

Date 07Sep2021	Assessor GCC Covid Subgroup	Subject : Grand Central Chorus - Risk Assessment for indoor rehearsal at Kirk Hallam Social Club
-----------------------	------------------------------------	---

- All GCC members are double vaccinated, but the vaccines are not 100% efficient and members can catch Covid-19. The viral load of vaccinated and non-vaccinated people may be similar and thus the benefit of vaccination is primarily to protect the individual from the virus rather than reducing the risk of spreading the disease.

Hazards/Risk	Level of Risk Pre-controls			Control Measures	Level of Risk Post-controls		
	Prob	Sev	Risk		Prob	Sev	Risk
Virus complacency - Members Unaware of the risk elements relating to Covid-19 transmission. Education and guidance	2	3	6	All members will be provided with a copy of the risk assessment (by email) and will sign a form to say they have read it, they are satisfied that the risks are being managed effectively and they agree to abide by the guidance provided. They will also sign to confirm they have been double vaccinated.	1	3	3
				Members will be asked when they enter the hall at the beginning of every rehearsal if they, or those they live with, have had symptoms over the proceeding 3 days or they have been in contact with anyone who has recently had the virus. They will be asked if they have completed a Lateral Flow Test within the previous 24 hours and the test result. Members will be refused entry if they do not confirm these factors.			
Contact - spreading by contact with surfaces	1	3	3	Hand sanitiser will be provided at the entrances and exits of the hall.	1	3	3
				Members will be encouraged not to shake hands or make physical contact with each other and advised that they should not be offended if anyone declines to shake their hand.			
				Members will be allocated a chair and they should be advised not to share music.			
				The hall will not be used for 6 days prior to the rehearsal and will be cleansed at the end of the rehearsal			
Airborne - spreading by droplets when indoors but not singing	2	3	6	Members should keep 2m distance wherever possible and take care to socially distance when moving within the building for sectionals, toilet breaks, filling water bottles etc	1	3	3
				The windows and doors of the hall will be kept fully open at all times when Members are in the hall.			
				Members must wear a mask when singing indoors. Wearing a mask indoors is recommended at all times but Members can remove the mask indoors for short periods when they are not singing, providing they maintain 2m social distancing.			
Airborne - spreading of virus when singing	3	3	9	GCC will provide singing masks, but members will be allowed to use their own singing masks if they prefer. These should be used at all times when singing indoors	1	3	3
Conclusion - Without mitigation there is an unacceptable risk of spreading Covid-19				Conclusion - All Members are double vaccinated so the risk of Covid-19 infection to the individual is limited to a serious injury (3). Vaccinated people can catch the virus and spread the virus so there will always be some risk. Mitigation reduces the probability of spreading Covid-19 to an acceptable level (very unlikely). Singing is the highest risk activity and GCC will provide singing masks which must be worn by all members when singing indoors. All members must read this risk assessment and agree to the rules in order to attend an indoor rehearsal. This risk assessment will be reviewed and updated as appropriate.			

Probability (P)	Severity (S)	Risk = Probability x Severity					
5 >Almost inevitable 4 Very likely 3 Likely 2 Unlikely 1 <Very unlikely	5-Multi death or very serious injury 4-Single death or very serious injury 3-Serious injury 2-RIDDOR 3 day 1-Minor/First Aid	5	10	15	20	25	High: Immediate action; further controls required
		4	8	12	16	20	
		3	6	9	12	15	Med: Justify/Review for each event day
		2	4	6	8	10	
		1	2	3	4	5	Low: No action required

Justification for the proposed Risk Assessment (In-person rehearsals for GCC at KHSC)

In the survey all GCC Members say they are double vaccinated. Two recent publications ¹ say that people who are double vaccinated have the same peak viral loading as those with no vaccine. This suggests that a fully vaccinated person can pass on the virus to a similar extent to a non-vaccinated member, and therefore a non-vaccinated person does not pose a higher risk to Members. On this basis we assume that all members are fully vaccinated and that we do not need to ask members for evidence of vaccination.

Our membership said they would attend an in-person rehearsal if we could make it safe – but fully recognising we cannot remove all risk. Our approach can be considered in 4 phases :

1. Reduce the chance of a Member with the virus coming to rehearsal
2. Reduce the chance of a Member producing aerosol droplets with the virus whilst singing
3. Reduce the chance of a Member inhaling the droplets from another Member
4. Reduce the chance of a Member becoming infected by touching a contaminated surface

1 Reduce the chance of a Member with the virus coming to rehearsal

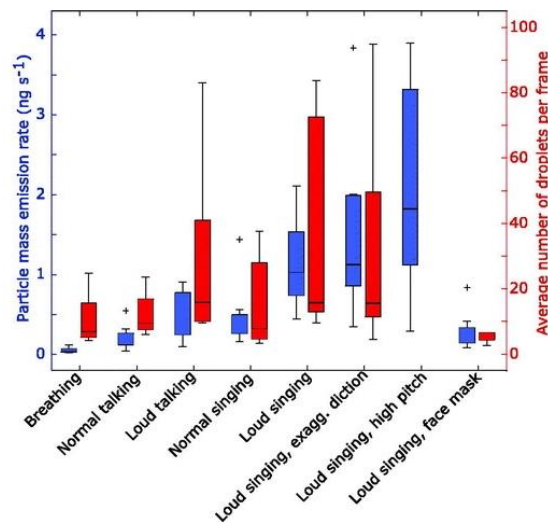
We will ask all members to confirm no-one in their bubble has had any symptoms in the past 48 hours and they are not aware of any recent contact having the virus. In addition, we will ask all Members to take a Linear Flow Test in the proceeding 24 hours. The test is quite effective in experienced hands but can produce 50% false negatives ² with inexperienced users. This means the test has a 50% probability of identifying a Member with Covid and thus reduces the risk of a Member with Covid attending a rehearsal by x2.

This will reduce the risk of covid transmission by a factor of >x2.

Since there are many people who are asymptomatic and it is a minor factor in the Risk Assessment, it is proposed that the result can be taken on trust and no evidence of the negative result will be required.

2 Reduce the chance of a Member producing aerosol droplets with the virus whilst singing

A recent article³ shows that a simple mask reduces the mass of emitted droplets during loud singing to a level equivalent to talking (with no mask), which is >5x reduction in mass of droplets. The number of droplets is decreased to an even greater extent :



Members wearing a mask will reduce the risk of covid transmission by a factor of >x5

3 Reduce the chance of a Member inhaling the droplets from another Member

The singing stack will mean that members are well spread out in the KHSC hall. Whilst it may be impossible to keep a full 2m apart from every singer it will be possible to limit the number of Members who are within 2m and this will help reduce the potential spread of the virus. There may only be one or two other Members within the 2m distance. At 2m distance the large droplets emitted during singing will fall to the floor and not be a risk to other Members. Smaller droplets will be more readily caught up in the airstream and will be removed from the hall with good ventilation. The amount of airflow in the room will be very dependent upon weather conditions, but having all doors and windows open will reduce the risk of spread of infection by a large accumulation of smaller droplets. The risk to a Member will depend upon their position in the hall.

In addition, wearing a mask is likely to reduce the probability of Members inhaling droplets from another Member.

The combination of social distancing, good ventilation and wearing a mask will reduce the chance of Members getting a viral loading sufficient to contract the disease. It is difficult to estimate the level but the accumulative effect will probably **reduce the risk of covid transmission by a factor of >x5**.

4 Reduce the chance of a Member becoming infected by touching a contaminated surface

A cleaning regime will be introduced for the facilities and hand sanitiser will be provided at all entrances and exits. No sharing of music. Physical contact between members should be discouraged. There is a low probability of contracting the disease by contact.

Conclusions :

The mitigations proposed could reasonably reduce the risk of infection by >x50 and this can be considered adequate for a 2 hour rehearsal for 45 Members. All members should be made fully aware of the risk assessment and this document, which helps to justify the proposed approach.

There should be no pressure on individuals to attend and all Members attending the rehearsal must agree to abide by the guidance set out in the risk assessment.

The GCC Covid SubGroup will keep monitoring guidance, the level of Covid-19 in the East Midlands, the effectiveness of vaccines to protect against Covid variants and will revise this advice and the risk assessment accordingly.

On behalf of the GCC Covid SubGroup - Mark Soave, Stuart Webb, Andrew Motson, Bryan Smith and Chris Blatchford.
07Sep2021

Publications :

1. Publications concerning viral loading

- [Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021 | MMWR \(cdc.gov\)](#)
- [Vaccines still effective against Delta variant of concern, says Oxford-led study of the COVID-19 Infections Survey | University of Oxford](#)

2. Publication summarising LFT false negative results

- [What is a lateral flow Covid test and how accurate is it? | Coronavirus | The Guardian](#)

3. Publication showing the effectiveness of face masks when singing

[Full article: Exhaled respiratory particles during singing and talking \(tandfonline.com\)](#)