

# School music guidance: an infectious disease perspective

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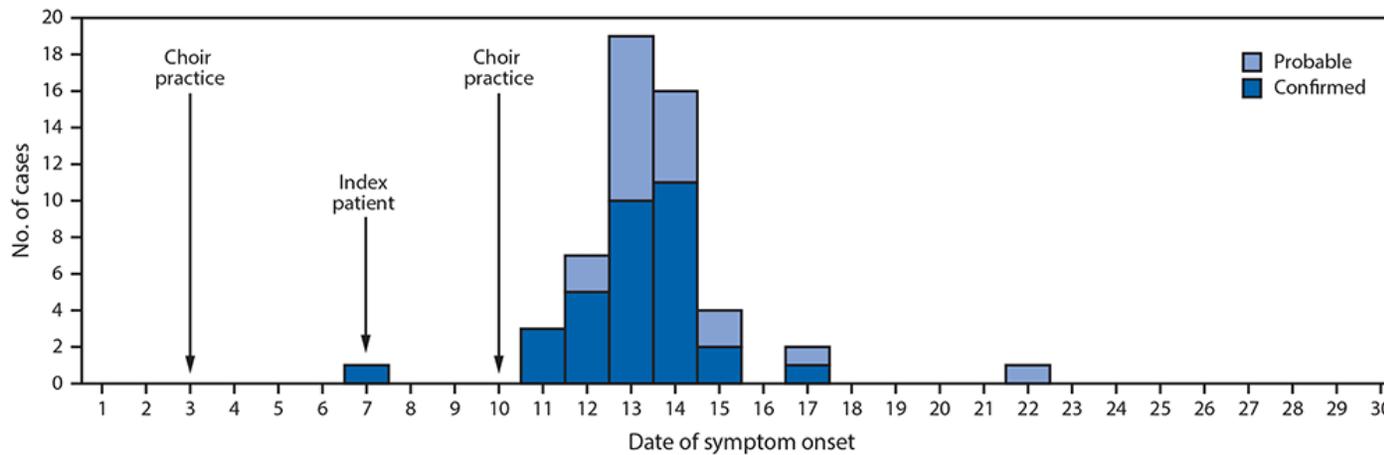


<http://www.loc.gov/pictures/resource/cph.3a35556/>

# High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice — Skagit County, Washington, March 2020

Weekly / May 15, 2020 / 69(19);606-610

**FIGURE. Confirmed\* and probable† cases of COVID-19 associated with two choir practices, by date of symptom onset (N = 53) — Skagit County, Washington, March 2020**

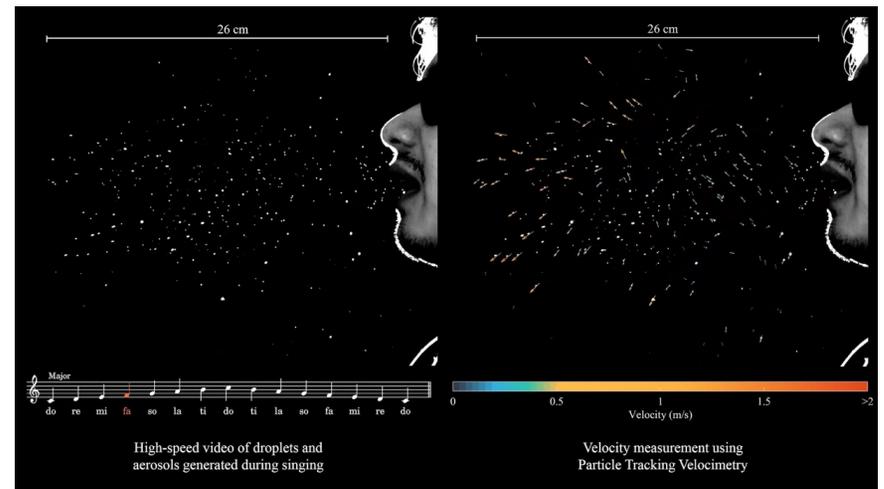


# What happened?

- 2.5 hour choir practice in March 2020 (seems like ancient history)
- Technically, no physical distancing
- No facial coverings
- First big hint regarding potential for aerosol transmission of SARS-CoV-2 (if given the correct conditions)

# Concerns regarding singing/music

- Singing previously known to be a risk factor for transmission of airborne pathogens (e.g. TB)
- Act of singing, volume of vocalization generates increased aerosols



Prateek Bahl, Charitha de Silva, Shovon Bhattacharjee, Haley Stone, Con Doolan, Abrar Ahmad Chughtai, C Raina MacIntyre, Droplets and Aerosols Generated by Singing and the Risk of Coronavirus Disease 2019 for Choirs, *Clinical Infectious Diseases*, 2020,; ciaa1241, <https://doi.org/10.1093/cid/ciaa1241>

# Unsafe singing = superspreading events

- September 2020, an indoor sing-along yodeling contest involving ~600 people in Switzerland led to one of Europe's worst outbreaks
- ~50% test positivity during October in Schyz canton where event occurred
- No masks required



Pascal Lauener/Reuters

# Knowledge gaps

- No data on aerosol generation via wind instruments
- No data about effectiveness of facial coverings/bell covers on aerosol emission during singing, music
- Fairly early consensus that singing, music outdoors posed little risk—but what about indoors?
- International Coalition Performing Arts Aerosol Study developed in part to address this question
  - National Federation of State High School Associations (NFHS)
  - College Band Directors National Association (CBDNA)
  - University of Colorado
  - University of Maryland

# Key findings

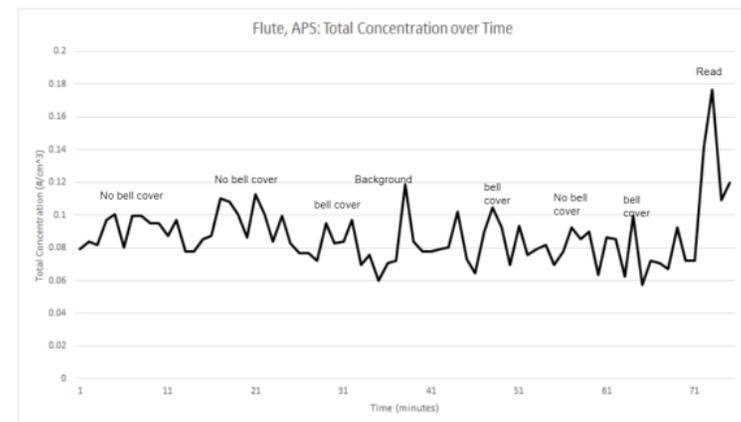
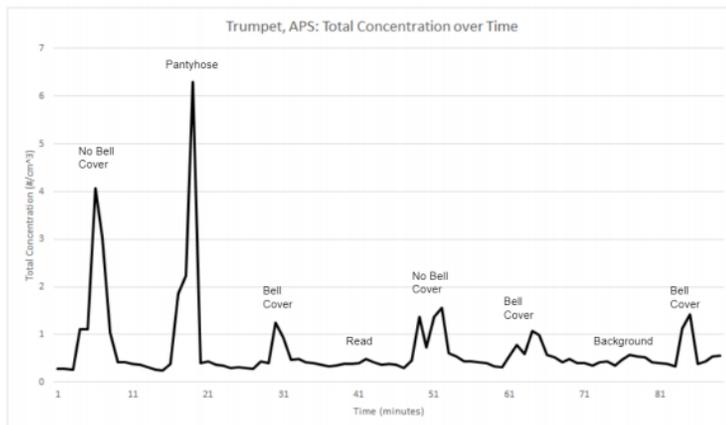
- Medical-grade masks (plus bell covers for wind instruments) reduce detectable aerosols by 60-90% of baseline, depending on instrument

<b>Instrument</b>	<b>Efficiency Calculated, Sampled at Bell / Mouth</b>
Saxophone	64%
Flute	67%
Baritone Singer*	79%
Theater 1*	80%
Clarinet	87%
Theater 2*	88%
Bassoon	89%
Trombone	89%
Trumpet	92%
French Horn	95%
Oboe	96%
Soprano Singer*	98%

<https://www.nfhs.org/media/4294910/third-aerosol-report.pdf>

# Key limitations

- Highly artificial conditions—how will this hold up “in the real world?”
- Unclear what amount of aerosol release is “safe”
- Everyone and every type of instrument has their own baseline
  - 60% reduction in aerosols for one may still end up being a large amount relative to someone else



<https://www.nfhs.org/media/4294910/third-aerosol-report.pdf>

# Extenuating circumstances

- Our kids are not ok
  - Broad recognition that kids are suffering, and this needs to be balanced against the risk of COVID-19 transmission
- Equity
  - Indoor winter sports have been allowed
  - From an ID perspective, I have seen nothing to suggest that indoor music, if practiced with the mitigation strategies proposed by VMEA, would clearly be any greater risk for virus transmission than ice hockey or basketball

# Final thoughts

- Data regarding aerosols generation via singing, wind instruments with masks and bell covers are imperfect but overall are fairly reassuring
- Allowing music during winter months at this point is simply the right thing to do for our kids
- But we should move back outdoors as soon as humanly possible!