Music Department Covid-19
Protocols for Ensembles

Fall 2020
Music Department protocols based on the latest research on Aerosols in Music

• We are using the first and second rounds of results from a major study on music and aerosols being conducted by leading aerosol researchers at University of Colorado, Boulder and University of Maryland.

• Sponsored by 100 professional organizations, including the College Orchestra Directors Association, American Choral Directors Association, College Band Directors National Association, the League of American Orchestras, and Chamber Music America)

• This study is guiding programs at the college and university level, as well as K-12 and professional arts organizations.

• The study outlines five areas of risk mitigation in music performance.
Areas of Risk Mitigation

- **Masks**
  - Student
  - Instruments
  - Materials

- **Distance**
  - 6-foot CDC guidance
  - Applies indoors and outdoors
  - 9x6 for trombone

- **Time**
  - 30-minute rehearsal
  - Clear room for minimum 1 air change before next rehearsal period

- **Air Flow**
  - Outdoors is best
  - HEPA Filtration
  - ACH Rates

- **Hygiene**
  - Spit Valves
  - Handwashing
  - Storage Areas
1. Wearing Masks while playing or singing – Masking Instruments as well as players

- All participants in ensembles (Choir, Orchestra, Jazz, and Chamber Ensembles) must wear masks at all times in rehearsal – both indoors and outdoors.
- All students in Choir are wearing specially designed singers' masks in rehearsal.
- Woodwind and Brass students in ensembles are being given bell covers for their instruments, to be used in all rehearsals, both outdoors and indoors. These are double layered and will be enhanced with coffee filter inserts.
- Surgical masks are provided for wind players to use while playing, with a slit cut for mouthpieces.
- Flute-specific masks are being made for the flutes to accommodate their head joints.
Aerosols Produced by Different Instruments

Playing wind instruments, singing, and theatrical voice releases airborne particles (aerosol). These particles are of the size range that may transmit the COVID-19 virus. Performing with mask and bell cover reduces emissions.
The Effectiveness of Masks for Singing

**Indoor Case Study:** Mask Impact on Infection Risk

Infection risk $r$ by Wells-Riley equation at the height of mouth opening, with breathing rate of 8 L/min.

- Singing without mask
- **Floor size:** $4 \text{ m} \times 4.5 \text{ m}$
- Perfect Fit Medical Grade Mask

- $t = 10 \text{ min}$
- $t = 30 \text{ min}$
- $t = 60 \text{ min}$
2. Social Distancing for Winds and Singers

- In combination with the other protocols, we are following the UC Boulder recommended 'trombone spacing' of 9' x 6’, both indoors and outdoors. While the CDC guidance recommends 6'x6’ spacing, the additional distance in front provides extra buffering for aerosols emitting forward from the player or singer.

- In practice most of the winds and choral ensembles will be in a single row.

- Strings, percussion, and keyboards will use the standard 6’x6’ spacing.
Distancing for Music

Distance – It Matters

- CDC Guidance currently is 6-foot distancing
- Indoors
  - 6x6 area
  - 9x6 for trombone
- Outdoors
  - 6x6 area
  - Masks strongly recommended
  - Instrument bell covers should still be used
3. Ventilation Breaks – every 30 minutes for winds and vocal rehearsals

- **Indoor rehearsals:** after 30 minutes we will move to a different space to allow the first rehearsal space to ventilate for 20 minutes (this is the time required for a full air exchange in our building) before it is used again.

- **Outdoor rehearsals:** after 30 minutes we will break for 5 minutes for natural aerosol dispersion before continuing to rehearse.
Rehearsal Breaks

Time

• 30-minute rehearsal times
  • Indoor
    • Allow a minimum of 1 air change prior to next use of the room, 3 would be better.
  • Outdoor
    • Playing should cease for approximately five minutes to allow the aerosol to disperse.

• More study is needed prior to any recommendations of time changes
4. Air flow mitigation and rehearsing outdoors

• Wind instrumental and vocal ensembles are rehearsing outdoors whenever possible during the first few weeks of the fall semester.

• Brass instruments and singers may be able to rehearse longer outdoors than woodwinds, as cold temperatures can damage wood instruments.

• Masks, bell covers, and the ventilation break after 30 minutes will be observed outdoors as well as indoors.

• The indoor ventilation break length is determined by the length of the air exchange cycle for the space; for Wellin Hall and List, this is 20 minutes.
5. Instrument-Specific Hygiene Practices

- **Shared equipment:**
  - Choir has three designated students handling setup and breakdown of chairs.
  - When rehearsing outdoors, students are asked to use their own music stands and to move and wipe down any department-owned equipment before and after rehearsal.
  - Students in Orchestra, Jazz, and Chamber Ensembles will move their own chairs and stands, wiping down all equipment they used before and after rehearsal.
  - Percussionists will use their own sticks, and wipe down all shared equipment before and after use.

- All students are given their own copies of music (we have the originals) so that there will be no sharing of parts.

- Brass instruments will use 'puppy pads' to empty their water keys when rehearsing or practicing inside.
Music Department Covid-19 Web Page

• The Music Department has added a webpage of our Covid-19 policies for students and faculty to find the latest safety protocols. We will continue to update as new research becomes available, and as we learn from experience: https://academics.hamilton.edu/music/covid-policy

• The latest results and recommendations from the University of Colorado, Boulder study are available at https://www.nfhs.org/articles/unprecedented-international-coalition-led-by-performing-arts organizations-to-commission-covid-19-study