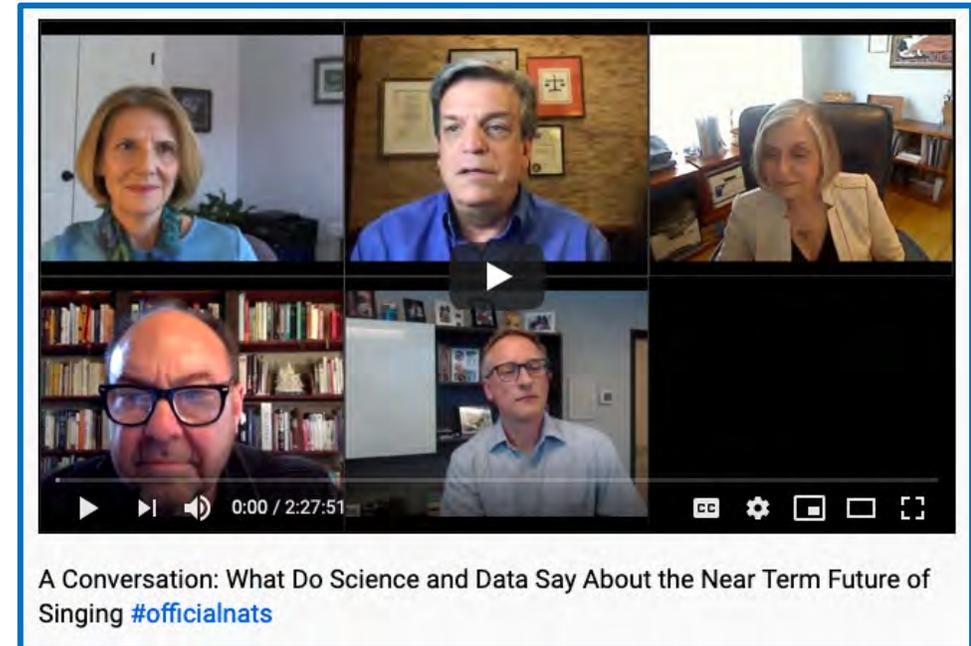
**NATS** (National Association of the Teachers of Singing)

### Barbershop Harmony Society

### Performing Arts Medical Association

**Dr. Donald Milton**, a leading researcher whose work focuses on the interrelated areas of infectious bioaerosols, exhaled breath analysis, and development and application of innovative methods for respiratory epidemiology. Dr. Milton is Professor of Environmental Health, University of Maryland School of Public Health, with a secondary appointment in the School of Medicine.

**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).



# Issues related to singing and spread of COVID19

**Intensity/sustained nature of inhale/exhale/aerosolization during singing** creates significantly greater risk than regular breathing or speech, activities already shown to contribute to spread of the virus

**6' Social distancing insufficient** in a singing environment because...

**Droplet (up to 50 microns) projection up to 16' distance**

**Higher volume of produced droplets** from singing, up to 6 times that of speaking

*(Singing and the dissemination of Tuberculosis, by Robert Loudon and Rena Marie Roberts)*

**Aerosolization** is created by singing:

**Produces much smaller particles** (no longer droplets visible to the eye, can be as small as 1 micron)

**Remain in the air for much longer**, possibly hours

**Penetrate deeper into lungs** on inhalation, impacting ease of transmission and severity of infection

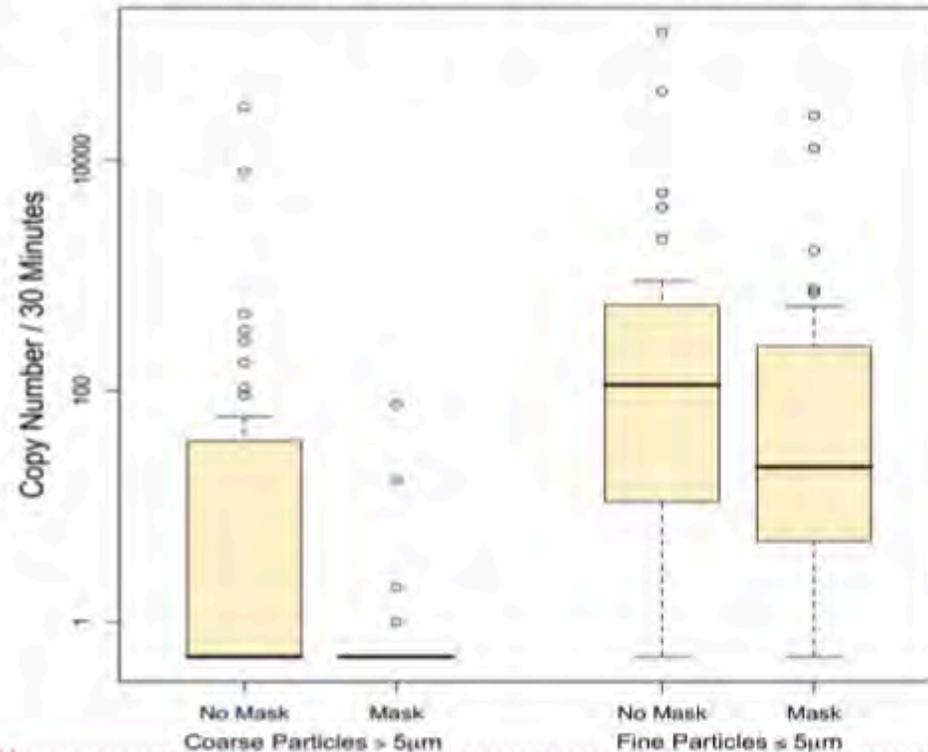
**More susceptible to airflow conditions** due to smaller particle size including HVAC, outdoor breezes

# Masks

According to Dr. Halstead,

**There are no barriers (masks) that make public, group singing safe.**

Influenza Virus Copy Number In Aerosol Particles Exhaled By Patients With And Without Wearing Of An Ear-loop Surgical Mask



This study was not necessarily specific to singing, so actual particle production / dissemination would likely be greater in those environments

# Documented Outbreaks

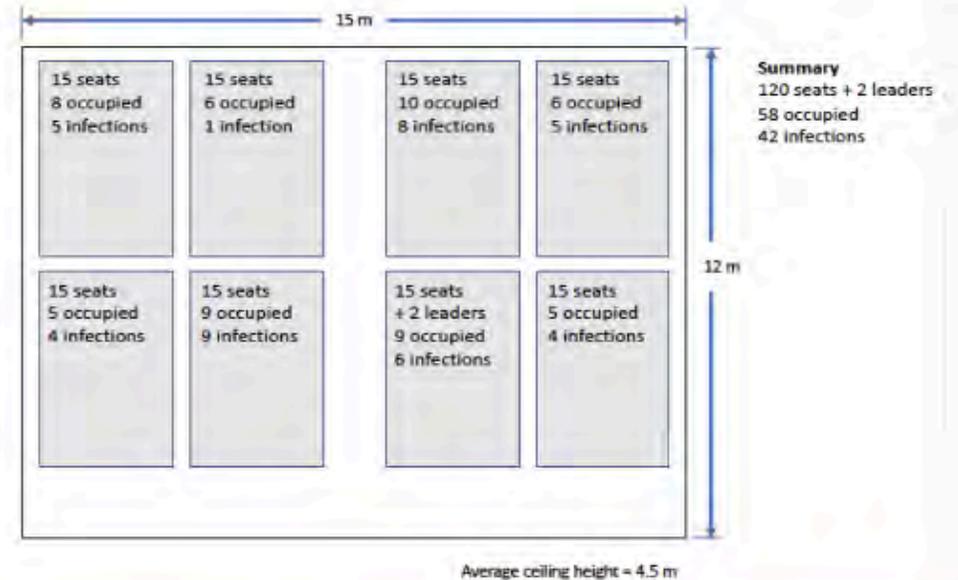
**Churches** in Arkansas, California, Kentucky, West Virginia, UK, South Korea

**Other indoor public gatherings with singing:** Bars, Karaoke Bars, Night Clubs (recent South Korea night club outbreak)

## Washington Choir outbreak

### Skagit Choir Outbreak

- March 10, 2020
- “About 55 people (roughly one-half of the group) attended.”
- At the time of the rehearsal, there were no known cases in Skagit Valley, nor were any closures in effect.
- Notice to members: “Anyone showing any symptoms of illness, no matter the cause, should not attend rehearsals.”
- ~70% infection rate
- 0.5 air changes per hour estimated
- Increase to 9 air changes per hour would have reduced to 14% infected, if airborne transmission



# Questions Facing Churches about singing during in-person worship:

## Who, if anyone will sing?

*Leaders? (soloists)*

*Choirs?*

*Congregation?*

*"Canned" singing?*

## What will those logistics look like?

*Distancing?*

*Masks?*

*Physical books/projections?*

*Microphones?*

## How will these changes affect the worship experience?

*The feeling of "restricting" congregants*

*The absence of singing as a worship component*

*Expectations vs. reality*

## How do we most effectively worship plan for these conditions?

# How do we most effectively worship plan for these conditions?

Challenge past assumptions about worship components (*already happening!*)

Consider with fresh perspective *why* musical elements resonate:

*Familiarity & comfort?*

*Capacity to instruct?*

*The feeling of acting as community?*

*Capacity to express the experience of faith?*

Consider **how these values might drive decisions** about  
Who/what/when to include musical components

*Instrumental versions of hymns?*

*Solos/duets/etc. at safe distance (16-20 feet)?*

*Technology in the live worship service?*

*Worship experiences outdoors?*



# Discussion

