







FRAMEWORK FOR DECIDING WHETHER TO IMPLEMENT VITAMIN A SUPPLEMENTATION CAMPAIGNS IN THE CONTEXT OF COVID-19

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BACKGROUND

Vitamin A supplementation (VAS) is a life-saving intervention that reduces the risk of child mortality, morbidity and malnutrition in countries with high levels of vitamin A deficiency (VAD) [1]. During disease outbreaks such as COVID-19 when access to health services is often limited, it is particularly important that children in these contexts receive their twice-yearly high-dose VAS every 4 to 6 months.

In many settings, campaigns are an effective way to reach children 6-59 months of age with coverage rates often 80% or above. However, due to COVID-19 mitigation measures including physical distancing, movement restrictions and the prohibition of large group gatherings, many countries have had to postpone VAS campaigns, leaving children unprotected from preventable illness and death. Decreased VAS coverage due to the COVID-19 pandemic threatens to reverse years of efforts by countries to improve the delivery of VAS and promote equity in VAS coverage. As a result, countries with a high prevalence of VAD in young children and high under-5 mortality (U5M) as well as COVID-19 outbreaks are currently determining the best course of action to ensure continuity in VAS delivery.

Many countries are trying to find the right balance between preventing the spread of COVID-19 and minimizing disruptions to essential child health and nutrition services, such as VAS. This challenging process requires countries to weigh the benefits of a safe and effective intervention such as VAS, against the risks of increasing transmission of a new disease that may burden essential health services. Contextual risk factors vary across countries and within countries. Every country will need to determine the best way to balance the benefits and risks associated with implementing or postponing VAS campaigns in the context of COVID-19 for its own population. As the COVID-19 transmission scenario is fluid, so countries will also need to reassess their decisions as new information or data emerges.

In the context of the COVID-19 pandemic, the purpose of this brief is to:

- 1. Outline a decision-making framework to help countries that deliver VAS through campaigns decide how best to proceed with VAS delivery, and
- 2. Offer guiding principles when deliberating on the appropriateness of implementing VAS campaigns.

This brief is complemented by GAVA's consensus statement and operational guidance on the administration of VAS for preschool-aged children in the context of COVID-19 [2, 3].

DECISION-MAKING FRAMEWORK

The framework below outlines a process for conducting a risk-benefit analysis to answer the key question – **Do the benefits of implementing a VAS campaign outweigh the risk of increased COVID-19 transmission?** The analysis requires countries to weigh the short- and medium term public health benefits of implementing a VAS campaign (and the risk involved in postponing a campaign) against the risk of a potential increase in COVID-19 transmission associated with carrying out a VAS campaign. A key consideration with respect to the benefits of implementing a VAS campaign is the well-being of vulnerable children. VAS coverage is vital for vulnerable children during an infectious disease outbreak and can prevent a surge in child morbidity and mortality. Therefore, the benefit analysis must also consider how vulnerable









children would be impacted if a VAS campaign was not implemented during the pandemic. Also important in this analysis is the pattern of COVID-19 transmission within the country, and the country's ability to ensure that VAS campaigns can be implemented using strict infection prevention and control (IPC) measures.

Figure 1 illustrates the decision tree developed to help countries determine the best course of action for VAS programming during the COVID-19 pandemic. The steps identified in the decision tree are detailed below.

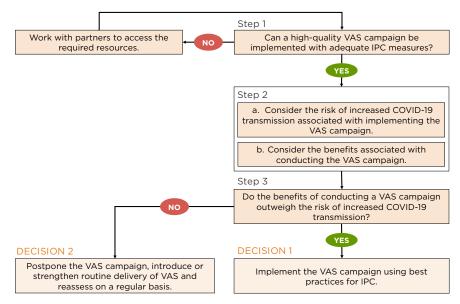


Figure 1: Decision tree to guide countries on the appropriateness of VAS campaigns in the context of the COVID-19 pandemic.

Step 1: Assess the country's capacity to implement a campaign safely and effectively.

Questions to consider during Step 1:

- What is the best delivery modality for the campaign?
 - The delivery method will determine the IPC measures and resources that are required to meet COVID-19 best practices.
 - Campaigns can be delivered in several ways (door-to-door; at a fixed site in the community or at a health post or health facility; over a one-week period, or over several weeks, etc.), with each method having its own associated risks and benefits.
 - Consider the local COVID-19 transmission scenario. The risk-benefit balance for each delivery method may differ sub-nationally, and the best delivery method may vary across districts or regions.
 - Consider whether safe transportation is available for caregivers and children and whether caregivers will be willing to travel to and/or attend fixed sites.
 - o Consider whether caregivers would accept home visits by health workers during the COVID-19 pandemic.
- · What is the capacity to implement rigorous COVID-19 IPC measures during the VAS campaign?
 - Are there enough resources (e.g. human resources, personal protective equipment, transportation) to conduct a
 VAS campaign following best practices for IPC during the COVID-19 pandemic?
 - Can adequate personal protective equipment (PPE) be provided to all front-line workers administering VAS during the campaign? If not, are government and health professionals comfortable with implementing VAS using the caregiver administration model?
 - Are there enough resources (e.g. human resources, expertise, PPE, transportation) to conduct COVID-19 surveillance following the VAS campaign?
- If a high-quality VAS campaign cannot be implemented with adequate IPC measures, is it possible to work with partners and stakeholders to access the required resources?

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Step 2a: Consider the potential risk of increased COVID-19 transmission associated with implementing the VAS campaign.

Questions to consider during Step 2a:

- · What is the COVID-19 transmission scenario in the country? How does it look when broken down sub-nationally?
- What type and level of control measures and interventions are being imposed by the government and what is the community adherence to those measures? Do these factors vary across sub-national regions?
- If a VAS campaign is conducted and it results in increased transmission of COVID-19, what impact will it have on the capacity of the health system to deliver routine health services? What resources and actions would be required for risk communication if the VAS campaign results in increased COVID-19 transmission?
- What is the capacity to communicate and engage effectively with the community to ensure that community members are confident in the IPC and public health measures that will be taken during the campaign?
- If the risk of increased COVID-19 transmission associated with implementing the campaign as originally planned is high, can the risk be reduced by further modifying the VAS delivery method (e.g. decentralizing VAS delivery to smaller administrative units, thus reducing the risk of crowding)?

Step 2b: Consider the benefits associated with implementing the VAS campaign.

Questions to consider during Step 2b:

- What is the estimated public health impact of not conducting the VAS campaign?
 - How long ago was the last VAS round? Was it more than 6 months ago?
 - Consider that children aged 6-59 months who are at risk of VAD could be more vulnerable to common childhood illnesses and diarrhoea due to a missed dose of VAS.
 - Consider those affected by food insecurity and the increased risk of undernutrition due to shutdowns caused by the COVID-19 pandemic.
 - Consider recent data on the incidence of diarrhoea or measles to assess whether children are at increased risk of illness due to the COVID-19 pandemic. Compare with data from the same time last year to control for seasonality.
- What is the alternative to a VAS campaign?
 - What level of coverage can be achieved through routine VAS delivery as an alternative?
- · How does the community and target population perceive the benefits of VAS for their children?
 - Is there strong demand for VAS from the community, such that demand would still be high in the context of the COVID-19 pandemic?

Step 3: Based on the risk-benefit analysis conducted in Steps 1 and 2, determine the most appropriate course of action.

PLANNING AND EXECUTING THE COURSE OF ACTION

Decision 1: Implement the VAS campaign using best practices for IPC.

If a country decides to proceed with the VAS campaign, the campaign should be implemented with best practices for IPC in accordance with the recommendations detailed in the GAVA operational guide [2], WHO guidelines for IPC [4], and local COVID-19 prevention and control measures and regulations.

Best practices for IPC during VAS delivery include, but are not limited to, the following:

- Screening of health workers (following national protocols where applicable);
- · Frequent hand hygiene;
- Physical distancing;
- · Conducting VAS delivery outside or in well-ventilated areas that are frequently disinfected;
- · Reducing the risk of crowding;

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- · The use of medical masks by health workers and, where not available, use of the caregiver administration model; and
- Other practices recommended by WHO and local authorities.

If IPC resources are limited during implementation, decisions may need to be made at the local level regarding the administration model to be employed. For example, if medical masks can no longer be provided to all health workers distributing VAS, then the caregiver administration model must be used. Training plans for health workers must be revised accordingly.

Decision 2: Postpone the VAS campaign, introduce or strengthen routine delivery of VAS, and reassess on a regular basis.

If a country decides not to proceed with a VAS campaign, GAVA recommends that countries introduce or reinforce VAS delivery though the routine health system, reassess this decision regularly, and plan for intensified, catch-up VAS delivery where necessary.

- · Introduce or reinforce VAS delivery through existing and/or adapted routine health services.
 - Countries that decide to postpone the VAS campaign should consider implementing VAS through whichever
 existing health system platforms are able to deliver services that reach children aged 6-59 months and their
 caregivers. VAS should be delivered as part of an essential package of child health and nutrition interventions (e.g.
 routine immunization, deworming, screening for acute malnutrition), and these interventions should continue to be
 offered at all possible contact points, while following recommended IPC measures.
 - Where resources are limited, in some settings it may be appropriate to prioritize the delivery of VAS to children aged 6-23 months.
- · Plan for intensified, catch-up VAS delivery.
 - In settings where VAS was typically delivered through campaigns before the COVID-19 pandemic, and where these campaigns have been postponed or cancelled, catch-up VAS delivery will be needed.
 - o In countries that needed to rely on routine VAS delivery during COVID-19, the rapid shift to delivering VAS through routine systems can cause a significant drop in coverage, so catch-up VAS delivery will still be needed. It is often challenging for routine systems to reach children above 18 months of age, as older children have completed their immunization schedule and caregivers do not often seek health services for older children unless they are ill. In addition, disruptions to the health system during the pandemic, in combination with reduced health care-seeking by caregivers, means that routine systems may not reach as many children as usual during the COVID-19 pandemic.
 - For these reasons, countries should begin to plan now for the reinstatement and intensification of VAS campaigns
 or other methods of VAS delivery that are able to achieve high coverage. VAS delivery should be carried out at the
 earliest opportunity, once conditions warrant and national authorities have deemed that campaigns and/or routine
 delivery of VAS can proceed.
- Reassess the decision to postpone or cancel plans for VAS campaigns weekly.
 - Countries should reassess their decision regularly to ensure that new information and data are included in the riskbenefit analysis.

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