To: Mary McColl  
From: David Michaels, PhD, MPH  
Date: May 15, 2020  
Subj: Ensuring the Safety and Health of Equity Members

You requested that I assist Actors’ Equity Association in its efforts to ensure the safety and health of its members who may be involved in theatrical productions while the country is facing the COVID-19 pandemic. Following a series of useful conversations with Equity leadership and others in the theatre, I have prepared this memo, addressing the current situation and what is needed to begin the process of reopening theatrical productions.

**Four Core Principles Needed to Support Safe and Healthy Theatre Productions**

*Once these four principles are met, extensive additional work will need to be done to further minimize risk of exposure.*

The COVID-19 epidemic has had a devastating impact on the country. Tens of thousands of people have been killed by the virus, many more sickened and more than a million people infected. The theatre community has also felt the pain of the epidemic.

Actors’ Equity Association is eager to reopen theatrical productions but should only permit this to happen, consistent with its collective bargaining agreements, when the safety of members and everyone else involved in producing theatre for the public can be protected.

Producing live theatre requires close physical contact that increases risk of transmission among performers, musicians, theater staff and depending on the venue, the audiences. With rare exceptions, theatre performers cannot utilize the most effective forms of disease prevention – physical distancing and appropriate personal protective equipment (PPE) – to protect themselves from COVID-19.

The source of COVID-19 exposure is individuals infected with the virus. The objective should be that no one involved in the production (and ideally no one in the audience) is infectious. While it is difficult to ensure that no individuals who are shedding virus enter the theater, source elimination must be a primary component of any exposure prevention effort. The success of this approach will depend on development and application of new technologies, improved understanding of the disease and immunity and the state of case tracking and disease prevention in the community. All of these three are improving, but none are at the point where it could be said they are adequate.

Equity is working on a comprehensive program to ensure the safety of its members and others involved in theatre production. However, given the inevitability of members being in close proximity to each other, other workers and audience members, there are a series of considerations that need to be addressed before it will be safe to mount theatrical performances. Presented below are several general considerations that must be addressed before theatrical
productions can be launched safely. Once a specific production is being contemplated, extensive additional work will need to be done to further minimize risk of exposure. Actors’ Equity continues to work on recommendations in this area.

1. The epidemic must be under control

In order to minimize the possibility of transmission to and among members, the epidemic must be demonstrated to be under control. This means that there is extensive testing and very few if any new cases are being identified in the area, since the appearance of new cases demonstrates that transmission is still occurring. It must be recognized, however, that this state is a transient one – even when few new cases are being identified, a spike in transmission and new infections can occur at any point in time. This concern will lessen with the development and widespread dissemination of an effective vaccine, but we are far from that now.

An important step in controlling the spread of the virus is contact tracing. If and when states implement comprehensive contact tracing programs, in which individuals who have had recent close contact with new cases are identified, the risk of transmission in theatrical productions in that area will be reduced. However, the risk of exposure is likely to differ by geographic location. Some areas may have very few active cases (although we will not know this until there is widespread testing) but theatre casts and stage managers may include members who have traveled from other parts of the country where the risk of infection is higher.

Similarly, once testing for active infection is available and implemented on a widespread society-wide basis, the risk of exposure to infected individuals will be decreased.

It is not yet clear if individuals who have been infected in the past can be re-infected. Answering this question definitively will make it easier to know if individuals are at risk of re-infection. For the moment, we must assume that previous infection does not completely eliminate risk of future infection.

2. Individuals who may be infectious must be readily identified and isolated

When individuals are infected and shedding virus, they must be identified quickly (ideally before they expose others), isolated and sent to self-quarantine for a designated period of time. Source elimination, or isolating infectious individuals, requires frequent, regular testing of individuals involved in the production, using a test that has a high sensitivity (few false negatives), preferably a high specificity (few false positives) and that provides a result shortly after the test is administered. Without this, it is questionable whether any production involving extensive exposure can be considered.

The limitation of this approach is that, even with some improvement in testing, not all infected individuals test will test positive. As a result, additional steps will be necessary. Steps that will likely be considered, depending on the sensitivity of the testing protocol, are likely to include measuring temperature of all theatre staff and regular surveillance of symptoms.

However, at present, there is not easily available highly sensitive rapid testing, and many of the tests that are currently in use are not sufficiently accurate.
3. Venues and productions must be modified to minimize exposure

Even when the epidemic is under control and highly accurate rapid testing is available, the possibility of transmission cannot be ruled out. When productions are first being planned, it will be necessary to modify the process for conducting auditions, rehearsals and performances. Accommodations will need to be made to enable participants to maintain social distancing and sanitary practices. This may require moving these activities to new locations and running them differently than previously.

As discussed above, beginning with auditions and rehearsals and continuing through the entire production, it will likely be necessary to screen participants regularly and frequently for active infection and to make provisions in the event of a positive test result or a person reporting symptoms. Given the possibility that individuals will be found to be infectious and need to go into self-isolation immediately, it will be important to engage additional members who can step in to replace cast members or stage managers at very short notice.

In addition, even before planning specific productions, tour operators, producers, theater owners and theme parks should begin to explore physical modifications that will minimize the risk of exposure in the workplace and backstage areas. This may include expanding or reconfiguring dressing rooms for dressing, hair, make-up and other activities to ensure adequate physical distance, as well as alternative approaches to audience seating, entry and exits. Plans should be made to designate an area for isolation if and when a member or other employee reports symptoms.

Theater owners should also examine the ventilation systems and air flow to ensure that adequate flow of fresh air is present in all parts of the theater.

4. Efforts to control COVID-19 exposure must be collaborative

Controlling exposure to a deadly virus requires an intensely collaborative effort, in which all parties participate in developing and implementing an infection control plan specific to the production. Each participant must agree to follow the rules and work to continually evaluate and improve it. If all the participants aren’t committed to the plan’s success, it is unlikely to succeed: an infection control plan will not succeed if it is imposed by fiat.

While it is too early to develop production-specific infection control plans, now is the time to plan the process to develop those plans.

Conclusion

It is not yet possible to re-open theaters in a way that protects the safety of members, as well as production workers and audiences. As the epidemic is brought under control and scientific and technological progress is made in understanding and testing for the virus, safe re-opening of theatrical productions becomes more feasible. However, even with these developments, much work will need to be accomplished before we can consider starting to mount theatre productions in ways that ensure the safety of everyone involved.