



INSECTICIDE-TREATED NET (ITN) MASS DISTRIBUTION CAMPAIGNS: TRENDS AND ADAPTATIONS DURING THE COVID-19 PANDEMIC

APRIL 2022



The Alliance for
Malaria Prevention

INTRODUCTION

To support malaria-endemic countries in the context of the COVID-19 pandemic, the Alliance for Malaria Prevention (AMP) adapted its established technical assistance approach to distance support to assist national malaria programmes and partners in adapting their ITN campaigns in accordance with WHO COVID-19 infection prevention measures¹. Further, to assist national malaria programmes with maintaining their ITN campaigns in line with the WHO Global Malaria Programme (GMP) guidance², AMP, with funding from the Global Fund to fight HIV/AIDS, Tuberculosis and Malaria (Global Fund), developed a series of operational guidance documents on all aspects of implementing ITN campaigns

in the context of the COVID-19 pandemic. All documents can be found at: <https://allianceformalariaprevention.com/tools-guidance/itn-distribution-during-covid-19/>.

For countries with planned ITN campaigns, AMP worked with national malaria programme and implementing partner staff to develop appropriate COVID-19 adaptations during the macroplanning phase for successful ITN campaigns. AMP also developed case studies highlighting the COVID-19 adaptations and how they were implemented, examining achievements, key enabling factors, key challenges and lessons learned within their revised strategies.

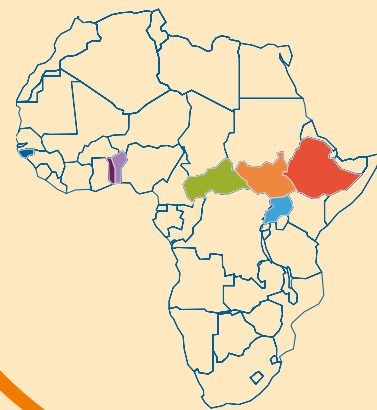
1. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

2. <https://www.who.int/news/item/23-04-2020-who-urges-countries-to-move-quickly-to-save-lives-from-malaria-in-sub-saharan-africa>

© National Programme for the Fight against Malaria, Benin



KEY HIGHLIGHTS



GUINEA BISSAU

At the end of the campaign, 2,293,177 people had been reached with the distribution of 1,287,746 ITNs in advance of the high transmission season. This equated to one ITN for every 1.8 people (provisional administrative data). There was strong engagement of all actors involved in the campaign at a time when a state of emergency had been declared which ensured a rapid strategy review and adaptation to align to the context of COVID-19.

ETHIOPIA

Over 1.6 million ITNs were distributed to 604,502 households with the potential to protect over three million people living at high risk of malaria in three regions of the country. The first ITN distribution reported after the onset of COVID-19 covered 55 woredas (districts) and 1,051 kebeles (villages) distribution site health posts using modern and local transportation resources. Community engagement was a high priority for a successful campaign.

CENTRAL AFRICAN REPUBLIC (CAR)

213,919 ITNs were issued to cover a population estimated at the microplanning stage at 345,961 inhabitants through a door-to-door distribution strategy. Distribution was also made to internally displaced persons (IDP) and special groups (SG). Overall, the objectives were achieved for ITNs distributed (97 per cent), households covered (90 per cent) and population covered (98 per cent).

BENIN

After the campaign 13,557,012 people, close to the entire population of over 14 million, were protected with ITNs in advance of the high transmission malaria season. Only minor delays were experienced vis-à-vis the original timeline.

TOGO

The ITN campaign in Togo, under the leadership of the Ministry of Health, Public Hygiene and Universal Access to Healthcare (MSHPAUS) and the National Malaria Control Programme (NMCP) led to the registration of 2,475,085 households and distribution of 5,421,189 mosquito nets across the country. More than 21,442 actors were used to implement the campaign, but no cases of COVID-19 were recorded among these actors.

SOUTH SUDAN

During the 2020 campaign in Northern Bahr el Ghazal State, the household registration resulted in a population count of 1,824,293 people, who in turn received a total of 983,704 ITNs for 300,901 households, or an average 3.2 ITNs per household. Original timelines were mostly observed, although there was a pause between registration and distribution due to the report of a COVID-19 case and the need to plan, discuss with national leadership and implement modifications to the campaign's original plan.

UGANDA

Securing additional ITNs and operational costs ensured that enough ITNs were in place during district distribution given the adapted campaign strategy, which did not include a separate phase for household registration to define actual ITN needs in each targeted area. Uganda was successful in distributing 9.4 million nets in waves I and II during the COVID-19 context and used lessons learned to improve campaign outcomes in subsequent waves.

COVID-19 ADAPTATIONS

This document highlights some of the adaptations adopted by different countries, emphasizing where there are similarities in approach and where there are differences. It is a summary of the information found in the annex which was collected from countries implementing a mass ITN distribution campaign during 2020, at the beginning of the COVID-19 pandemic.

For more detail from each country, please see [Annex 1: Adaptations by country](#).

A number of trends were identified across countries implementing their ITN campaigns in the context of COVID-19. Most importantly, almost every country attributed the success of their campaign to the flexibility of national governments, donors and partners (national

and international) in adapting budgets and timelines for the campaign and in facilitating procurement of personal protective equipment (PPE) and other commodities required to ensure that campaign staff followed government and international regulations around COVID-19 infection prevention and control measures.

The identification of adaptations and trends focuses on the main implementation areas of a campaign: coordination, procurement, macroplanning, microplanning, logistics, training, social and behaviour change (SBC), data collection, supervision and monitoring, implementation arrangements, household registration, ITN distribution, payments and post-distribution.

Coordination

Trend


The majority of countries emphasized the importance of support and a flexible attitude towards their campaign at the highest level, not only from the national government, but from international and local partners,

including donors and implementing partners. In many countries the national COVID-19 Task Force, or equivalent, was involved closely in their coordination mechanism.

Comoros

At the national level several consultation and planning meetings were held by the central coordination committee comprising staff from different areas of the *Programme national de la lutte contre la paludisme* (PNLP), including monitoring and evaluation, logistics, finance and vector control, as well as the National Commission for the fight against COVID-19.

At the island level (three major islands and a number of smaller ones) a coordination team was made up of staff from regional directorates, surveillance agents from health districts, a member of the island commission to fight COVID-19, district health staff and other island resource people.



© CAR: Coordination meeting at local level. Note that masks were not available but there was adherence to physical distancing.



The successful campaign was the outcome of timely decision-making, the result of solid coordination and communication on the part of the National Malaria Control Programme, availability for teleconference meetings, exchange of e-mails, and meetings of technical committees including good cooperation with partners such as the Global Fund, WHO, RBM Partnership and AMP.”

Tchad

South Sudan

There was effective coordination between international partners (AMP, Global Fund, Malaria Consortium, PSI, WHO) and the National Malaria Control Programme. The National COVID-19 Task Force acted to provide additional technical monitoring and leadership. Enhanced coordination with local government actors assisted in the logistics

and last mile distribution, as well as assistance with crowd control to maintain physical distancing in line with COVID-19 infection prevention and control measures established by the government. Further to limit COVID-19, the in-country Task Force met virtually via Zoom every week to coordinate each planned campaign.

Procurement

Trend

Most countries required additional budget to procure commodities for COVID-19 infection prevention measures, i.e. PPE, comprising face masks, hand sanitizers, etc. Many countries using international procurement for those commodities experienced delays in shipments because of movement restrictions caused by COVID-19 prevention measures and global supply chain disruption. Where local procurement was approved in an effort to ensure ITNs were distributed in a timely

manner, in-country procurement was often subject to inflated prices.

In some cases, particularly when household registration was replaced by use of census or other population data so as to limit contact with households, additional ITNs needed to be procured because of the potential difference between the data used for quantification and the need based on the door-to-door visits.

Benin

Procurement procedures were modified to minimize delays in the campaign implementation. Procurement of materials, such as face masks and soap to protect the

health of campaign workers and to ensure the safety of household recipients of ITNs was timely.



There were major implications as none of the PPE was budgeted at the outset of the campaign. Masks were procured locally and inflated costs were noted from suppliers given a period of high demand and low supply.”

Benin

Macroplanning

Trend

For the 2020 campaigns, macroplanning had generally been completed before the declaration of the COVID-19 pandemic. With the infection prevention measures put in place by governments, aligned with the restrictions on movement, gatherings of people, etc., modifications to the macroplanning were required. Most countries updated their main macroplanning documents (overall campaign action plan, logistics plan of action, social and behaviour change plan, monitoring and evaluation plan, risk mitigation plan, timeline and budget) to reflect the necessary COVID-19 prevention measures.

With regard to strategy, and to comply with COVID-19 infection prevention measures, in most cases a change was made from the traditional approach of registering households in person, handing out vouchers for ITNs according to registration numbers and mobilizing households to attend fixed site distribution points on specific days. Instead a door-to-door strategy was adopted, either with two visits (one for registration and one for ITN distribution), or just one (registration and distribution at the same time). In some cases, the fixed site distribution remained but with infection prevention measures in place and enhanced crowd control measures.

Central African Republic

The macroplanning documents were reviewed. The plan of action took into account the COVID-19 context with infection prevention measures to be respected, personal protection equipment to be used, health screening of

personnel during training required, reduction in the number of working days to minimize expose of personnel to the risks of COVID-19, and formulation of key messages adapted to the COVID-19 context.



Close collaboration was established between the ITN Campaign Coordination Committee and the COVID-19 Technical Management Committee to harmonize interventions and work in line with government guidelines for hygiene measures put in place to limit the spread of COVID-19, as well as to maintain malaria service provision (routine mass distribution of ITNs, treatment of mild and severe malaria, intermittent preventive treatment (IPT) in pregnancy, etc.).”

Central African Republic

Microplanning

Trend

In many countries, microplanning workshops were adapted, with fewer participants and more workshops. In some cases, where it was deemed to be reliable, data from previous

microplanning activities were used. In others, data from other health interventions, such as Indoor Residual Spraying (IRS) or measles immunizations, were used.

Central African Republic

Owing to the restrictions in place in the COVID-19 context, previous microplanning population data were used for the 2020 campaign. The updates done at the central level were guided by a concern to reduce the exposure of field workers to the risk of contracting COVID-19. The principal adjustments concerned the number of training and distribution days, the number of

volunteers, aspects of communication and PPE for COVID-19 infection prevention and control. There were 213,919 ITNs issued to cover a microplanned population estimated at 345,961 inhabitants through a door-to-door strategy, to internally displaced persons (IDP) and special population groups. Campaign targets were achieved for the ITNs distributed, households covered and populations identified.



The microplanning budget and additional costs related to COVID-19 – equipment, coordination activities at central level, management costs of partner NGOs and World Vision’s support costs in the framework of the zero cash policy (ZCP) approach – were presented to the Global Fund and approval obtained to cover all costs in view of the country’s fragility and financial context, as well as the burden of malaria and the need to ensure ITNs reached households. The budget for distributing ITNs to a population of 345,961 inhabitants was revised upwards taking into account the number of training and distribution days, the number of volunteers, aspects of communication and personal protective equipment against COVID-19.”

Central African Republic

Logistics

Trend

By the time COVID-19 was declared as a pandemic, most countries had already received their ITN deliveries in country for their campaign. Logistics activities were adapted to take account of the various restrictions on movement of people and numbers who could gather together (for example, for offloading bales), and the requirement to use PPE. In many cases, since the implementation strategy

changed in order to reflect the COVID-19 prevention measures in place, the logistics operation had to be adjusted. For example, if the change was from fixed site to single phase door-to-door distribution of ITNs, the pre-positioning of the ITNs was adapted and the provision of last mile transport to door-to-door teams was included in the campaign budget.

Guinea Bissau

Due to the COVID-19 pandemic, the logistics process was different from previous campaigns. In compliance with the recommendations of WHO and the Government of Guinea-Bissau the “physical distancing and avoiding crowds” regulations were taken into account during planning and budgeting. To avoid delays and to reduce the number of person-to-person contacts, household registration was coupled with ITN distribution and it was therefore not possible to adjust the ITN needs based on the household registration results. The ITNs were transported from the central warehouses (CEMOME and Bafata) directly to the distribution points of the health areas according to the microplanning results. Since the microplans were not adjusted based on registration data, some localities did not receive enough ITNs while others received too many. A great deal of redeployment was done during distribution by supervisors but this effort did not correct the gap in all areas. This is one of the main reasons why a second phase of distribution was planned in order to ensure access to ITNs for households that were missed due to stock-outs in some localities during the first phase.



Another challenge related to the emergency measures around COVID-19 was the restriction that no more than four people (daily workers) were allowed to unload the ITNs from containers.

This challenge was solved by extending warehouse working hours, including weekends, and allowing more shifts to make up for time lost. In addition, an extension was negotiated for time of arrival of trucks, which were staggered to take account of the new loading and unloading times.”

Guinea Bissau

Training

Trend

In almost every country, the planned training sessions were shortened with fewer participants at each session but with more sessions. Content was adapted to include information on COVID-19, the infection prevention measures, and how these would affect the campaign implementation and timelines. In almost all cases, participants were using PPE and maintaining other infection prevention measures, such as physical distancing. While some sessions

were held online, many sessions were held outside and if necessary to hold in a room, then handwashing facilities were provided and the room was disinfected before and after a session. To counteract any shortfall in the training quality due to the adaptations put in place, many countries developed additional supporting materials, such as detailed standard operating procedures (SOPs) that workers could carry with them.



Togo

The training was for 30 participants including facilitators, which was in line with the country's regulations for the prevention of COVID-19. In addition, physical distance, masking, routine handwashing, the use of hydro-alcoholic gel and disinfection of training rooms were the rule. The training sites systematically had to have handwashing stations. To compensate for any inadequacies related to the training quality due to COVID-19 restrictions, short videos were shared with the actors to correct or reinforce certain aspects of the campaign. Messages with emphasis on the prevention of COVID-19 were developed and provided to the actors to remind them of what was expected.

“

Conducting multiple parallel training sessions (e.g. in schools) can help to reduce the number of days required to train large numbers of campaign actors but requires a greater number of trainers.”

Togo

Social and behaviour change (SBC)

Trend

All countries reported using integrated messaging, giving information on both malaria, use of ITNs and prevention of COVID-19. In most cases, the messages were also used to give information on the adaptations and changes to the campaign implementation. In many cases, interpersonal communication was adapted, with messages being disseminated via town criers, virtual advocacy meetings, megaphones, vehicles with loudspeakers, etc.

Uganda

COVID-19 messages were integrated into all SBC messages, especially those communicated during the door-to-door registration and ITN distribution through interpersonal communication (IPC) while respecting physical distancing and use of masks. Key messages were given to village health teams (VHTs) as part of their standard operating procedures to ensure that they were consistent, clear and correct and to avoid any problems with miscommunication due to lack of understanding given challenges with ensuring high-quality training. Visibility of the campaign was achieved through various channels and activities, including radio, television and social media. Social mobilization at district level was added.



© Uganda: Utilizing town criers for messaging



The SBC activities were modified to adapt to the COVID-19 context by discouraging gatherings of large crowds of people at marketplaces and road show events. The time taken to educate household members at distribution sites was also reduced in line with the COVID-19 infection prevention guidelines. Joint social mobilization was conducted for IRS, ITNs and COVID-19 using town criers and local radio stations. In Gambella region, door-to-door SBC using cue cards for ITNs was carried out by community mobilizers who visited households during the IRS campaign.”

Ethiopia

Data collection

Trend

Data collection methods varied quite widely, with some countries continuing to use their previous paper-based system, daily review meetings and validation of data.

A few countries, however, reported that the planned change to digitalized or electronic data collection system(s) contributed to reducing the risk of infection via paper-based tools.

Uganda

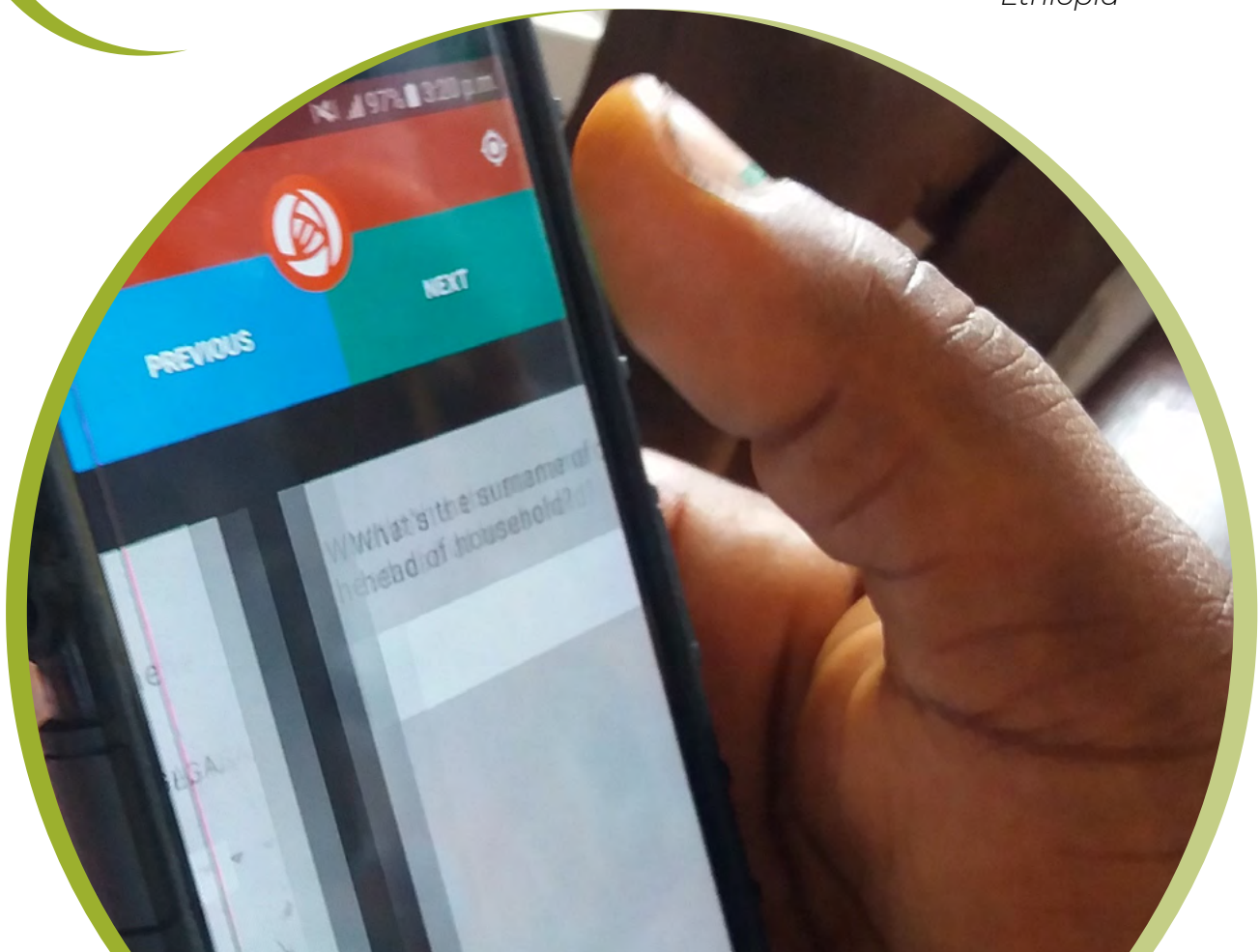
Data for household registration and ITN distribution were captured electronically through the Electronic Data Management Information System (EDMIS) as well as through the Collaborative Communication Management Information System (CCMIS) which captured all other data including supervision. This limited the movement of paper between locations. Data collection forms

were reviewed prior to the campaign with all partners and the information to be collected was significantly reduced to ensure that limited time was required at each household to reduce potential transmission of and exposure to COVID-19. Minimum data points to ensure accountability for the ITNs were retained for the campaign.



The COVID-19 context necessitated a complete change from paper-based data collection in previous campaigns to SMS text messaging to share daily data on the number of households served, total number of people served in the households and total number of ITNs distributed.”

Ethiopia



Supervision and monitoring

Trend

Most countries reported a reduction in the amount of supervisory and monitoring activities that were possible. However, it was also found that increasing the amount of local,

rather than central, supervision and giving more responsibility to supervisory staff for health checks, etc. was necessary. Remote supervision via telephone was also introduced.

Tchad

Effective supervision is essential. The community (local) supervisor plays a central role in the management and resolution of problems in collaboration with local leaders. The supervisor ensured correct understanding of the definition of a “household” by the door-to-door teams to avoid inflating the number of household members and allocation of

too many ITNs, which would create ruptures in stock. The supervisor was responsible for maintaining strict oversight of protection measures against COVID-19 during all the activities. In-person supervision by teams at national level was reduced in favour of virtual interactions by telephone, radio and/or Internet.



Supervision and monitoring were implemented as originally planned, although field-based activities were reduced in scale. At the local level, supervisors focused on ensuring that distribution teams adhered to the COVID-19 safety measures, including that health checks were implemented each day, as well as ensuring management of the daily team movement plans.”

Benin

Household registration and ITN distribution

Trend

The merging of household registration and ITN distribution occurred in many countries in order to limit household contacts and large gatherings of people in one place. The single phase door-to-door strategy involved registering households and distributing ITNs at the same time. SBC messages were passed to households by the registration/distribution teams during the same visit. Mandatory infection prevention measures were put in

place, such as teams using PPE, no signatures on paperwork, etc. In some cases, countries continued with distribution via fixed sites, although with modifications such as limiting the number of people visiting a site each day, physical distancing, recipients asked to tear vouchers in half in front of distributors instead of handing them to distribution team members, etc.

Tchad

Adapting to the COVID-19 context, the revised strategy established: (i) the adoption of door-to-door distribution, i.e. direct delivery of ITNs to each household; (ii) the addition of a third person responsible for re-supply of ITNs; (iii) the merging of eight days of registration and three days of distribution into six days of registration combined with distribution; (iv) the transformation of fixed sites into pre-

positioning sites; (v) the abolition of distribution coupons and summary forms to reduce physical contact to the minimum; (vi) capping the number of ITNs at three per household to better manage distribution and reduce to a minimum any shortage of ITNs. Continuous, rapid and timely re-supply of distribution teams was essential to achieve the objectives.



The budget was revised and amended to include the costs of acquisition of personal protective equipment and other health products, and to take account of the changes in registration and distribution activities to a single phase door-to-door activity.”

Tchad

Ethiopia

The strategy was redefined as: (i) limiting the number of households to be served in a single day to less than or equal to 100 from each distribution point and setting up more than one distribution point in the health post; (ii) restricting the actual distribution area (with a simple fence) to prevent entrance

of a large crowd and only allowing entry of one person per household; (iii) staggering distributions by assigning people from different neighbourhoods a different time of day to receive their ITNs; (iv) assigning security personnel (village militia) to help in controlling crowds.

“

There was a pause between registration and distribution as COVID-19 cases increased and modifications to the campaign needed to be considered and discussed by national leadership.

Modified fixed-point distribution was held for several days with additional distribution points added over a longer period of time. All activities were organized in a way to avoid a large congregation of people.”

South Sudan



Post-distribution

Trend

In general, post-distribution activities were affected by the restrictions imposed by COVID-19. Most countries held review meetings, but these were limited. Post-distribution communication activities were

also limited. Most countries noted that there was a need to revise their waste management planning, especially with the need to manage used PPE.

Uganda

Final review meetings were held in each sub-county to get feedback from stakeholders, to capture lessons learned and to develop recommendations for subsequent campaign waves.

Waste management: The distribution team collected all of the waste generated each day, including waste from disposable PPE, and put it in bale wrapping to keep it in manageable packages. The waste was then transported back to the sub-county stores for proper disposal.



Post-distribution activities and home visits to confirm receipt and check the hanging of the ITNs were cancelled for budgetary reasons and subsequent lack of availability of personnel for the activity.”

Tchad

ANNEX 1:

[Annex 1](#) contains more detail of different adaptations from the countries that had mass ITN campaigns in 2020 in the COVID-19 context.





AMP CONTACTS

To join the weekly AMP conference call each Wednesday at 10:00 AM Eastern time (16.00 PM CET) use the following Zoom meeting line:

<https://us06web.zoom.us/j/2367777867?pwd=a1lhZk9KQmcxMXNaWnRaN1JCUTQ3dz09>

You can find your local number to join the weekly call:

<https://zoom.us/u/acyOjkIj4>

To be added to the AMP mailing list visit:

<https://allianceformalariaprevention.com/weekly-conference-call/signup-for-our-mailing-list/>

To contact AMP or join an AMP working group please e-mail:

allianceformalariaprevention@gmail.com

For further information please go to the AMP website:

<https://allianceformalariaprevention.com>