Immunization as an essential health service: guiding principles for immunization activities during the COVID-19 pandemic and other times of severe disruption

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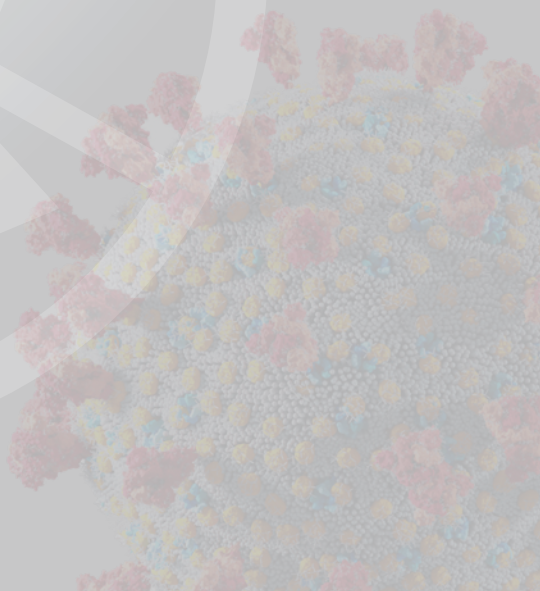

This document replaces Guiding principles for immunization activities during the COVID-19 pandemic: interim guidance, issued on 26 March 2020.

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Introduction

Due to empirical evidence, field observations and survey data collected since 11 March 2020, the date WHO officially declared COVID-19 a pandemic, the global impact of the disease on immunization programmes is increasingly documented and understood. The knowledge gained has informed the formulation of the recommended approaches and guiding principles expressed in this document.

Immunization is an essential health service that protects the health and well-being of communities and is thus fundamental for well-functioning countries and their economies. Immunization activities should be prioritized and safeguarded for continuity to the greatest extent possible during times of severe disruption to service delivery or utilization.[1] Re-deployment of health workers responsible for immunization services during periods of crisis should be minimized or avoided if possible, as it can lead to long-term negative consequences. Even brief disruption or postponement of an immunization service could lead to increases in individuals susceptible to outbreak-prone vaccine preventable diseases (VPDs) in the short term, such as measles;[2] and, in the longer term, increased risk for chronic diseases such as hepatocellular carcinoma due to hepatitis B virus, and cervical cancer due to human papilloma virus. The critical importance of preserving immunization activities is supported by modelling, which estimates that routine vaccines prevent at least 80 deaths in children in Africa for each death in an older household member due to infection with SARS-CoV-2 acquired during a routine immunization clinic visit.[3] Strengthening infection prevention and control measures (IPC), training health workers on IPC and ensuring adequate supplies of personal protective equipment (PPE) can further reduce health facility-acquired infection.

This document, endorsed by the WHO Strategic Advisory Group of Experts on Immunization, provides guiding principles to support countries in their decision-making regarding provision or resumption of immunization services during severe disruptive events such as COVID-19, natural disasters or humanitarian emergencies. It incorporates the Immunization Agenda 2030 principles of being people-centred, country-owned, partnership-based and data-guided.[4]

Key characteristics of major disruptive events, such as the COVID-19 pandemic, are noted:

A. A severe disruption touches everyone, everywhere and in every way, regardless of geography or income level, although low-income and marginalized groups will be more adversely affected. Effects are not limited to the health realm but can be felt across the whole economy.

B. The disruption may not be short term; it is typically open ended and uncertain in duration.

C. More severe disruptions to routine immunization activities may occur as contexts change – this should be anticipated through risk mitigation and prevention measures.

D. Publicly available health information emerges from many sources and may not be well vetted, adversely impacting both immunization and acceptance decisions.

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[1] Maintaining essential health services: operational guidance for the COVID-19 context: interim guidance, 1 June 2020. Geneva: World Health Organization (https://apps.who.int/iris/handle/10665/332240).

[2] Suk JE, Jimenez AP, Kourouma M, Derrough T, Baldé M, Honomou P et al. Post-Ebola measles outbreak in Lola, Guinea, January–June 2015. Emerg Infect Dis. 2016;22(6):1106–1108.

[3] Abbas K, Procter SR, van Zandvoort K, Clark A, Funk S, Mengistu T et al. Routine childhood immunisation during the COVID-19 pandemic in Africa: a benefit–risk analysis of health benefits versus excess risk of SARS-CoV-2 infections. Lancet Glob Health. 2020;8:e1264–72.

[4] Immunization Agenda 2030: a global strategy to leave no one behind. Geneva: World Health Organization; 2020 (https://www.who.int/immunization/immunization_agenda_2030/en/).

Guiding principles for *all countries* to address in sustaining immunization activities during times of severe disruption, including the COVID-19 pandemic.

Health system and policy principles

1. Immunization is an essential health service that should be prioritized to prevent VPDs even in times of crisis and disruption, such as the COVID-19 pandemic.

2. As providers of essential health services, immunization managers and health workers involved in immunization services should be empowered to sustain immunization services; including preparatory planning and capacity assessment for the COVID-19 vaccine. Re-deployment to COVID-19 exclusive roles should be minimized, if possible.

3. Immunization managers and health workers involved in immunization services should not be re-deployed during a crisis, but rather empowered to sustain immunization services.

4. Health workers should be trained, supervised, remunerated, protected and empowered to assure adherence to infection prevention and control measures for their safety and that of their communities.

5. Severe disruptive events like the COVID-19 pandemic are not static, but rather unfold and evolve. Hence immunization programmes, and regional and global partners must continuously re-adjust their plans. Therefore, processes for continually assessing data, drawing lessons from experiences, documenting processes and outcomes, and sharing best information need to be in place.

6. National Immunization Technical Advisory Groups (NITAGs), supported by Regional Immunization Technical Advisory Groups (RITAGs), have a critical role in advising national immunization programmes and immunization partners by using local data to inform recommendations for maintenance, adaptation, suspension and/or resumption of immunization services. Regular monitoring must be assured so any necessary adaptations can be identified.

7. The decision to suspend, maintain or resume immunization services should be informed by government policy for COVID-19 pandemic control, and by lessons gathered from previous disruptions, local epidemiology,[1] population demographics and migration patterns, and implementation feasibility (e.g. human resources, supplies, health worker and patient infection control safety requirements).

[1] Scobie HM, Edelstein M, Nicol E, Morice A, Rahimi N, MacDonald NE et al. Improving the quality and use of immunization and surveillance data: summary report of the Working Group of the Strategic Advisory Group of Experts on Immunization. Vaccine. 2020;38(46):7183–7197.

Service delivery principles

8. Immunization should be integrated into essential health services to ensure effective and efficient service delivery through coordination and collaboration with other health programmes.

9. Innovation and creativity, informed by best practices and evidence, will be required to optimize service delivery and access. Immunization delivery strategies (e.g. fixed site, outreach, mobile, campaign) should be adapted based on local contexts to ensure services are delivered under safe conditions (e.g. using standard and additional precautions and supplying health workers with necessary supplies for infection prevention control measures).[1,2]

10. When resources are very constrained, immunization should be prioritized to protect, at a minimum, vulnerable populations most at risk of morbidity and mortality due to VPDs such as zero dose communities (i.e. communities with large numbers of unimmunized children) and close contacts of vulnerable populations (e.g. maternal vaccination, health worker vaccination). In resource-constrained scenarios, preventing outbreak-prone VPDs is a priority.

11. Throughout the disruptive event, it is critical to collect data on who is immunized and who is missed. Innovative and creative data collection processes may be needed.

Catch-up vaccination strategy

12. A clearly defined catch-up vaccination policy and schedule, supported with adequate financing and prepared in consultation with immunization stakeholders, should be in place for all national immunization programmes to ensure that everyone has an opportunity to receive missed vaccinations, for any reason, at any time.[3]

13. In non-disruptive times, planning and processes for catch-up, optimization of routine immunization, and for routine and crisis communication should be established in collaboration with partners and the community. Having such plans established will facilitate taking action as soon as feasible, when a major disruptive event occurs.

14. Recognizing that immunization resources, including health providers and funding, may be limited with severe disruptions, catch-up programmes need to be developed to maximize impact with the resources available. Simultaneous implementation of multiple local strategies for catch-up may be required (e.g. newborn and defaulter tracking, reducing missed opportunities, school vaccination checks, school-based immunization, periodic intensification of routine immunization [PIRI]). As during times of non-disruption, the routine immunization system may be the least resource intensive and most sustainable strategy to offer catch-up vaccination.

15. Revised catch-up programmes must be data-guided, people-centred, regularly reviewed and adjusted as contexts change in order to minimize the number of unimmunized over time. Underserved or zero dose communities should be specifically targeted, as they are most vulnerable to morbidity and mortality due to VPDs.

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[1] Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed: interim guidance; 29 June 2020. Geneva: World Health Organization (https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC-2020.4).

[2] Transmission of SARS-CoV-2: implications for infection prevention precautions; 9 July 2020. Geneva: World Health Organization (https://www.who.int/publications/i/item/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations).

[3] Leave no one behind: guidance for planning and implementing catch-up vaccination. Working draft; August 2020. Geneva: World Health Organization (https://www.who.int/immunization/programmes_systems/policies_strategies/catch-up_vaccination/en/).

Mass vaccination campaigns

16. If preventive or outbreak response mass vaccination campaigns must be postponed due to the disruptive event, countries should frequently re-evaluate this decision by weighing the epidemiological data and short- and medium-term public health consequences of further postponement, against the risks of implementation (e.g. security issues, causing infection or accelerating transmission) and resource constraints. To facilitate this complex decision-making, countries are encouraged to refer to WHO guidance.[1,2]

17. To leverage limited resources and maximize efficiencies, countries and their global and national partners (e.g. global disease-specific programmes, NITAGs) should explore feasibility for multi-antigen and/or integrated mass intervention campaigns after careful consideration of target populations, logistics, operational costs, community acceptance and local epidemiology.

VPD surveillance and coverage monitoring

18. VPD surveillance is a critical function even during a major disruption. Surveillance disruptions impact a country's ability to rapidly detect and respond to VPD outbreaks and must be preserved. When resources are very limited, countries need to assess what VPDs are most critical for surveillance in their context, so that early VPD detection can trigger early intervention and prevent further cases.[3]

19. VPD surveillance should be integrated in emergency/event-based surveillance. Comprehensive VPD surveillance should be reinstated as early as is feasible. Any local barriers to conducting surveillance should be expeditiously and creatively addressed.

20. Countries should monitor trends of subnational programme performance and VPD surveillance to document impact and use results for advocacy and planning for local improvement. It is important to explore local reasons for underperformance, particularly in zero dose or underserved communities, to design local solutions.

Supply chain for immunization, infection control and waste management