International Coalition Performing Arts Aerosol Study

Dr. James Weaver (NFHS) and Dr. Mark Spede (CBDNA), Chairs Dr. Shelly Miller, University of Colorado Boulder and Dr. Jelena Srebric, University of Maryland, Lead Researchers

With the CDC announcement of reduced physical distancing on March 19, 2021 many questions have been asked about whether performing arts activities can be also have reduced physical distancing. We applaud the CDC on removing the requirement for plexiglass barriers. The CDC's new distancing recommendation only focuses on seated classrooms. With the rapid spread of more aggressive variants such as the B.117 variant, health officials do **not** recommend a change in physical distancing for activities that have increased exhalation.

However, with further research in the aerosol study being completed the following are the recommendations for performing arts activities:

- Bell covers for woodwinds and brass should be made with a multi-layer cover with the center layer being made of MERV-13 filter material, or a 3-layer surgical style mask using an ASTM F2100 or GB/T32610 standard.
- Singers produce aerosol at similar rates as woodwinds and brass. The amount of aerosol varies depending on consonants, vowels, intensity, and pitch. Singers wearing a well fit 3-layer surgical style mask that meets the ASTM F2100 or GB/T32610 standard reduces aerosol emission.
- Face shields are only effective at close range to stop large droplets; they do not prevent aerosol from being inhaled or released unless a mask is also worn.
- Reduced time in performing arts activities:
    - Indoors - 30-minute restriction followed by a minimum of one (1) air exchange
    - Outdoors – 60-minute restriction followed by a five (5) minute break (New 3/19/21)
- Practice good hygiene by washing hands, using sanitizers, and preventing uncontrolled spit valve release.
- Rehearsal space recommendations in order of preference:
    - Outdoor rehearsals, using individual mitigation techniques described above.
    - Indoors with elevated outdoor air exchange rate from HVAC.
    - Indoors with typical outdoor air exchange rate from HVAC plus recirculation air through MERV 13 filters or addition of appropriately sized HEPA air cleaners.
    - Indoors with outdoor air exchange rate from open windows supplemented with appropriately sized HEPA air cleaners when airflow is reduced under certain outdoor wind conditions.

Please refer to the Association for Heating, Ventilating and Air-Conditioning Engineers (ASHRAE) guidance on ventilation during COVID-19: https://www.ashrae.org/technical-resources/resources

For more information on aerosol in performing arts activities please click here.