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**Guidance on routine  
immunization services during  
COVID-19 pandemic in the  
WHO European Region**

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Note: This will be regularly revised and updated as the epidemiological situation of COVID-19 evolves

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## CONTENTS

Background .....	1
Decision-making considerations.....	1
Key principles .....	3
Decision-making algorithm.....	4
Annex 1 .....	5



## **Background**

As a public health emergency of international concern, the COVID-19 pandemic (caused by the novel SARS-CoV-2 virus) has drawn global attention and response. As of 19 March 2020, 51 of 53 countries in the WHO European Region have reported confirmed COVID-19 cases<sup>1</sup>. Each of these countries has initiated a range of measures to mitigate the transmission of SARS-CoV-2 and reduce the impact of the outbreak on healthcare systems, including shifting of healthcare resources to the COVID-19 response.

In planning these measures, due consideration should be given to minimizing the excess risk of morbidity and mortality from vaccine-preventable diseases (VPDs) that would result if immunization services are disrupted. **Any disruption of immunization services, even for short periods, will result in an accumulation of susceptible individuals, and a higher likelihood of VPD outbreaks<sup>2</sup>. Such outbreaks may result in VPD-related deaths and an increased burden on health systems already strained by the response to the COVID-19 outbreak.**

## **Decision-making considerations**

**Immunization services are an essential component of health services. Therefore, routine immunization sessions should be maintained as long as COVID-19 response measures allow. Decisions related to the operation of immunization services should be taken based on a detailed assessment of the VPD epidemiology, transmission scenario of COVID-19<sup>3</sup> and corresponding mitigation measures in place, and health and immunization system resources.**

The current COVID-19 situation and health system capacities vary widely across the WHO European Region, and this situation is rapidly evolving. Approaches to sustain high levels of routine immunization coverage will also vary among countries.

**All possible efforts should be made by the Ministry of Health to equitably sustain high population immunity.**

**In the event that regular immunization service providers are diverted to the COVID-19 response, relevant civil society organizations (CSOs) or non-governmental organizations (NGOs) operating in an area, if available, should be mobilized to support the immunization programme. Considering that some of the routine immunization services could be disrupted in the current context, the immunization service providers should start enumerating the cohorts of children who have missed their vaccine doses and develop an action plan for tailor-made catch-up immunization.**

Consideration of immunization options during the COVID-19 pandemic should be guided by a detailed assessment of the:

1. epidemiological risks of VPDs among the general population and specific vulnerable groups;
2. epidemiological situation of COVID-19 and related mitigation measures in place;

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<sup>1</sup> <https://who.maps.arcgis.com/apps/opsdashboard/index.html#/ead3c6475654481ca51c248d52ab9c61>

<sup>2</sup> Suk et al. Post-Ebola Measles Outbreak in Lola, Guinea, January–June 2015. *Emerging Infectious Diseases*. 2016; 22(6):1106-1108.

<sup>3</sup> Critical preparedness, readiness and response actions for COVID-19; <https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19>

3. health system and immunization delivery services characteristics and constraints;
4. relevant vaccine and logistics characteristics.

The impact and appropriateness of the chosen options should be monitored and periodically reassessed as the COVID-19 situation evolves.

### **1. Epidemiological risks of VPDs among the general population and specific population groups**

#### **What is the potential risk of an increased VPD occurrence?**

Review the population immunity (subnational routine vaccination coverage) along with VPD surveillance data, including ongoing measles outbreak characteristics, and incorporate local knowledge. Special emphasis should be given to epidemic-prone VPDs and to halting any backslide in achievement of measles elimination or polio eradication.

### **2. Epidemiological situation of COVID-19 and related mitigation measures in place**

#### **What is the transmission scenario of COVID-19 in your setting?**

Review the COVID-19 situation in your area of responsibility: considering whether there are no cases, sporadic cases, cluster of cases or community transmission<sup>3</sup>. In line with the WHO Strategic Preparedness and Response Plan for COVID-19, all countries should be prepared to respond to all the transmission scenarios. The need to divert resources to reduce the impact of COVID-19 on the health system must be weighed against the risk of increased morbidity and mortality of VPDs resulting from any change to immunization services, and the potential additional burden on the health system this may cause.

### **3. Health system and immunization service delivery characteristics and constraints**

#### **What are the health system and immunization service delivery characteristics of your setting?**

Countries in the European Region have varied health system characteristics and immunization legislative frameworks. Consider the healthcare delivery services required to manage COVID-19 transmission scenario(s) in your country and the potential need and legal options to divert immunization programme staff to contribute to managing the COVID-19 situation.

### **4. Vaccine and logistics characteristics**

#### **Are routine vaccines available in sufficient quantities?**

Availability of routine vaccines and assessment of vaccine supply and ability to procure vaccine(s) in the current context should be evaluated within the realm of national vaccination and logistics management guidelines. While assessing the vaccine and logistics supply, due consideration should be given to understanding the vaccine demand, whether all scheduled doses of a vaccine in the national immunization schedule could be completed in the current context or if a “stop–start” policy would need to be adopted, with the target population receiving the required vaccine doses at irregular intervals over a longer period of time.



## **Key principles**

Sustaining trust of the population in immunization and the health system is critical. Assessing and understanding the demand for and acceptance of routine immunization in the community is critical for decision-makers to evaluate the suitability of immunization service delivery options. Given the benefits of immunizing the population with vaccines in the national immunization schedule even during the COVID-19 pandemic, it is crucial to monitor the trend of community uptake of vaccines and seek insights into any decreases in uptake, including possible barriers to vaccination among the general public or special population groups.

### **Guiding principles for immunization programmes during the COVID-19 pandemic**

- a. Follow the existing guidelines on COVID-19 infection prevention measures during immunization sessions. Relevant programmatic considerations in limiting risk of SARS-CoV-2 transmission during vaccination are provided in annex 1.
- b. Prioritize primary series vaccinations especially for measles-rubella- or poliomyelitis-containing vaccines and other combination vaccines.
- c. Avoid mass vaccination campaigns until the COVID-19 situation resolves.
- d. Vaccinate newborns (as per the national immunization schedule) in maternity hospitals.
- e. Prioritize pneumococcal and seasonal influenza vaccines for the vulnerable population groups.
- f. Delay introduction of any new vaccine/s in the national immunization schedule.
- g. Communicate clearly to the community and healthcare professionals the rationale for inclusion of immunization as one of the priority health services during the COVID-19 pandemic and the risks from VPDs and benefits of vaccination.

## Decision-making algorithm

The epidemiological, operational and contextual characteristic in each country are unique and it would be impossible to determine one appropriate strategy for all situations. The following algorithm can help national authorities take decisions related to the continuing operation of immunization services.

### **Situation 1:**

- Low risk of VPDs and unlikely potential for large outbreaks
- No cases or sporadic cases of COVID-19
- Adequate immunization staff and logistics available

- Continue routine immunization services with emphasis on primary series vaccinations

### **Situation 2:**

- High risk of VPDs, potentially leading to outbreaks and causing mortality
- No cases or sporadic cases of COVID-19
- Adequate immunization staff and logistics available

- Maintain and enhance VPD surveillance

### **Situation 3:**

- Low risk of VPDs and unlikely potential for large outbreaks
- No cases or sporadic cases of COVID-19
- Immunization staff are engaged in COVID-19 preparation and response

- Explore alternate solutions to continue immunization, e.g.
  - Involve and train Healthcare providers not engaged in COVID-19 response, including NGOs and CSOs
  - reduce missed opportunities by combining vaccination with well-baby visits (if taking place) or medical examination

### **Situation 4:**

- Low risk of VPDs and unlikely potential for large outbreaks
- Cluster of cases and/or community transmission of COVID-19
- Immunization staff are engaged in COVID-19 preparation and response

- Develop list of cohorts of children who have missed their vaccine doses
- Maintain and enhance VPD surveillance

### **Situation 5:**

- High risk of VPDs, potentially leading to outbreaks and cause mortality
- Cluster of cases and/or community transmission of COVID-19
- Immunization staff are engaged in COVID-19 preparedness and response

## **Annex 1**

### **Programmatic considerations in conducting vaccination during COVID-19 pandemic and limiting risk of SARS-CoV-2 transmission during vaccination sessions**

Provision of immunization services should be aligned with the national guidelines on infection prevention and control in healthcare settings and include the following.

#### **a. Minimizing exposure to COVID-19**

- Use available communication technology to communicate on immunization services, setting appointments for sessions and reporting of adverse events following immunization (AEFIs).
- Consider combining vaccination visits with well-baby visits and reducing the number of rooms visited by bundling medical examination and vaccination services during such visits.

#### **b. Administrative controls**

- Train core and backup staff to prevent SARS-CoV-2 infection during immunization sessions
- Consider mobile vaccination posts or outreach whenever feasible to equitably improve access to immunization, while minimizing risk of infection.
- Perform exposure risk assessment of health workers having history of contact with COVID-19 patients<sup>4</sup>.
- Avoid crowding in waiting rooms by advanced scheduling of well-person visits and immunization services.
- Inform caregivers attending the immunization session/s on COVID-19 measures, including use of respiratory hygiene and importance of social distancing (maintaining a distance of at least 1 metre from others).

#### **c. Environmental and engineering controls**

- Conduct vaccination preferably in dedicated immunization clinics or in separate room in the healthcare facility.
- Allocate ventilated areas and ensure feasibility of social distancing for caretakers and children waiting for immunization.

#### **d. Standard precautions**

- Ensure procedures on hand hygiene, use of personal protective equipment, preventing needle-stick or sharps injury, waste management, cleaning and disinfection of equipment and environment are followed in line with the guidelines of the Ministry of Health and adapted according to the COVID-19 situation.
- Healthcare professionals and workers should receive all appropriate vaccines and are up-to-date with recommended vaccines.

#### **e. Vaccine demand and supply**

- Note that restricted movement of population and goods, modified scheduled immunization sessions, variable vaccine demand and increased wastage rates during this circumstance may impact vaccine demand and supply. Forecasting estimates, frequency of resupply and safety stock levels should be updated regularly taking into account the available cold chain equipment capacity.

#### **f. AEFIs**

- Anticipate increased risk of coincidental AEFIs due to ongoing SARS-CoV-2 transmission coinciding with vaccination. All vaccinees should be kept under observation after vaccine(s) have been administered. Functional strategies to report, investigate,

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<sup>4</sup> [https://apps.who.int/iris/bitstream/handle/10665/331340/WHO-2019-nCov-HCW\\_risk\\_assessment-2020.1-eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/331340/WHO-2019-nCov-HCW_risk_assessment-2020.1-eng.pdf)

conduct causality assessment of serious AEFIs and communicate their causes should be in place to maintain public confidence in immunization.