TECHNICAL NOTE ON ADJUSTING PUBLIC HEALTH AND SOCIAL MEASURES IN THE RESPONSE TO COVID-19 IN THE WHO AFRICAN REGION

15 March 2022
Key messages

- As the risk of the emergence of a new variant remains high, countries should adjust the public health and social measures (PHSMs) gradually but cautiously.
- The adjustment of PHSMs should be linked to the impact of the prevailing transmission on the health system in terms of hospitalizations and the proportion of available beds occupied by COVID-19 patients.
- High vaccination coverage of at least 70% for the adult population, combined with a high level of seroprevalence, is essential for the safe withdrawal of the majority of PHSMs.
- To thoroughly understand the levels of population immunity due to both infection and vaccination for informed adjustment of PHSMs, countries should prioritize representative and regular seroprevalence studies.
- Adjustments to PHSMs should be preceded and accompanied by intensified risk communication and community engagement.
- At points of entry countries should shift from country-focused PHSMs to individualized approaches with a view to relaxing or lifting most of the PHSMs that do not facilitate travel in line with the International Health Regulations (2005).

Introduction

The coronavirus disease 2019 (COVID-19) pandemic has continued to impact lives and livelihoods in Africa. However, the most recent wave, dominated by the Omicron variant, provided the long-awaited glimmer of hope that the virulence of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was beginning to wane, as its reported impact in terms of hospitalizations and deaths was significantly lower than of previous waves (1).

Since the COVID-19 pandemic began, countries have been implementing a package of interventions including PHSMs, formerly referred to as non-pharmaceutical interventions (NPIs). These PHSMs were initially designed to slow the transmission of the SARS-CoV-2 so that countries could buy time to develop response capacities and protect vulnerable persons (2). The potential of the emergence of new variants of concern (VOCs) of SARS-CoV-2 alongside the increasing population immunity in Africa, currently at 65.1% [56.3-73.0%] for pooled seroprevalence from infection vaccination (3), and the improved response capacities necessitates a review of existing PHSMs in Member States in the Region so that they reflect this dynamic.

Epidemiological overview

Current epidemiological trends

The first imported case of COVID-19 in the WHO African Region was reported in February 2020. The pandemic has affected to varying degrees all the 47 countries in the Region. As of 12 March 2022, over 8 million cumulative cases and 169 711 cumulative deaths had been reported, representing 2.4% of the global cases and 2.9% of the global deaths, respectively (4). There has been a steady decline in the number of cases in the past 3 months (since the end of December 2021), with a halving of the number of cases observed in the past month.

The evolution of COVID-19 in the WHO African Region has been marked by four waves driven mainly by the emergence of new VOCs. The fourth wave had a significantly higher incidence of...
cases, reaching its peak within 20–25 days compared to previous waves, for which the peaks occurred over at least three months (Figure 1) (5).

![Figure 1. New confirmed cases of COVID-19 in the WHO African Region by date of reporting (2020–2022).](image)

By 12 March 2022, 11.4 million cases and over 250 000 deaths associated with COVID-19 had been reported in Africa, with a case fatality rate of 2.2%. More than 10.6 million people had recovered. Cases continued to decline for the seventh consecutive week across all the African continent following the peak of the fourth wave in mid-January. As of 12 March 2022, only two countries in the WHO African Region remained within their recent waves, but they were conveying a declining trend.

Considering the COVID-19 epidemiological trend observed in 2020 and 2021, the following scenarios could occur in the countries during 2022: (1) a sustained low incidence in the transmission of the current dominating variant strain, but this is unlikely, (2) resurgences of the virus due to increased reinfection, a likely scenario, and (3) an emergence or importation of a new variant, also a likely scenario. The third scenario would become a worst case if the new variant had higher transmissibility and/or higher virulence than previous variants.¹

**Impact of COVID-19 transmission on health systems**

As the pandemic evolves, PHSMs should be regularly reviewed and adjusted according to the local epidemiology of the countries. This requires agile decision-making based on ongoing situational assessments conducted in a coherent and coordinated manner with the involvement of neighbouring communities at the subnational and national levels. A simplified assessment using the impact of the existing transmission on the health system is recommended (Table 1).

Two key indicators in COVID-19 assessment are the number of hospitalizations in the previous 14 days and the proportion of functional² inpatient beds occupied in the previous seven days in the

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² A functional bed is one that is staffed and the necessary equipment for patient care are available.
general and intensive care unit (ICU) beds (Table 1). In situations where the impact of the transmission on the health system is low or medium, countries can relax most of their measures and retain the minimum personal prevention measures such as wearing of well-fitting face masks, hand hygiene and adequate indoor ventilation (Figure 2). If the prevailing epidemiology indicates a high impact on the health system this should warrant immediate revision of the PHSMs to relieve the pressure on existing resources. The resurgence indicators, i.e. case incidence, test positivity rate, hospitalizations for general and ICU beds and the case fatality rate, should be used for early warning, enhancing readiness and initiating response.

Table 1. Indicators and thresholds for assessing the impact of COVID-19 transmission on health systems

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: New COVID-19 hospitalizations per 100,000 population (14-day total)</td>
<td>&lt;10 or &lt;5</td>
<td>10–19.9</td>
<td>20–29</td>
<td>&gt;30</td>
</tr>
<tr>
<td>2: Percentage of functional inpatient beds occupied by COVID-19 patients (7-day average)</td>
<td>&lt;15%</td>
<td>15–24.9%</td>
<td>25%–34.9</td>
<td>&gt;35%</td>
</tr>
<tr>
<td>3: Percentage of functional ICU beds occupied by COVID-19 patients (7-day average)</td>
<td>&lt;10%</td>
<td>10–14.9%</td>
<td>15%–24.9%</td>
<td>&gt;25%</td>
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Considerations for adjusting PHSMs

Decisions on whether to implement, lift or strengthen PHSMs should be based on the pertinent guiding principles and should aim for measures with high acceptability and effectiveness, feasibility and ease of reintroduction if cases and hospitalizations begin to rise. Adjustments should be implemented in a phased manner and weighed against their potential impact on health systems and public health risk. WHO recommendations for consideration when implementing and adjusting PHSMs in the context of COVID-19 offer guidance to Member States on modifying PHSMs amid the pandemic (6).

At this point in the pandemic, adjustment of PHSMs should be based on the impact of the transmission on the health system in terms of hospitalizations and deaths as shown in Table 1, as opposed to just the case incidence.

Cautious and gradual relaxation of PHSMs allows Member States to develop appropriate legislative and policy frameworks beyond the emergency actions or disaster declarations that can anchor and facilitate the enforcement of PHSMs. The policy frameworks can foster the integration of PHSMs, infection prevention and control measures, vaccination, testing, surveillance and other vertical COVID-19 interventions into routine health programming and services.

Guided by risk assessment and considering the epidemiological situation, response capacities, vaccination coverage and public behaviours, knowledge and perceptions, as well as the uncertainties related to the rapidly evolving situation of Omicron or any new variant, countries should be ready to escalate PHSMs in a timely manner to avoid the rapid overwhelming of the health care services. In addition, active monitoring of and response to community feedback, rumours and disinformation should be conducted in a timely manner for course correction.
Figure 2. Proposed stepwise approach for adjusting PHSMs

Public health measures that should be lifted

Fogging/fumigation

Routine application of disinfectants to environmental surfaces in indoor spaces by spraying or fogging, also known as fumigation or misting, is not recommended for COVID-19 (7). Spraying or fumigation of outdoor spaces such as streets or marketplaces should be discontinued (see https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19), as should be spraying travellers, school children or any person with disinfectants.

Temperature screening

Temperature screening using infrared, hand-held thermometers or scanners at entrances of public health buildings and points of entry should be reviewed. Historically temperature screening at points of entry has been implemented for a variety of diseases, but evidence is limited to support it as an effective measure for detecting COVID-19. This is because: (1) a fever might not be exhibited by people in the incubation period between exposure to the virus and symptom onset; (2) people may not exhibit fever early in the course of the disease, which is the case for an estimated 20% of all COVID-19 cases (8) who are asymptomatic; and (3) ill people may be taking medication such as antibiotics or anti-inflammatories that lower the body temperature. For indoor public spaces, hand hygiene, proper and consistent use of a well-fitting mask, ventilation and physical distancing should be encouraged.

Interventions at points of entry, international travel and mass gatherings

Travel-related risk mitigation measures should shift from a country focus to an individualized approach where the focus is on the status of the person as opposed to the situation in their country or region (9).

In line with the individualized approach to public health measures, countries may consider individuals who are up to date with their primary vaccination series, i.e. they are fully vaccinated,
or those who have recovered from the viral disease to be at lower risk and may consider waiving testing and/or quarantine for arriving international travellers in those categories (10). Such decisions can be reviewed regularly based on risk assessment and evolving epidemiology (6,11,13).

Mass gatherings

The decision-making process on mass gatherings during the COVID-19 pandemic should always rely on a risk-based approach focused on evaluating, mitigating and communicating risk (see Key planning recommendations for mass gatherings in the context of COVID-19, who.int).

Contact tracing and quarantine

See separate guidance on adjusting contact tracing and quarantine.

Isolation

In any scenario where COVID-19 could be transmitted, persons with any symptoms suggestive of disease should wear a medical mask and self-isolate and seek medical advice as soon as they start to feel unwell with the potential symptoms of COVID-19, even if the symptoms are mild. In addition, they should follow all other pertinent measures, including observing respiratory hygiene, frequently washing their hands and maintaining a physical distance of at least 1 metre (see WHO guidance on Home based care (12).

Priority actions for Member States in the current context of the pandemic in the African Region

The use of established PHSMs in response to individual cases or clusters of cases of COVID-19, including for mass gatherings, contact tracing, quarantining of contacts and isolation of cases must continue to be adapted to the existing epidemiological and social context with community involvement and input. This can be most effective if working through community leaders, civil society and community-based organizations to understand the impacts of the PHSMs on different population groups. In this way, practical, relevant and acceptable advice can be provided and the secondary impacts of restrictive measures can be better anticipated and mitigated.

In the current situation where partial or total lifting of PHSMs is being discussed or is already implemented by many countries, the WHO Regional Office for Africa is suggesting the following actions to Member States:

Before lifting or adjusting PHSMs, Member States countries should consider the following:

- Establish a baseline of the health system capacity in terms of the bed capacity for both ICU and general wards, human resources and daily oxygen production and utilization to be used to monitor the impact of the COVID-19 transmission on the health system.
- Establish a system for real-time monitoring of the impact of COVID-19 transmission on the health system at district, regional and national levels using the indicators outlined in Table 1.
- Establish a clear system that allows early diagnosis and a pathway for prompt entrance into the clinical care for patients.
- Conduct representative and regular seroprevalence studies to better document and monitor the level of population immunity in different parts of the country, i.e. rural, urban, hard-to-reach areas etc., within given periods of time.
Conduct social behavioural studies coupled to the epidemiological evidence on the PHSMs to inform policy decisions and definition of the rationale for adjusting PHSMs.

Scale up vaccination to increase the proportion of the population that is up to date with their primary series of vaccines, with a special focus on high-risk groups and those that require booster doses. Areas identified to have low seroprevalence should also be targeted for accelerated vaccination.

Establish an “emergency brake”(9) multisectoral framework that can quickly respond to the emergence of new variants of concern or when the existing transmission places significant strain on the health system. The triggers of the emergency brake and activation mechanisms should be clearly understood by all levels of the response.

Scale up risk communication and community engagement (RCCE) as PHSMs are being revised so that the community understands the rationale and the possibility of re-instituting the measures as the situation evolves. Shift from one-way or top-down communication to community engagement, participatory approaches and community led solutions that will contribute to address misinformation.

The measures can be adjusted in the following phased manner:

**When the impact of the existing COVID-19 transmission on the health system is low or medium:**

- Institutions of learning to remain operating at full capacity with minimum preventive measures such as ventilation of indoor spaces, provision of adequate and functioning hand hygiene infrastructure and protocols and implementation of environmental hygiene measures. Masking in the classrooms should be required for all age groups.

- Restrictions on outdoor gatherings to be lifted but with the implementation of additional risk mitigation measures such as provision of adequate ventilation. Other measures to be considered include requiring rapid antigen testing or vaccination certificates for accessing mass gatherings.

- Maintain the mask requirement for indoor gatherings alongside practising of hand hygiene and physical distancing and ensuring environmental cleaning and adequate ventilation in indoor spaces.

- Shift the point of entry measures from a country-based focus to an individual approach. Consider waving the requirement for a negative PCR for travellers who are up to date with their vaccination series. Facilitate travel as much as possible as required under the IHR (2005).

- Occupational settings to consider return to office for all staff except those with a medical justification for remote working. Strengthen occupational health and safety units for effective surveillance and response and enhanced linkage with other health and safety protocols.

- Lift restrictions on public transport but retain the mandatory use of a well-fitting face mask.

- Restart all other health programmes that had been affected. Catch-up plans for routine immunization, tuberculosis and HIV programmes etc. should be implemented. Integrate vertical COVID-19 interventions such as vaccination, testing and RCCE into all health services.
Halt the use of thermal screening at entrances to public places and focus on the use of face masks and practising of hand hygiene and cough etiquette, as well as provide ventilation in indoor spaces.

Review and lift all movement restrictions.

**When the impact of the existing transmission on the health system is high to critical:**

- Consider re-introducing the measures to reduce congestion and transmission in schools but ensuring that schools remain open.
- Support businesses to put in place hand hygiene and social distancing measures, as well as implement environmental cleaning. Adapt the functioning of businesses to minimize the COVID-19 risk including through remote working, modified service provision or closure of business premises when necessary.
- Have 50–75% of staff working in person, which is recommended in occupational settings to limit density and physical contact.
- Consider strict measures for all long-term care facilities, prisons and other residential facilities to limit the risk of infection, including reducing the number of visitors or temporarily suspending in-person visits, if this does not impact the quality of life of the resident individuals for example by affecting their access to food, essential medical supplies or critical human contact.
- Support telemedicine and remote health services and reschedule non-urgent health and medical care services.
- Revise the measures related to public transportation, for example for vehicle carrying capacity, physical distancing and mandatory mask wearing.
- Revise international travel measures guided by the risk assessment and the WHO travel advice issued in respect of the circulation of a new variant of concern.
Table 2. Summary of considerations and priority actions for PHSMs

<table>
<thead>
<tr>
<th>Key considerations before adjusting PHSMs</th>
<th>Existing transmission has low* or medium* impact on health system</th>
<th>Existing transmission has high* or critical* impact on health system</th>
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<td>Establish a baseline of the health system capacity in terms of the bed capacity of both ICU and general wards, human resources and daily oxygen production and utilization.</td>
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<td>Establish a clear system that allows early diagnosis and prompt entrance into the clinical care pathway for patients.</td>
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<td>Consider strict measures for all long-term care facilities, prisons and other residential facilities to limit the risk of infection.</td>
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<td>Conduct social behavioural studies coupled to the epidemiological and evidence on PHSMs to inform the policy decisions and definition of the rationale for adjusting PHSMs.</td>
<td>Occupational settings to consider return to office for all staff except those with a medical justification for remote working.</td>
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<td>Scale up vaccination to increase the proportion of the population that is up to date with their primary series of vaccines, with a special focus on high-risk groups and those who require booster doses. Areas identified to have low seroprevalence should also be targeted for accelerated vaccination.</td>
<td>Lift restrictions on public transport but retaining of the mandatory use of a well-fitting face mask.</td>
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<td>Establish an “emergency brake” multisectoral framework that can quickly respond to the emergence of new variants of concern or when existing transmission places a significant strain on the health system. The triggers of the emergency brake and activation mechanisms should be clearly understood by all levels of the response.</td>
<td>Re-start all other health programmes that had been affected.</td>
<td>Revise international travel measures guided by the risk assessment and the WHO travel advice issued in respect of the circulation of a new variant of concern.</td>
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<td>Adapt public messages to and intensify the risk communication and community engagement (RCCE) so that the community understands the rationale and the possibility of re-instituting measures as the situation evolves.</td>
<td>Halt the use of thermal screening at entrances to public places and focusing on the use of face masks and practise hand hygiene and cough etiquette and provide ventilation in indoor spaces.</td>
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<td>Establish an approach for occupational settings to consider return to office for all staff except those with a medical justification for remote working.</td>
<td>Review and lift of all movement restrictions.</td>
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*Low, medium, high and critical impact of transmission on health system defined in Table 1
References

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