

Policy brief about performances of orchestras during the COVID-19 pandemic

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The orchestra boards of trustees and directors of the following Berlin orchestras (in alphabetical order):

Berliner Philharmoniker [Berlin Philharmonic]

Deutsches Symphonie-Orchester Berlin (DSO) [German Symphony Orchestra Berlin]

Konzerthausorchester Berlin [Berlin Concert Hall Orchestra]

Orchester der Deutschen Oper Berlin [Orchestra of the German Opera Berlin] Orchester der Komischen Oper Berlin [Berlin Orchestra of the Comic Opera] Rundfunk-Sinfonieorchester Berlin (RSB) [Berlin Radio Symphony Orchestra] Staatskapelle Berlin [Berlin State Orchestra]

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Authors' notes:

The policy brief applies to the orchestra performance and safety of the musicians and serves to make performances possible during the COVID-19 pandemic. Rules and recommendations regarding the audience have to be defined elsewhere. Additional epidemiological developments and new research results must be considered during the implementation of our recommendations.

Overview

This policy brief is based on current scientific knowledge and assessments as well as experience of musicians and expert instrumentalists. We recommend the following measures during the resumption of performances by symphony and opera orchestras for the avoidance of risks for coronavirus 2019 diseases (COVID-19).

General safeguards:

- Symptom mindfulness: Daily self-checking of clinical signs indicating COVID-19: fever, coughing, runny nose, sore throat, dyspnea, headaches and sore limbs, gastrointestinal problems, feelings of weakness and smell/taste disorders. When one or more of these symptoms develop, the musician must stay at home and contact a physician for a SARS-CoV-2 test.
- The employer offers the release from active duty for employees in the high risk group for COVID-19 infections (see the Robert Koch Institute definitions) as part of preventive occupational medicine. If desired, the musician can participate in orchestral performances.
- Compliance with hand hygiene and cough etiquette, disinfection of hands at least during the entering and exiting of the workplace.
- Physical distance of at least 1.5 m in general social interaction of employees. Oral nose protection must be worn in closed spaces outside of the concert hall; this is not necessary on the podium.
- Normal cleaning of workspaces and utility rooms inclusive of change rooms and washrooms.
- Operation of air-conditioning systems in accordance with the appropriate DIN standard, alternatively constant ventilation.

Stage plan for the orchestra and recommendations for instruments:

- Distance of string players' chairs 1.5 m.
- Distance of wind players' chairs 2 m, removal of fluids and cleaning of instruments with disposable cloths (to be discarded) or cloths (to be cleaned), brass players with supplemental plexiglas protection.
- Distance of percussionists' chairs 1.5 m, avoidance of shared use of instruments and accessories.
- Distance of harp and keyboard players' chairs 1.5 m.
- Distance of the conductor to the orchestra musicians of at least 2 m during practice and 1.5 m during the concert.

These recommendations are temporary measures in an extreme exceptional situation. It would be preferable to resume normal operation of performances as soon as possible.

Background

The spread of the SARS-CoV-2 coronavirus since December 2019, has created the exceptional situation of a worldwide pandemic. Containment measures of the infection have resulted in severe restrictions of public life and individual freedom of movement in many countries. Cultural institutions are affected particularly severely in the wake of the COVID-19 pandemic. Because of the predominantly unclear danger to musicians and audiences, performances of orchestras were completely suspended for the time being.

The Robert Koch Institute (RKI), the competent Federal authority in Germany, assesses the infection risk to be high. Interventions to prevent infections result on the basis of the Infektionsschutzgesetz [Infection Protection Law] and are regulated separately by the legislations of the regional states and implemented by local health authorities. The main objective of these measures is to recognize new infections as quickly as possible, to prevent further spread of the virus, to avoid an overload of the health care system and also progression of the disease and deaths. It may take quite some time before vaccines and antiviral medicines are developed and become available and for that reason, concepts for as normal a life as possible with adequate COVID-19 prevention must be developed.

The societal consequences in Germany since March 2020 encompass a severe restriction of spatial contact in the private and professional spheres. This includes the closure of industrial plants, stores, public facilities, schools and museums as well as the cancellation of sports events and art and cultural events, and in particular cancellation of orchestra, theater and operatic performances.

These restrictions, which have been in effect since March 2020, have achieved a sharp decline of the infections and in an international comparison have maintained the very high capacity of the German health care system. Against this background, a successive easing of the restrictions is being discussed and implemented in all sectors of the economic, cultural, social and educational systems.

Resumption of professional activities is not only relevant from an economic point of view. Professional activities are especially important from a socio-medical perspective and have a stabilizing effect on health. A number of scientific studies have shown that the lack of professional activities or unemployment – which is more or less the same for freelance musicians and performers - result in increased mental disorders respiratory distress syndromes and also chronic physical illnesses in the long term. Professional activities, and with these a stable economic situation of the individual are part of the important social determinants of health and life expectancy.

After all, art and culture are of essential significance for humans. On an individual level, art promotes health and growth and music in particular has curative effects. On a population level, art and culture have an identity-boosting impact on education and

well-being. Resumption of art and cultural events should therefore be urgently pursued with a parallel reopening of industrial plants, commercial and educational facilities.

Objectives

Based on current scientific knowledge and assessments as well as experience of musicians and instrument experts, we have developed recommendations for general hygiene and behavioral measures, for stage plans of orchestras and for instrument-specific aspects that make resumption of orchestral performances possible in Germany. These special recommendations focus in particular on musicians in woodwind and brass sections, since aerosol production and droplet formation is associated with their playing and since a potentially increased danger of infection compared to normal social contact must therefore be considered.

Reference is made to additional general positions and guidelines in the appendix.

Relevant dangers and risks

Asymptomatic and presymptomatic virus transmission

Transmission of SARS-Cov-2 from one person to another person can also happen by infected persons who display no symptoms of disease or remain asymptomatic as well as by ill persons with symptoms than can initially be very discrete (RKI). Therefore, groups of exclusively healthy appearing, able-bodied persons can have a relevant risk for transmission of the virus.

Modes of transmission

During general social interaction of persons, the main mode of transmission of the virus is droplet infection, in other words transmission due to coughing or sneezing.

Another mode of transmission that could be relevant in certain workspaces is an aerosol-producing event, as for example medical measures during care of COVID-19 patients (RKI). In accordance with the current state of knowledge, aerosol transmission does not play a significant role in normal social interactions of persons.

Mucus membranes (mouth, nose, possible also eyes and conjunctivas) are entry points for the virus, through which the viruses can enter by means of drops, aerosol or by contact with contaminated surfaces.

The general protective measures are derived from these modes of transmission (see below).

Viability of the virus on surfaces

SARS-CoV-2 is capable of surviving in aerosols as well as surfaces for some time. This so-called tenacity lasts up to 3 hours in aerosols (RKI), and depending on the material up to 72 hours on surfaces. Viruses can probably survive from 48 to 72 hours on stainless steel and plastic surfaces and on the other hand a significantly shorter time on paper and porous materials. Although these times were determined during special laboratory examinations – in other words not in everyday practice – contaminated surfaces or work materials with SARS-CoV-2 are seen as a relevant infection risk for a limited amount of time.

Specific dangers with wind instruments

Aerosols, condensed water dependent on outside temperatures and droplet formation due to saliva can form with wind instruments. These fluids can be potentially infectious if the musicians are SARS-CoV-2 positive, even if they display no symptoms. An assessment is therefore necessary to what extent there is a possible infection risk during and after play and what measures are effective and suitable to reduce this risk.

Underlying evidence

Special aspects of wind instruments

The musicians playing wind instruments sit parallel and behind each other; movements are limited and are performed exclusively in their assigned spot. The breathing frequency is dependent on the passages to be played; as a rule, they are breathing through their mouth. With a view to avoidance of the danger of infection, it should be accentuated that the musicians should not sit opposite of each other and should not speak to each other except occasionally in a rehearsal situation. In the following, the respective characteristics of the individual wind instrument are described in regard to their formation of aerosols and droplets as well as their air flows.

Flute: With the flute, the largest ratio of breath air flows to the bottom front, in other words in the main direction of the blowing flow (see below). A small ratio of the breath air escapes from the open valves. Condensation water, which drips from the end of the flute dependent on the outside temperature and which is wiped from the entire instrument after play develops with all instrument materials (gold, silver, etc.). Air flow with aerosol formation thus develops primarily in frontal direction, presumably also a little to the right side of the player. The amount of air and also the air pressure are on the average the same as with normal speech; in few exceptions, the air volume and air pressure are higher.

Oboe: With the oboe, the breath air is pressed through a very small opening (max. 0.3 mm) of the reed and flows through the instrument in direction of the floor. Because of the very small opening for the entry of air, only a very small amount of air, which is far below the amount of air during normal conversation, flows through the

instrument. Tiny amounts of air also escape through the open valves. Formation of condensation water is minor, since the instruments are constructed of wood; the condensation water subsequently drips from the instrument. The moisture is wiped from the instrument after play. After passages in which not enough air can be ejected from the instrument during play, the musician sheds the excessive air by means of blowing heavily into the instrument.

Clarinet: With the clarinet, the breath air is also pressed through a small opening between the reed and the wood of the instrument and flows through the instrument in direction of the floor. Because of the small opening for the entry of air, an amount of air that is smaller than during normal speech, but larger than with an oboe, flows through the instrument. The air also escapes in small amounts through the open valves and tone holes. The condensation water forms mainly in the metal S-bow since the instrument is made of wood. The moisture is wiped from the instrument after play.

Bassoon: With the bassoon, the breath air is pressed through a very small opening of the reed and initially flows through the metal S-bow and then through the instrument and subsequently leaves the body of the instrument upward into the room air. Because of the very small opening for the entry of air, only a very small amount of air, which is far below the amount during speaking, flows through the instrument. Small amounts of air also escape through the open valves and tone holes. Condensation water forms mainly in the metal S-bow and only minimally in the instrument itself since the instrument is made of wood. Practically no aerosol escapes into the room air from the bell section since the moisture is absorbed in the approximately 2.30 m long wooden tube system. The condensation water has to often be emptied from the S-bow several times during play. After play, the moisture is wiped from all sections of the instrument.

Saxophone: The saxophone has a relatively wide bell tube measured to a length between 0.6 and approximately 3 m. The breath air flows through a small opening between a reed and the mouth piece through the instrument and escapes through the horn, which is forward facing. The air flow matches that of the clarinet. The air also escapes in small amounts through the open valves. The condensation water that forms dependent on the surrounding temperature is drained off through a water valve.

Horn: With the horn, the breath air flows through a circularly coiled brass tube measuring approximately 3.70 m in length and leaves the instrument in lateral backward direction through the horn. Since the tones are created by lip fluctuation and consequential air fluctuation in the instrument and not due to a particular amount of air, the air used during play is very minimal. The condensation water in the brass tube that is dependent on the outside temperature is frequently emptied with several water valves. A quick emptying is required during brief pauses in play, during which the condensation water inevitably squirts through the water valves.

Trumpet: With the trumpet (also variants of flugelhorn and cornet), the breath air flows through a consistently narrow, multiple times coiled, measured brass tube (approximately 12-15 mm) and leaves the instrument through a horn in frontal blow direction. Since the tones are created by lip fluctuation and consequential air fluctuation in the instrument and not due to a particular amount of air, the air used during play is very minimal. The condensation water in the brass tube that is dependent on the outside temperature is frequently emptied with several water valves.

Trombone: With the trombone, the breath air flows through an S-shaped bent brass tube and leaves the instrument through a horn in frontal blow direction. Since the tones are created by lip fluctuation and consequential air fluctuation in the instrument and not due to a particular amount of air, the air used during play is very minimal just like with the trumpet. The condensation water in the brass tube that is dependent on the outside temperature is frequently emptied with a water valve.

Tuba: With the tuba, the breath air flows through a coiled brass tube with a length of 4 and 5 m and leaves the instrument through a horn in upward direction. Since the tones are created by lip fluctuation and consequential air fluctuation in the instrument and not due to a particular amount of air, the air used during play is minimal, but has a larger volume than with the trumpet due to the significantly larger diameter of the tube. The condensation water in the brass tube that is dependent on the outside temperature is frequently emptied with several water valves.

Specific aspects of other instruments

Strings: The musicians with string instruments are sitting parallel and behind each other, movements are limited and are exclusively performed in their places. The breathing frequency can be increased, dependent on the passages to be played; as a rule, the musicians breathe through their noses. With a view to avoidance of the danger of infection, it should be accentuated that the musicians should not sit opposite of each other and should not speak to each other except occasionally in a rehearsal situation. The danger of exposure to saliva droplets or aerosols is definitely less than in conversation during normal social contact.

Keyboards: The keyboard musicians as a rule sit by themselves and exclusively move around their midbodies at their places. The breathing frequency can depend on the passages to be played; as a rule, they breathe through their noses. The distances from other musicians is as a rule dependent on the instrument (piano, positive organ, etc.) and is at least 1.5 m.

Harp: Harpists sit by themselves and exclusively move around their midbodies at their places. In the case of several harpists, they sit next to each other with parallel viewing direction. The breathing frequency can be increased, dependent on the passages to be played; as a rule, the harpists breathe through their noses. The distances from other musicians is as a rule dependent on the instrument and is at least 1.5 m.

Percussion, timpani: Musicians with percussion instruments sit or stand by themselves and dependent on the size and structure of the instruments with a distance of more than 1.5 m from other musicians. Depending on the music, they have to move back and forth between several instruments. In case of major works with extensive use of percussion instruments, there are typically encounters in confined spaces as well as exchanges of timpani mallets and other instrument parts between musicians.

Additional information

Initial results of visualization studies of an engineering firm in collaboration with members of the Bamberg Symphony Orchestra revealed no air flow to the side with concert flutes, but only to the front and downward, in other words in the main direction of the blowing flow for approximately 1 m. Neither is there any emission to the side at the mouth piece nor at the open end of the flute tube with either high or low tones. Results are also on hand for trumpets, with no relevant air flow measured in front of the horn (directorship of the Bamberg Symphony Orchestra).

Semiquantitative visualization experiments with air flows of brass instruments were conducted by the Vienna University of Music and Performing Arts. Brass instruments are lip tone instruments, with which the sound is created by a thin airflow that is intermittently dissipated by the lips. The airflow of a trumpet was shown to be significantly smaller than with intense speech or coughing (Prof. Bertsch, Music Physiology Department, Vienna University of Music and Performing Arts).

Testing for COVID-19 infection

Regular series of tests of all asymptomatic members of an orchestra for COVID-19 infections before the start of performances is not necessary. The available laboratory tests with asymptomatic persons in regard to their sensitivity of recognizing a virus-positive person and their specificity to differentiate persons with COVID-19 from persons with other viruses on mucous membranes are not completely reliable and perfected yet, so that with the overall low frequency of the infection in the population, a number of tested persons were negative even though they were ill and a number of persons were tested positive even though they were healthy and free of viruses. The tests up to now have not been 100% reliable that the result is correct and require several follow-up examinations for reliability. A routine single test of the entire ensemble therefore makes no sense.

However, if one musician has symptoms of a disease consistent with COVID-19, he/she must be referred to a physician for a SARS-CoV-2 test. If one member of an orchestra has been tested positive for SARS-CoV-2, all persons that have been in contact with him/her have to be reported to the Health Authority. The Health Authority will then specify the rest of the procedure, such as which of the contact persons have to go into at-home quarantine and which are to be tested for SARS-CoV-2.

Recommendations

Depending on the specific work conditions (spaces, technical configurations, size of the ensemble, pieces to be rehearsed), we recommend to orchestras to conduct a risk analysis and to prepare a hygiene, behavior and process concept on the basis of the SARS-CoV-2 Employment Protection standard of the German Federal Ministry for Labor and Social Affairs (see the appendix) under consideration of the integration of the present policy brief and recommendations

General Safeguards

Symptom mindfulness: Only persons who feel healthy and capable should resume their professional activities with the orchestra. Daily self-testing in view of the following COVID-19-typical symptoms is therefore necessary before entering the work building (for example with appropriate notice): cough, fever, runny nose, sore throat, dyspnea, headaches and sore limbs, gastrointestinal problems, feelings of weakness and smell/taste disorders. When one or more of these symptoms develop, the musician must stay at home and contact a physician for a SARS-CoV-2 test.

High risk persons: Persons with an elevated risk for a severe course of a COVID-19 infection are high risk persons. As part of preventive occupational health, they are granted a release from participation in orchestral performances. In accordance with the RKI information, risk persons are severely overweight persons, older persons (70+), patients with coronary heart disease, clearly high blood pressures (at least 2 medications), chronic pulmonary disease (such as COPD, asthma), chronic liver disease, diabetes mellitus and weakened immune systems as an aftereffect of a disease or administration of medication (RKI). If the musician wants to, he/she can participate in orchestral performances.

Spatial distancing: Musicians and other employees should maintain a physical distance of at least 1.5 m from each other during general social interaction. Entry into and exit from the rehearsal and concert venues should be conducted in a stipulated order under observation of distances of 1.5 m; crowding in narrow backstage entrances must be avoided.

Hand washing: Hands should immediately be washed thoroughly with soap or with a supplied hand disinfectant (for at least 30 seconds) after entering the work place. Hands should always be immediately washed thoroughly (or disinfected) after coughing or sneezing without the use of a handkerchief or the sleeve (Bundeszentrale for gesundheitliche Aufklärung (BzgA) [Federal Center for Health Information]).

Coughing etiquette: Coughing and sneezing rules should be observed so that no saliva or nasal secretion is sprayed into the surrounding area. A disposable handkerchief should be used for coughing and sneezing and this should subsequently be disposed of. If no handkerchief is available, the crook of the arm should be used to cover the cough or sneeze (BzgA).

Oral-nose protection: Oral-nose protection should be worn in closed spaces outside of the concert hall, such as in change rooms, restrooms, hallways, etc.. Oral-nose protection is not absolutely necessary on the podium, since the musicians do not speak during the performance and since they do not move from their places (see the separate information for wind instruments and percussion).

During rehearsal, persons that are not impaired with an oral-nose protection during play of their instrument (percussion, keyboard, harp) can wear one. Protection from others can be assumed with correct use (only touch it on the fastening ends, firm fit on the sides and the nose), since droplet distribution is thus effectively inhibited. Moistened masks (after rehearsal) have to be exchanged and disposed of properly (RKI, BzgA). **Cleaning:** Surfaces in the concert hall or in the rehearsal space must be cleaned after every orchestral performance/rehearsal. Disinfecting cleaning is not necessary as a rule (RKI). Professional cleaning of instruments and if necessary disinfecting cleaning is the responsibility of the musicians.

Air-conditioning system/ventilation: Air-conditioning and ventilation of the rooms and stages can be continued as long as these comply with the applicable DIN standards. If no ventilation systems can be used, regular ventilation should be conducted.

Specific recommendations

In the music ensemble with wind instruments with aerosol production and formation of droplets, specific hygienic measures should be developed according to the following aspects:

- a) Handling of dripping condensation water or saliva in instruments. The usual procedure during performances to let fluids drip or to drain them onto the floor should absolutely be avoided since these fluids can be potentially infectious. Fluids must be collected in disposable cloths that get disposed of after the rehearsal or the concert. Cleaning of the instruments (brass and wood) after play should if possible also be performed with disposable cloths that are disposed of after use. In case special materials are required for the cleaning, these have to be washed in warm water with a temperature of at least 70°C [158°F]. Lower temperatures with disinfecting detergents are sufficient for sensitive materials. The attempt of cleaning condensation water through valves by heavy blowing during pauses in play should be avoided. After contact with the fluids during cleaning of the instrument, the hands should be washed or disinfected. Cleaning of the instruments is the responsibility of the musicians.
- b) The floor in the work area of the wind instrument group should be cleaned thoroughly after play.
- c) Musicians with wind instruments should maintain a 2 m distance from each other to avoid contamination of the neighbor's work place.
- d) Protection with a transparent material should be set up for the string players or for others sitting in front of the wind players to avoid distribution of aerosol in their direction. This should be tall enough to shield the horns of the respective instruments so that it provides protection even during movement of the instruments during play. Many orchestras already work with these types of shields usually made of plexiglas to protect the musicians from noise with a minimal impairment of sound.
- e) After a rehearsal/a concert, music stands and other work surfaces including the aforementioned protective shields in d) in the wind players region must be cleaned (also see general recommendations).

A distance of approximately 1.5 m between the chairs of string players is recommended. Viewed in perspective, a reduction of the distance to 1 m is possible according to the recommendations of the World Health Organization (WHO) in case

of a completely stable situation of if additional scientific knowledge exists.

A distance of 1.5 m between chairs should be maintained in the musician group with percussion instruments. In addition, the organization and personnel during playing should be prepared in such a way that the instruments can be played by stationary musicians as much as possible. An exchange of mallets or instrument parts should be avoided.

A distance of 1.5 m should be maintained between the chairs of the music group with harps and keyboards.

If the orchestra's instruments are used, exchange of the instruments between musicians should be avoided. If an exchange is necessary, the instrument should not be used for 72 hours to ensure that the instrument is no longer contaminated with a virus.

The conductor usually also speaks to members of the orchestra directly opposite to him/her during rehearsal; for that reason, a 2 m distance from him/her in a rehearsal situation and a 1.5 m distance in a concert situation should be maintained by the musicians.

Orchestra assistants should wear gloves since they are exposed to a higher risk of touching surfaces contaminated with viruses.

Appendix

Discussion of other general information and guidelines

Branch-specific action assistance SARS-CoV-2 Occupational Safety Standard -Recommendations for the stage and studio sector for the following area: Rehearsal operation of the Verbands der Berufsgenossenschaften [Federation of Professional Associations] VBG dated April 17, 2020: The VBG action assistance serves to enable respective branches to resume step by step activities. The occupational safety standard applies as guiding principle for the interpretation of the German Federal Occupational Health and Safety Act and should be an integral component of the employer's risk assessment. These make it possible to adapt concepts to specific fields of activity and characteristics of the sector. The aforementioned VBG action assistance offers a general framework, which allows specific adaptations. It is compatible with the specific recommendations in this policy brief. It also stipulates a distance of at least 1.5 m from other persons. A distance of 6 m is demanded for singing or excessively speaking persons, which is not transferable to the group of wind instruments of the orchestra for the aforementioned instrumentspecific reasons, since the volume of breath air of the wind instrument players is consistently significantly lower than during speech. In regard to room size, the VBG action assistance demands a floor space of at least 20 m² per person. This floor space also applies to rehearsal space and performances of theaters and other performances in which the employees must move regularly and excessively. The floor space is specified analog to the regulation in retail, where it is also assumed that the customers are moving. During orchestral activity, however, musicians do not leave their places (with the exception of percussionists, see separate recommendations for these), and in addition do not sit opposite of each other but parallel to each other, so that droplets and aerosol do not flow in the direction of the adjacent person. The floor space of 20 m^2 for individual musicians is therefore not applicable.

The VBG action assistance demands a distance of 12 m in blow direction for musicians with wind instruments, and at least 3 m in other directions. The VBG does not supply a justification for this regulation. It is notable that a distance of 12 m is recommended for some sports on the basis of experience and test results (bicycling and jogging, in other words for athletes that are constantly moving). Musician-specific characteristics, in particular the technical factors of the various wind instruments have not been taken into account here if such a regulation refers to the factors in sports. The time and again publicized statement in music physiology and musician medicine that professional playing of music is reportedly a "high-performance sport" may have contributed to the very sweeping distance regulation for the entire artistic sector. On the basis of the previously described technical and playing-specific characteristics of the various wind instruments, a distance regulation of 12 m must be rejected as unsubstantiated.

The VBG action assistance also recommends reasonable hygiene measures that are easy to implement in the field of orchestral activity. The formation of fixed teams that

cannot be mixed is already customary in orchestras in regard to the string and other instrument groups; the groups always have their own rehearsal spaces and change rooms as well as places on the stage. The recommendations for costume production, use of costumes and make-up artists does not apply to orchestras, since all musicians use their own personal clothes and since there is no exchange or adjustment.

SARS-CoV-2 Employment Protection Standard of the Bundesministerium for Arbeit und Soziales (BMAS) [German Federal Ministry of Labor and Social Affairs] dated April 16, 2020: The ordinance of the BMAS is a guideline for action that specifies a cross-sector, general occupational concept of measures. This ordinance specifies a minimum distance of 1.5 m and demands transparent dividers of the work places when there are no other protective distances. In view of the additional workplace layout, work equipment, cleaning, spatial design, ventilation as well as staff restaurant, no regulations have been specified that cannot be realized in the operation of an orchestra. The specific recommendations for the operation of an orchestra developed in this policy brief completely comply with the SARS-CoV-2 occupational safety standard.

Practical suggestions of the Arbeitsgruppe Gesundheit und Prophylaxe der Deutschen Orchestervereinigung (DOV) [Health and Prevention Working Group of the German Orchestra Association]: The recommendations contain medicalhygienic and organizational measures that substantially correspond in significant parts with the recommendations of this policy brief; this includes recommendations for oral nose protection, handling of condensation water of wind instruments, setting up of plexiglas walls, consideration of general distance regulations and cleaning information. The work group also suggests that trumpet and trombone cloth coverings are used on the horns. This measure does not seem to be necessary considering the background of the current studies with the measurement of air flows with wind instruments. The also recommended set-up of a music stand for every musician in the string section should be tried by orchestras if the 1.5 m distance between string players makes reading of the score more difficult. The DOV cites the regulation of a 12 m distance in front of the players of the wind group from the VBG action assistance, but does not adopt this as their own.