

WHO Mass Gathering COVID-19 Risk Assessment Tool – Generic Events

Instructions for authorities and event organizers planning mass gatherings during the COVID-19 pandemic
Version 2 – 10 July 2020

The content of this Risk Assessment tool has been updated to reflect new WHO guidance and new evidence on both COVID-19 and mass gatherings, as well as feedback from end-users. Additional improvements have been made to the way the information is organized and presented: the Decision Tree is now built into the tool and a new tab dedicated to Risk Communication has been added. The expanded tool now includes six tabs: 1. Instructions; 2. Decision Tree; 3. Risk Evaluation; 4. Risk Mitigation; 5. Decision Matrix; 6. Risk Communication.

Version 1 was published on 20 March 2020 under the title "Mass Gathering risk assessment COVID-19: key considerations".

Routine planning for mass gatherings includes conducting risk assessments to determine the overall risk of disease spread connected to a mass gathering. In view of the current outbreak of COVID-

There are three pillars to the WHO Mass Gathering Risk Assessment Tool:

1. Risk Evaluation
2. Risk Mitigation
3. Risk Communication

This tool must be completed in this Excel spreadsheet (see following tabs), as the scores are automatically calculated there. The tabs contain a decision tree providing an overview of the entire process, the risk evaluation, and the risk mitigation for event organizers to complete. Instructions for use of the individual components are provided in the respective tabs. After the risk evaluation and risk mitigation have been completed, the scores you receive in the Excel spreadsheet for both sections will need to be entered into the decision tree accessible through the second tab ("2. Decision Tree") or the decision matrix found via the fifth tab ("5. Decision Matrix") for the overall risk score to be determined. The final tab ("6. Risk Communication") details the importance of clearly communicating your plans and findings with your staff, participants and general public and provides considerations for the event's risk communication strategy.

This risk assessment should be used in conjunction with the Key planning recommendations for mass gatherings in the context of the current COVID-19 outbreak (Interim guidance) found on the WHO website (<https://www.who.int/publications/i/item/key-planning-recommendations-for-mass-gatherings-in-the-context-of-the-current-covid-19-outbreak>) and in the WHO COVID-19 app for smartphones, WHO Academy.

To accurately provide answers to the following risk evaluation and risk mitigation questions, organizers must be knowledgeable about the current COVID-19 outbreak. The organizers should reference the daily global COVID-19 situation reports provided by WHO as well as national COVID-19 situation reports, if available.

Risk assessments must be conducted with input from local public health authorities. Personnel with expertise in mass gatherings, risk assessment, epidemiology, infectious disease control measures and risk communication must be engaged from the initial stages of planning.

For the overall risk to be determined, factors under consideration include:

- the current stage of the COVID-19 outbreak and known transmiss
- the geographical distribution and number of participants, and their individual risk profile dynamics
- the risk assessment tool
- the mitigation measures that are currently in place or feasible

It should also be noted that risk assessment is a cyclical process, as demonstrated in the figure below. Recording and reporting on the findings of the risk assessment; communicating key messages to the public, participants and event staff; and monitoring and reviewing the risk assessment must continuously occur throughout the planning stages of a mass gathering. As the figure displays, this tool should be continuously updated to account for changing information.



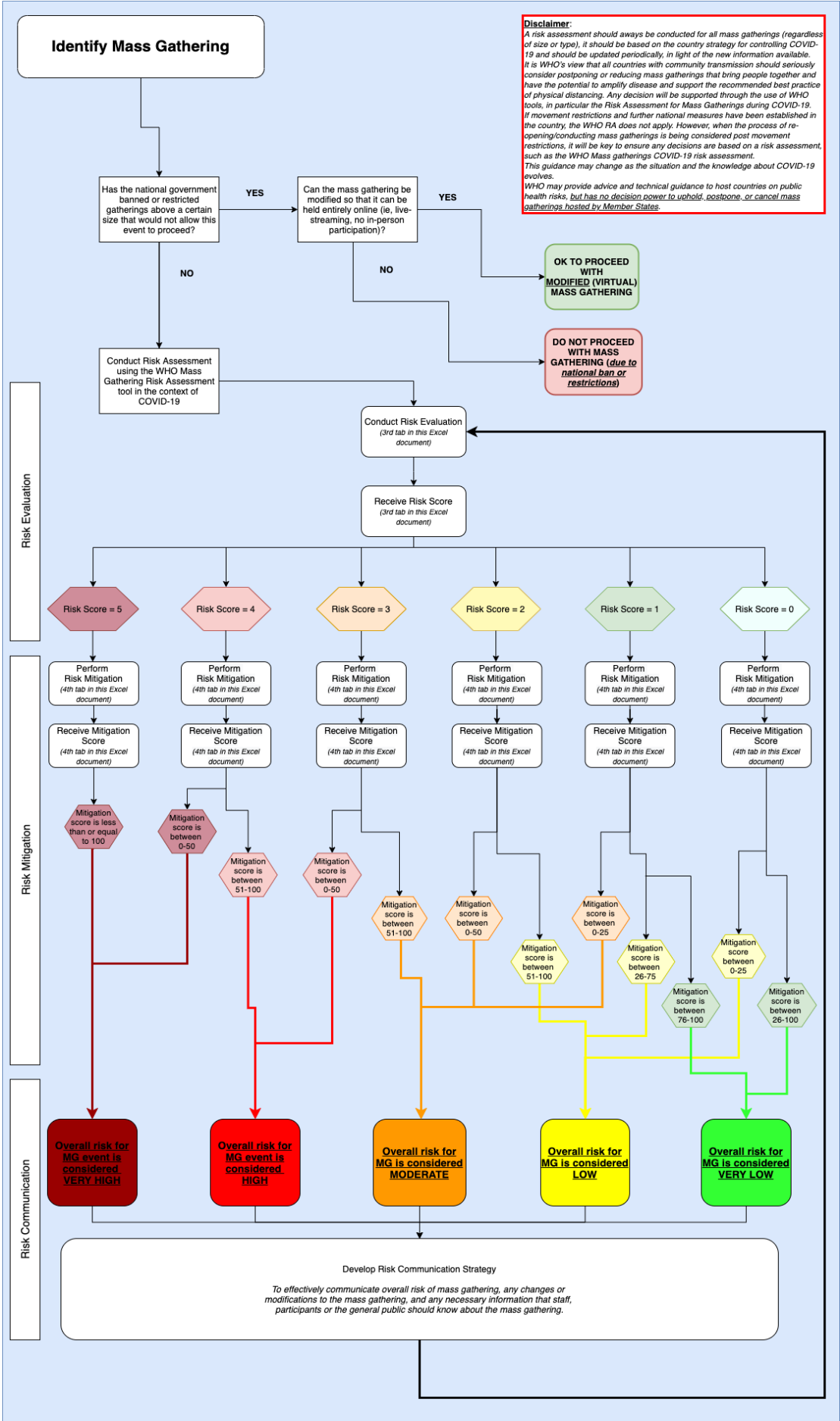
It is important to remember that while mitigation measures can reduce the risk of COVID-19 infections, they cannot completely eliminate the threat. It is WHO's view that all countries with community transmission should seriously consider postponing or reducing mass gatherings that bring people together and have the potential to amplify disease and support physical distancing. Any decisions can be supported through the use of WHO tools, in particular the Risk Assessment for Mass Gatherings during COVID-19.

If movement restrictions and further national measures have been established in a country, the WHO risk assessment tool does not apply. However, when the process of re-opening/conducting mass gatherings is being considered after movement restrictions have been lifted, it will be critical to ensure any decisions are based on a risk assessment, such as the WHO Mass gatherings COVID-19 risk assessment tool.

Mass gathering decision tree for COVID-19 risk assessment tools

The decision tree provides an overview of the process for determining the risk of COVID-19 spread should a mass gathering be held. Event organizers can walk through this process to complete this risk assessment by conducting the risk evaluation and risk mitigation to receive their overall score. Then event organizers must employ effective risk communication to ensure their plans for the mass gathering are distributed to their staff, participants and the general public. The material available through tab 3 will allow you to perform a risk assessment; and through tab 4 you can assess what mitigation strategies are needed

Once the risk evaluation and risk mitigation are completed, and the risk score and mitigation score are calculated, this decision tree shows how the two scores combine to provide an overall risk score of COVID-19 on the mass gathering. An overall risk score can be defined as very low, low, moderate, high or very high.



Mass gathering risk evaluation for COVID-19

The questions below will enable event organizers to review the considerations specific to COVID-19 for their mass gatherings planning, which will inform their risk assessment. This will help organizers understand and manage the risk COVID-19 presents to their mass gathering.

The risk assessment should be reviewed and reassessed regularly during the planning phase of a gathering and updated immediately before transitioning to the operational phase, in light of the rapidly evolving nature of the outbreak. Reference should be made to the latest technical guidance and situation reports on the WHO website.

The risk assessment for COVID-19 associated with mass gatherings must be coordinated and integrated with the host country's national risk assessment for COVID-19. The person completing the risk evaluation should incorporate input from the local public health authorities, consult WHO's latest technical guidance and ensure that there is an up-to-date evaluation of the epidemiological situation.

The person conducting this risk evaluation should answer 'yes' or 'no' to each question below to receive a total risk score before proceeding to the next step of completing the risk mitigation.

Risk Evaluation

Please answer yes or no to the following questions:		
Risk of COVID-19 to the mass gathering		Yes No
Original Risk of Mass Gathering	Will the event take place in a host country experiencing community transmission (larger outbreaks of local transmission), as defined by WHO?	
	Will the event include international participation from countries experiencing community transmission, therefore increasing risk of importation of COVID-19 cases to the host country?	
	Will the event include a significant number of participants at higher risk of severe disease (e.g. people > 60 years of age or people with underlying health conditions)?	
	Will the event be primarily indoors or will people be in close contact (less than 1m distance) with one another for a prolonged period (more than 15 minutes)?	
	Is there a culture of risk taking behaviour (e.g. excessive drinking, illegal substance use, sexual activity etc.) that may be connected to the mass gathering or are there legitimate concerns of noncompliance with health and safety precautions?	
Modifications of the Event	Can the mass gathering be modified so it can be held virtually?	
	Can the mass gathering be modified so that there will be no international participation to reduce the risk of international spread?	
	Can the mass gathering be modified so those at high risk (e.g. people > 60 years of age or people with underlying health conditions) will no longer attend?	
	Can the mass gathering be modified so that the event will be held outdoors and with limited close contact between people?	
	Can there be enhanced monitoring and incident reporting during the mass gathering to reduce risk taking behaviours or noncompliance (such as smartphone apps for participants to report potential incidents)?	
Total COVID-19 Risk Evaluation Score		0

Mass gathering risk mitigation for COVID-19

Mitigation measures (also referred to as control measures) assess the current effort and planning to reduce the risk of spread of COVID-19 disease for an event. As mitigation measures can reduce the overall risk of the mass gathering contributing to the spread of COVID-19, they should be taken into account after the risk evaluation has occurred to gain a clearer understanding of the overall risk of transmission and further spread of COVID-19 in the event of the mass gathering. Together with the risk evaluation score, the mitigation measures will contribute to the decision matrix and influence the assessment of the overall risk of transmission and further spread of COVID-19 associated with the mass gathering.

The questions below will enable event organizers to review the mitigations specific to COVID-19 for their mass gatherings planning. The risk mitigation questions should be reviewed and reassessed regularly during the planning phase and updated immediately before transitioning to the operational phase to account for additional changes or modifications made during the mass gathering planning phase.

The person conducting the risk mitigation should incorporate input from the local public health authorities, consult WHO's latest technical guidance and ensure that there is an up-to-date evaluation of the epidemiological situation.

The person conducting this risk mitigation should answer 'yes/complete'; 'maybe/in progress'; 'no/not considered'; or 'not applicable' to each question below to receive a total mitigation score as a percentage before proceeding to the final step of determining the overall score.

Risk Mitigation

Topic	Key considerations	Yes/Completed Maybe/In Progress No/Not Considered Not Applicable	Comments
<p>Understanding COVID-19, the country situation, and the mass gathering</p>	<p>Have the relevant organizers and responsible staff been informed about the latest available guidance on the COVID-19 outbreak: official web resources available from WHO, United States Centers for Disease Control and Prevention (CDC), European Centres for Disease Control and Prevention (ECDC), United Nations (UN), local public health authorities)? And are the relevant organizers and responsible staff committed to following the available guidance documents?</p>		<p>All WHO technical guidance related to COVID-19, by topic and by publication date, is available here: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance</p>
	<p>Are organizers aware of global and local daily situation reports as provided by WHO or local public health authorities?</p>		<p>For more information please see: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/</p>
	<p>Do organizers and responsible staff understand COVID-19 risks and transmission routes, the steps that event attendees can take to limit spread, the recognized best practices (including respiratory etiquette, hand hygiene etc), and the travel restrictions adopted by different countries that may affect the mass gathering?</p>		<p>For more information please see: https://www.who.int/publications/i/item/key-planning-recommendations-for-mass-gatherings-in-the-context-of-the-current-covid-19-outbreak and: https://www.who.int/publications/i/item/controlling-the-spread-of-covid-19-at-ground-crossings and: https://www.who.int/news-room/articles-detail/updated-who-recommendations-for-international-traffic-in-relation-to-covid-19</p>
	<p>Is there a Medical Response Plan that includes COVID-19 considerations developed for this mass gathering?</p>		
	<p>Does the Medical Response Plan developed for the mass gathering include information about how attendees should interface with the healthcare system (e.g., hotline/helpline number, organizer's medical teams, local healthcare system)?</p>		
	<p>Is there an Emergency COVID-19 Outbreak Response Coordinator/Team in the mass gathering organizational structure with defined roles and responsibilities, coordinating health preparedness and response planning for the outbreak?</p>		
	<p>Has the host country or organizer requested support from WHO and/or local public health authorities?</p>		

Event emergency preparedness and response plans

Have the mass gathering organizers acquired PPE (masks, gloves, gowns,) for on-site medical personnel to help reduce transmission?		For more information please see: https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak
Have the organizers acquired masks for event participants to help reduce transmission?		
Have the organizers acquired hand sanitizer and tissues, with plans to frequently replace soap canisters in washrooms to help reduce transmission?		
Have the organizers acquired bins for the safe disposal of hygienic materials (e.g. tissues, towels, sanitary products) in washrooms and changing rooms to help reduce transmission?		
Have the organizers acquired hand sanitizers and rubs for all entrances and throughout the venue to help reduce transmission?		For more information please see: https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19
If a person falls ill/ shows symptoms of an acute respiratory infection during the event, is there a procedure for meeting participants to clearly identify whom to contact and how to do so if they or other event participants are unwell?		
If a person is to fall ill/ show symptoms of an acute respiratory infection during the event, is there a protocol on whom meeting organizers should contact in the host country to report suspected cases and request epidemiological investigations?		
If a person is to falls ill/ shows symptoms of an acute respiratory infection during the event, are first aid services or other medical services in-place and equipped to support patients with respiratory symptoms?		
If a person is to fall ill/ show symptoms of an acute respiratory infection during the event, are there isolation rooms or mobile isolation units available on-site?		
are there any designated medical facilities that manage patients with COVID-19 infection in host-country?		
If a person is to fall ill/ show symptoms of an acute respiratory infection during the event, are there transportation services with trained professionals available to transport critically ill patients with severe acute respiratory infections to a hospital or out of the host country, if		
Has a cleaning schedule been developed to ensure the venue is clean and hygienic? Wiping surfaces with disinfectant is recommended (before, during, and after the event).		For more information please see: https://www.who.int/publications/i/item/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance
Are seating arrangements assigned to ensure the crowd will remain stationary for most of the duration of the mass gathering?		
Do seating arrangements ensure physical distancing can be maintained? (If there are no seating arrangements, answer "not applicable".)		
Are there established screening measures , including temperature checks, for participants at points of entry, venues, routes and on-site medical facilities (first aid points)? (Please specify in Comments what these screening measures include)		
Are there measures in place to ensure participants do not crowd at potential 'choke' points (such as gates, entrances, food services, restrooms)?		
Is the host country conducting COVID-19 laboratory diagnostic tests on all suspected cases of COVID-19 in the local population ? (If yes, please specify in comments the type of COVID-19 diagnostic the country uses.)		For more information please see: https://www.who.int/news-room/commentaries/detail/immunity-passports-in-the-context-of-covid-19
Is the host country planning to conduct COVID-19 laboratory diagnostic tests on all participants attending the mass gathering ? (If yes, please specify in comments the type of COVID-19 diagnostic the country uses.)		
Is transportation provided for the mass gathering (such as private cars, buses with limited travellers, etc.) to enable participants to avoid public transportation?		
Does the host country have a national public health emergency preparedness and response plan that can address severe respiratory diseases including COVID-19?		
Is there a preliminary agreement by the host country to provide care for any COVID-19 cases connected with the mass gathering?		
Is it possible to shorten the duration of the mass gathering to limit contact among participants and limit the duration of exposure?		
If the event is for a duration of 14 days or longer, does the Medical Response Plan include resources and protocols for managing all public health interventions that would be necessary and supporting the national public health authorities if participants are infected and become sick at the event? (If the event is less than 14 days, please answer "not applicable".)		

	If the event is for a duration of less than 14 days, does the Medical Response Plan for this mass gathering include protocols for organizers to notify all participants of possible exposure to COVID-19 if the organizers are made aware of any suspected or confirmed cases that attended event? (If the event is 14 days or longer, please answer "not applicable".)		
<i>Stakeholder and partner coordination</i>	Is there an established collaboration and coordination between health and security sectors , which is considered as crucial?		For more information please see: https://www.who.int/publications/i/item/considerations-for-mass-gatherings-in-the-context-of-covid-19-annex-considerations-in-adjusting-public-health-and-social-measures-in-the-context-of-covid-19
	Are there agreed, clear and easily understood processes in place for reporting to external multi-sectoral stakeholders (including surveillance authorities, WHO, CDC, ECDC, etc.) and disseminating risk communication messages?		
<i>Command and control</i>	Is there a decision-making authority/body and an agreed procedure to modify, restrict, postpone or cancel the mass gathering event related to a COVID-19 outbreak?		For more information please see: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-on-mass-gatherings-and-covid-19
	Are there arrangements to activate a strategic health operations centre if there are suspected COVID-19 cases in connection with the mass gathering? Have organizers and staff undergone training and exercises on personal safety procedures and emergency mitigation measures (including those specifically listed in this questionnaire)?		
<i>Communicating with Staff, Participants, Media, and Stakeholders</i>	Is there a risk communication strategy for the mass gathering in regard to COVID-19 that ensures culturally appropriate language and specific messaging for the targeted audiences?		For more information please see: https://www.who.int/publications/i/item/risk-communication-and-community-engagement-(rccce)-action-plan-guidance
	Does the risk communication strategy include plans for dissemination and delivery of the targeted messaging (this may include visual reminders on basic preventative measures, actions and steps to take if people develop COVID-19 symptoms and instructions for the correct use of face masks or other personal protective equipment)?		
	Is there a designated person or persons to lead media activities and tasked with managing all external communications with national and international government officials, the general public, and the media? (If yes, please identify the spokesperson in comments)		
	Has there been monitoring of national and international media and social media established for rumours to be able to counter them early? (Please explain in the Comments what protocols are in place for counter messaging)		
	Has coordination been set up with major official domestic and international media channels and social media sites such as Twitter, Facebook and Instagram so that messaging can be coordinated with, and assisted by, the platforms to provide targeted messaging from organizers (including messaging to counter fake news and rumours, and proactive messaging about the status of the mass gathering, including changes)?		
<i>Public health awareness of COVID-19 before and during the event</i>	Has public health advice on clinical features of COVID-19, preventive measures, especially respiratory etiquette, hand hygiene practices, and physical distancing been shared to all participants, staff, and personnel of all relevant stakeholders?		
	Has information on the at-risk populations been provided to all participants so that they may make an informed decision on their attendance based on their personal risk?		For more information please see: https://www.who.int/publications/m/item/covid-19-and-nccs
	Has public health advice included the information on the meaning of the following measures: quarantine, self-isolation and self-monitoring ?		For more information please see: https://www.who.int/publications/i/item/overview-of-public-health-and-social-measures-in-the-context-of-covid-19
	Have event organizers collected any available information about the participants for the mass gathering (including the countries they are coming from, the epidemiological context of those countries, health data if available, etc.) to gain a better understanding of the potential risks of disease spread and facilitate measures such as contact tracing?		
	If necessary, have event organizers liaised with national and international authorities and relevant parties to inform them about the demographics of the mass gathering and any potential risks identified to the host country and other countries?		
	Have participants provided information to allow for direct follow up (contact tracing) with individuals and national governments on potential exposure if there is a suspected or confirmed case of COVID-19 linked to the mass gathering?		For more information please see: https://www.who.int/publications/i/item/contact-tracing-in-the-context-of-covid-19
	Are there any surge arrangements in place in the event of a public health emergency during the mass gathering (i.e. suspected and confirmed cases of COVID-19) that include funding for mitigation measures ?		

<i>Surge Capacity</i>	Are there any surge arrangements in place in the event of a public health emergency during the mass gathering - (i.e. suspected and confirmed cases of COVID-19) that include stockpiles of equipment (e.g. PPE)?		
	Are there any surge arrangements in place in the event of a public health emergency during the mass gathering - (i.e. suspected and confirmed cases of COVID-19) that include training of extra staff?		https://www.who.int/publications/i/item/considerations-for-public-health-and-social-measures-in-the-workplace-in-the-context-of-covid-19
	Are there any surge arrangements in place in the event of a public health emergency during the mass gathering - (i.e. suspected and confirmed cases of COVID-19) that include volunteers?		

Total Mitigation Score (%)	0
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Mass gathering decision matrix for COVID-19

After receiving the risk score and mitigation score from the corresponding risk evaluation and risk mitigation, the overall risk of COVID-19 for the mass gathering can be calculated. This can be done either through the decision tree provided on the 2nd tab or through the decision matrix below. The overall risk ranges from very low to very high. A key defining the colour coding of the matrix is also provided on this tab.

Users must find their total risk score (from the risk evaluation) on the right-hand side of the decision matrix and the range of values that corresponds to their mitigation percentage score. By connecting the two scores, the user will be able to identify the overall risk of COVID-19 spread should the mass gathering occur with the current modifications and other planning considerations in place.

Total Risk Assessment Score from COVID-19 Risk Evaluation Tab	0
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Total Mitigation Score from COVID-19 Mitigation Tab (%)	0
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Risk Versus Mitigation Decision Matrix				
Total Risk Score	Total Mitigation Score (%)			
	76-100	51-75	26-50	0-25
0	VERY LOW	VERY LOW	VERY LOW	LOW
1	VERY LOW	LOW	LOW	MODERATE
2	LOW	LOW	MODERATE	MODERATE
3	MODERATE	MODERATE	HIGH	HIGH
4	HIGH	HIGH	VERY HIGH	VERY HIGH
5	VERY HIGH	VERY HIGH	VERY HIGH	VERY HIGH

KEY	
VERY LOW	Overall risk of transmission and further spread of COVID-19 is considered <u>VERY LOW</u>
LOW	Overall risk of transmission and further spread of COVID-19 is considered <u>LOW</u>
MODERATE	Overall risk of transmission and further spread of COVID-19 is considered <u>MODERATE</u>
HIGH	Overall risk of transmission and further spread of COVID-19 is considered <u>HIGH</u>
VERY HIGH	Overall risk of transmission and further spread of COVID-19 is considered <u>VERY HIGH</u>

Mass gathering risk communication for COVID-19

WHO recognized early in the COVID-19 pandemic that a corresponding “infodemic” was occurring around the world. The COVID-19 infodemic has been characterized by the surge of information, some true but some false, circulating across communication channels, inundating people with messages and complicating health communication efforts.

Given the communication landscape and the widespread impact of the COVID-19 pandemic globally, most individuals in a mass gathering will have some preconceived notions about the COVID-19 pandemic. These perceptions will be informed by an individual’s personal experience with COVID-19, the current state of their nation’s response, and many other personal and societal viewpoints.

Clear risk communication is essential in helping people accept changes and modifications to how an event is carried out, compared to the way it would have been during pre-COVID times. This is especially important when personal behaviour change is part of the required mass gathering modification.

A robust risk communication strategy for a mass gathering event should be built on two foundational understandings:

1. The rationale behind the mass gathering modifications/changes
2. The communication needs of those at the gathering.

The Mass Gathering Risk Assessment Tool helps to identify pathways for safer mass gathering practices, but the rationale behind these decisions must be effectively communicated to support successful implementation. The assessment tool can also be a valuable resource for message construction, since the process of decision-making is made more transparent, helping to increase buy-in from the mass gathering participants.

The epidemiological situation around COVID-19 is dynamic, and changes may occur that could change a mass gathering’s risk situation. Organizers should therefore acknowledge this uncertainty upfront, be prepared to explain the impact on their decision-making process and point out that further changes may be needed.

Building a flexible risk communication strategy, acknowledging uncertainty, and sharing transparency around the decision-making process are essential components of effective risk communication. A risk communications strategy should start with an assessment of needs and identifying the proper channels for communication (through partners and community engagement). It should also identify influencers who can bring credibility and help spread the information, how best to get the information to target audiences and tools for monitoring and managing rumours and misinformation; and plan for an evaluation to assess effectiveness and inform future work.

The “Risk Mitigation” section of the Risk Assessment Tool has taken a number of these strategy elements and translated them into actionable steps designed to guide your modification efforts. You can use these questions, as well as others brought up in this section, to jumpstart a risk communication strategy.

If your organization is looking for assistance, national health offices may be able to provide services to inform risk communication strategies. Additionally, there are a number of free resources that can inform these efforts, including the WHO publications listed below.

WHO Resource Links:

- Risk Communication Essentials - Training (<https://openwho.org/courses/risk-communication>)
- Communication Risk in Public Health Emergencies Guideline (<https://www.who.int/publications/i/item/communicating-risk-in-public-health-emergencies>)
- Risk Communication: Frequently Asked Questions (<https://www.who.int/news-room/q-a-detail/risk-communication-frequently-asked-questions>)

WHO COVID-19 Specific Resource Links:

- Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/risk-communication-and-community-engagement>)
- Risk Communication and Community Engagement (RCCE) Readiness and Response to the 2019 Novel Coronavirus (2019-nCoV) (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/risk-communication-and-community-engagement>)