Statement on preventing spread of novel coronavirus for wind musicians Adam Schwalje MD, DMA

The recent worldwide spread of coronavirus has affected many lives. Musicians and others are sheltering in place, avoiding contact with the outside world, caring for children home from school, all while still striving to pursue our livelihoods and maintain our passion and creativity. Wind performance and instruction offer specific opportunities for the possible spread of infectious diseases like COVID-19. It is vitally important to recognize and mitigate these.

GENERAL BACKGROUND. Novel coronavirus, also known as SARS-CoV-2, which causes the disease COVID-19, is a new infection rapidly spreading throughout the world. It is related to both SARS and MERS, which are well-known for previous global infection concerns. It is both more infectious and less deadly than either of those. Tallied infections with SARS-CoV-2 are increasing and number more than 300,000 worldwide, with over 13,000 deaths reported (https://coronavirus.jhu.edu/map.html). There are likely many more infections than reported due to well-publicized issues with testing. The doubling rate for number of infections is around 5-7 days. Symptoms are gradual in onset and flu-like, though many infected individuals can be asymptomatic. Overall death rate is somewhere around one percent, which is several times more deadly than influenza, with most deaths in those who are elderly and / or chronically ill. Its spread is mostly by droplets, which can deposit on surfaces if larger or hang in the air if smaller. The 6-foot radius of safety is commonly cited, though there is also the possibility of aerosol transmission: for example, if an infected individual is coughing in a small room the air in the room can remain infectious for some time. It can also likely be spread by the fecal-oral route. It can be transmitted by those who are infected but asymptomatic, or after recovery for some number of weeks.

SOCIAL DISTANCING. Remaining physically separated from others should remain the backbone of the wind musician's response to COVID-19. This means in-person lessons should not occur. In-person performances and rehearsals, even for smaller chamber groups, should be avoided.

- Playing a wind instrument involves sometimes forceful exhalation and likely aerosolization of the contents of the mucous in the mouth and nose. There is at least a theoretical risk of droplet transmission during wind performance; therefore, in-person lessons and rehearsals should be deferred.
- Any in-person audience will give the virus many chances to spread.
- There should be no sharing of instruments or reeds, even between asymptomatic individuals; this puts one person in direct contact with the secretions of another person and could easily lead to transmission of virus.

REEDS. There is no validated method that will eliminate the risk of viral transmission from reeds. There is some timeframe, of unknown duration, during which virus particles deposited on and in a reed will lose their ability to infect a new host.

- The safest approach is to treat all reeds as if they are infectious; to not work on others' reeds and not share reeds with others.
- It is unclear how long coronavirus particles remain infectious on or in items like reeds. The closest available comparison is with cardboard, on which virus particles seem to have a relatively short time of remaining infectious (24h compared to 72h + for solid surfaces). However, the cardboard tested to draw this conclusion was almost certainly not soaked in someone's mouth for hours on end. Therefore, its applicability to reeds is questionable at best.
- One should assume that every reed and every piece of equipment could transmit the coronavirus. For cleaning and disinfecting reedmaking equipment, a reedmaker might be able to use resources like: <u>https://www.cdc.gov/coronavirus/2019-ncov/prepare/cleaning-disinfection.html</u> or <u>https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sarscov-2</u>
 - Knives and other reed tools should be treated like food preparation equipment; potentially dangerous chemicals should be removed from their surfaces before use.
- There is no method that is proven to sanitize the reeds themselves from infectious coronavirus particles. Beware that whatever chemical is used will be ingested. Using a "sanitizing procedure" could give a false sense of security.

Dr. Schwalje is a bassoonist and resident physician in the Department of Otolaryngology at the University of Iowa Hospitals and Clinics (UIHC). Many thanks to Dr. Henry Hoffman, a staff physician in the Department of Otolaryngology at UIHC, for his thoughtful review.