1. Introduction

Gatherings are events characterized by the concentration of people at a specific location for a specific purpose over a set period of time (1). Gatherings may be public or private, planned or spontaneous, recurrent or one-off, and of varying size and duration. They can also be of different nature, including, although not limited to, social, sports, religious, cultural, entertainment, political, business and health-campaign events (1).

Gatherings involving large numbers of attendees are usually referred to as “mass gatherings”. Mass gatherings also include high-visibility events such as the Olympics, Hajj and World Expo; they are often associated with international travel, multiple venues, prolonged duration and extensive media coverage, as well as significant reputational, political, social and economic implications (1).

2. Aim and purpose

The aim of this policy brief is to present WHO’s position on, and guidance in relation to, holding gatherings during the COVID-19 pandemic. It is intended for policy-makers; the information is derived from WHO publications and on a review of evidence extracted from the scientific literature.

3. Gatherings and associated risks in the context of COVID-19

3.1. Risk of amplification of transmission of SARS-CoV-2

During the COVID-19 pandemic, gatherings of any size can be associated with risk of amplification of transmission of SARS-CoV-2 (2). This happens because the likely high density and mobility of attendees (crowding) provides a conducive environment for close (within 1 metre or 3.3 feet), prolonged and frequent interactions between people.

A systematic review of scientific articles published up to June 2021 has indicated that the most important factors associated with risk of SARS-CoV-2 transmission in conjunction with gatherings are:

- duration: risk grows with the duration of the event, or with the duration of stay of attendees at the event, especially in the case of multiple days;
- location: risk is higher in indoor venues than in outdoor venues; and
- compliance with precautionary measures: risk is higher when measures are not applied, weakly implemented or not followed by attendees.

The risk of transmission of SARS-CoV-2 was not found to directly correlate with the size of the gathering. Available evidence therefore highlights the importance for organizers and attendees to exert caution at any gatherings, regardless of their nature or size. This also applies to smaller events such as private or family parties, weddings, funerals and grassroots sports matches.

3.2. Risk of disruption to health services

In addition to risk of amplification of transmission of SARS-CoV-2, larger events such as mass gatherings can also strain the planning and response resources of the host country or community, and be associated with disruptive impacts on health services (1,2). This is because when transmission amplifies among large numbers of individuals, it can generate a significant number of cases and rapidly overwhelm the capacities of health systems. Although there is no defined threshold in terms of numbers of attendees to qualify a mass gathering, the risk of potential disruption grows with that number.

4. Holding gatherings during the COVID-19 pandemic

Many countries are currently implementing restrictions on gatherings of different size, as part of their response to COVID-19. As a first step, decisions on holding a gathering during the current pandemic should therefore consider whether the public health and social measures (PHSMs) applied in the hosting area allow for the event under consideration to occur (3,4).

Even where they are allowed to proceed, gatherings should not take place unless the basic precautionary measures to prevent and control infection are strictly applied and adhered to by all attendees.

WHO recommends that the following measures should be applied by everyone, irrespective of their COVID-19 vaccination status, and at all times:

1. practice physical distancing by strictly maintaining a distance of at least 1 metre (3.3 feet) between people at all times;
2. cover both mouth and nose with your bent elbow or a tissue when coughing or sneezing; avoid touching your eyes, nose and mouth;
3. wash hands regularly and thoroughly with soap and water, or clean them with an alcohol-based hand sanitizer (at least 80% ethanol or 75% isopropyl alcohol) (5);
4. stay outdoors and minimize indoor meetings; when indoors, avoid crowded or poorly ventilated areas (6);
5. follow advice on use of masks issued by relevant health authorities (7).

Attendees should therefore always be reminded to apply individual-level responsibility to their decisions and actions, with the aim of preserving their health, that of the people they interact with, and ultimately that of their community. This is especially important for spontaneous or unplanned gatherings, during which it is imperative that everyone is aware of the risk and exerts a strong sense of civism.
5. The risk-based approach

5.1. Principles

WHO recommends that the decision-making process related to holding, modifying, postponing or cancelling gatherings of any size in the context of the COVID-19 pandemic should rely on a risk-based approach. Such risk assessment exercises should be tailored to the characteristics of the event under consideration and be repeated at regular intervals, throughout the planning period as well as during the gathering, stopping only after the event has ended and local systems have returned to normal. This will enable a factual and dynamic appraisal of the overall risk associated with the event and its implications, and a timely adaptation of the response (2).

The risk-based approach entails three steps (2):

1. **risk evaluation**: identification and quantification of the baseline risk of transmission of SARS-CoV-2 and strain on the health system’s capacity associated with the gathering before applying precautionary measures, based on the characteristics of the event and the context in which it takes place;

2. **risk mitigation**: application of a series of precautionary measures aimed at decreasing the baseline risk, through adaptation of the event (venues, use of personal protective equipment, requirements for attendees, etc.) or through strengthening the preparedness and response of the health system;

3. **risk communication**: proactive dissemination of information on the measures adopted, their rationale and purpose, and on how the relevant decisions were taken.

The risk-based approach is flexible and adaptable to all SARS-CoV-2 transmission scenarios (3,4) and to gatherings of any type or size, from high-visibility events to smaller ones, formal or informal, planned or spontaneous. No matter how low the associated risk is, the recommendation is always to consider implementation of precautionary measures, to further decrease residual risk and to develop an adequate communication strategy.

Nevertheless, it is important to state that none of the precautionary measures, when implemented on their own, can guarantee protection from COVID-19. Rather, precautionary measures act in concert and should be applied simultaneously as a package of interventions. Their implementation in coordination with broader PHSMs such as strategic testing, isolation of cases, tracing and quarantine of contacts, and vaccination is critical to reduce transmission of SARS-CoV-2 (4).

5.2. Decision-making process

Decisions related to the organization of the planned event should be based on a set of considerations including the current SARS-CoV-2 transmission scenario globally, regionally and locally; volume of international travel expected at the event; community adherence to PHSMs implemented in the hosting country or area; specificities of the gathering, including side-events and transportation to and from the venues; and the capacities of public health systems and event organizers to implement, enforce and communicate precautionary measures applied to the gathering, and to respond appropriately to COVID-19 outbreaks or clusters (2,8,9).

For larger public gatherings, WHO recommends that decisions should be taken by the relevant authorities in consultation with the event organizers. The process should be inclusive, transparent and open to all relevant stakeholders (2). For smaller, private events, the decision is likely to be made by the organizers alone, within the framework of the PHSMs applied in the hosting area.

5.3. Key messages

The principles of the risk-based approach are valid throughout the entire spectrum of gatherings. In fact, their applicability is universal, and WHO advises that everyone should become the manager of their own health risk in everyday life, and adapt their behaviour based on the evolving circumstances.

Importantly, we should be reminded that gatherings should never be left unmanaged or poorly managed, regardless of their size, type and level of associated risk, and that even when precautionary measures are properly applied, zero risk does not exist. Postponing or cancelling events of any size should always be an option to consider, as the health and well-being of individuals and communities should always be the utmost priority.

6. The role of WHO

As part of its critical technical and leadership role on international health, WHO develops and updates guidance and tools on gatherings, with the aim of making them available to authorities in hosting countries and to event organizers. Relevant stakeholders are invited to adapt them, use them and make informed decisions based on a thorough assessment of the risk associated with the planned event. WHO does not have the mandate to take, enforce or sanction decisions related to holding, modifying, postponing or cancelling planned gatherings.

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