

# INSTRUMENT PLAYING & SINGING AEROSOL STUDY: RECOMMENDATIONS AND DEPAUW RESPONSE

## General Study Notes:

- These recommendations are based on preliminary data.
- These recommendations are not guaranteed to remove all risk.
- These recommendations address aerosols, not infectious particles, so it is possible that the recommendations are overly cautious if these aerosols do not have infectious virus in them. However, we are erring on the side of caution to mitigate risk.

Multiple instruments were tested, including singing, and all were found to have approximately the same amount of aerosol spread except the following:

- Oboe: There tended to be more aerosol from the oboe.
- Trombone: Aerosol spread was farther due to the size/shape of the instrument.
- Bassoon: Bassoon was not tested.

Each guideline below will be reviewed every 14 days, including the location of lessons and rehearsals.

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## Recommendation/Findings:

Outdoor rehearsals are better than indoor rehearsals.

## DePauw Guideline:

All woodwind and brass rehearsals and lessons will take place outside or remotely until further notice. It is recommended that voice lessons be held outside, but may be indoors in a large space, using masks.

Ensemble directors and applied professors should take into consideration the weather forecast and wind direction when choosing between outside or remote rehearsals and lessons. When possible, determining the method of teaching 24 hours in advance is preferred to allow students and professors to properly plan. However, the weather in Indiana can change rapidly. Professors should monitor weather conditions throughout the day and communicate with students regularly.

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## Recommendation/Findings:

Wind direction and speed can increase the spread of aerosols. All students should sit facing the same direction.

## DePauw Guideline:

Ensemble directors should take into consideration wind speed and direction when setting up for rehearsals. All students should sit facing the same direction. No ensemble should be in a semi-circle formation.

Ensemble directors and applied professors should take into consideration the weather forecast and wind direction when choosing between outside or remote rehearsals and lessons. When possible, determining the method of teaching 24 hours in advance is preferred to allow students and professors

to properly plan. However, the weather in Indiana can change rapidly. Professors should monitor weather conditions throughout the day and communicate with students regularly.

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**Recommendation/Findings:**

More particles were found near the bell or open holes of an instrument.

**DePauw Guideline:**

All brass players will be provided a bell cover for their instrument. Bell covers should be used during all rehearsals, lessons, and practice sessions, whether **indoor or outdoor**. All woodwind players will be provided with instrument covers. Instrument covers should be used during all rehearsals, lessons, and practice sessions, whether **indoor or outdoor**. Covers for oboe, soprano/alto/tenor saxophone, and clarinet have been purchased. Covers for bassoon, baritone saxophone, and flute are still under development.

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**Recommendation/Findings:**

The use of a mask reduces viral spread, even while playing or singing.

**DePauw Guideline:**

Students must wear a mask during rehearsals, lessons, and practice sessions, whether **indoor or outdoor**. Each brass, woodwind, and vocal student will be provided with two specialized masks for music making. **These masks should only be used for rehearsals and are not a replacement for standard masks that are to be worn throughout the day.** Brass masks will also be provided to those students enrolled in Brass Techniques.

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**Recommendation/Findings:**

Time is needed between and during rehearsals to allow for air exchange.

**DePauw Guideline:**

Indoor rehearsals must have a 30-minute break scheduled every 30 minutes to allow for air exchange. Outdoor rehearsals must have a 5-minute break scheduled every 30 minutes to allow for air exchange. This applies to applied lessons, ensembles, and coachings.

DePauw has updated the HVAC system in the Green Center. The GPS NPBI technology works to safely clean the air inside commercial and residential buildings. The patented technology uses an electronic charge to create a plasma field filled with a high concentration of + and - ions. As these ions travel with the air stream they attach to particles, pathogens and gases. The ions help to agglomerate fine sub-micron particles, making them filterable.

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**Recommendation/Findings:**

Spit valves should not be emptied onto the floor.

**DePauw Guideline:**

Each brass player and students enrolled in the Brass Techniques course will be given a set of towels to use when emptying spit valves. Used towels should be stored in a sealed Ziploc bag (provided) until laundered. Each individual is responsible for regularly laundering these towels.

Individuals should sanitize their hands after handling used towels.

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**Recommendation/Findings:**

Only the director/professor should speak during rehearsals.

**DePauw Guideline:**

Ensemble directors and applied music professors should set guidelines for talking during rehearsals and lessons. Amplification will be provided for the professor.

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**Recommendation/Findings:**

Shared spaces should be cleaned with 70% alcohol wipes.

**DePauw Guideline:**

DePauw has provided cleaning wipes for classrooms and offices. Each student should consider bringing their own 70% alcohol wipes for instrument cleaning.

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**Recommendation/Findings:**

Students should physically distance during rehearsals.

**DePauw Guideline:**

Inside: All chairs must be 6 feet apart in all directions. Trombone chairs must have 9 feet of space in the front. It is recommended that singers space 8 feet apart.

Outside: All chairs must be 6 feet apart in all directions. Trombone chairs must have 9 feet of space on all sides (due to wind). It is recommended that singers space 8 feet apart.