



Benin case study: Distributing ITNs during the COVID-19 pandemic

Key enabling factors for continuing the mass campaign during the COVID-19 pandemic

- **Strong support** from the Government of Benin, through the Ministry of Health and the National Malaria Control Programme (NMCP), to continue with the implementation of the campaign in advance of the high transmission malaria season
- **Effective coordination** between international partners (Global Fund, World Health Organization, RBM Partnership to End Malaria, Alliance for Malaria Prevention, Bill and Melinda Gates Foundation) and the NMCP and in-country partners (the United States President's Malaria Initiative, Catholic Relief Services)
- **Regular communication** between the main campaign funder (Global Fund) and the NMCP for timely decision-making to avoid delays
- **Rapid problem-solving** (for example, sourcing of COVID-19 protective materials for campaign workers) by the NMCP with support from the Ministry of Health and partners
- **Flexibility** in modifying procurement procedures to minimize delays in the campaign implementation
- Use of an **electronic system** for data collection that facilitated a “no touch” approach during the ITN distribution and payment of campaign workers



Achievements

- After distribution, 13,557,012 people, close to the entire population of over 14 million, are protected with 7,638,192 ITNs in advance of the high transmission malaria season
- Only minor delays experienced vis-à-vis the original timeline
- Rapid strategy adaptations for key remaining activities in line with WHO and national COVID-19 infection prevention measures:
 - Training of campaign workers for the ITN distribution modified, including information on regular handwashing and COVID-19 infection prevention
 - Fixed site to door-to-door distribution approach, including revised team structure to ensure regular resupply of ITNs to distributors to meet daily targets
 - Communication strategy to include integrated messaging (malaria, ITNs and COVID-19)
- Timely procurement of materials to protect the health of campaign workers, as well as the households receiving ITNs, including masks, gloves and soap
- Leverage of the existing community health worker network for social and behaviour change (SBC) and ITN distribution

Lessons learned and recommendations

- **Engagement** with all national actors, particularly the COVID-19 emergency taskforce, is critical for ensuring strong coordination, support for implementation and limiting delays
- **Careful planning** is required for the door-to-door distribution in terms of the number of households per day – options considered should be based on ensuring that all activities can take place, including the communication of a limited number of SBC messages, at each household
- **Timely, continuous resupply** of distribution teams is critical to meeting daily targets – it is necessary to undertake detailed quantification to ensure that sufficient transport means are available
- **Reinforcement of supervision** at the community/implementation level – if problems happen, they will start locally. The community supervisor is a critical part of managing and resolving these issues in collaboration with local leaders
- **Urban area planning** for SBC and ITN distribution requires different adaptations, including for resupply of teams
- Consideration should be given to **creation of short self-learning videos**, accessible by mobile phones, on the principal aspects of the campaign
- **Order COVID-19 protection equipment** in a timely manner, especially masks and thermo flashes (thermometers), if needed, which are not always available in quantity locally
- **Waste management** must be considered, in particular for protective equipment, as part of the strategy adaptations for the COVID-19 context
- **Electronic data collection** is a significant benefit for the implementation of the mass campaign; sufficient devices should be available to limit the time for implementation of activities in the context of an outbreak such as COVID-19

Context

The Benin NMCP uses two main vector control methods: indoor residual spraying (IRS) in targeted areas and distribution of ITNs through both campaign and routine channels. ITNs campaigns are organized every three years and routine distribution is continuous, including during the campaign years, in line with WHO guidance.

The NMCP began planning for the 2020 mass ITN distribution campaign in 2019. A decision had been taken to introduce electronic data collection in an effort to improve the quality and accuracy of the household registration, which in turn would provide a better population base for planning future ITN campaigns, as well as other health campaigns (e.g. Expanded Programme on Immunization (EPI), seasonal malaria chemoprevention (SMC)). Catholic Relief Services was engaged as the partner for the information and communication technology for development (ICT4D) deployment during the campaign.

- The campaign implementation protocol, as well as the risk assessment and mitigation plan, timeline and budget were completed in October 2019
- Microplanning, based on a strategy of door-to-door household registration and fixed site ITN distribution, and using a bottom-up approach, was completed for the pilot phase in November 2019 and for the national phase in February 2020
- Household registration, carried out door-to-door by two-person teams using smartphones to collect data and to give social and behaviour change messages (SBC) was completed for the pilot phase in December 2019 and for the national phase 24 February—13 March 2020
 - Households were given one voucher with their ITN allocation (one ITN for two people with a maximum of 10 nets per household, rounding up in the case of an uneven number of people in the household)
 - Supervision and monitoring were implemented as originally planned
- Final data from the household registration to facilitate the transport of the ITNs was available 15 March 2020

The COVID-19 pandemic reached Benin the second week of March, with the first cases being recorded the week of 09 March. The ITN distribution was scheduled to begin 29 March 2020. Given the importance of the ITN distribution for protecting the population prior to the rainy season, particularly in a situation where the COVID pandemic potentially worsened, the NMCP was requested to develop a revised strategy and budget for ensuring that ITNs reached households while maximizing COVID-19 infection prevention.



Head of a household tearing up the voucher after receiving ITNs

The revised strategy

The revised strategy was needed to cover only the activities remaining prior to the ITN distribution, i.e. training, distribution, supervision and monitoring, logistics and communication.

Training:

- Training of campaign personnel down to the level of the distribution team supervisors and distribution teams had been completed
- Significant adaptations were required for the training of the distribution point supervisors and teams in light of the COVID-19 pandemic and the urgency to get ITNs into households through the revised strategy:
 - Adapted to take place over three hours with a maximum of 18 people per class
 - Hygiene and safety measures were put in place (handwashing facilities, physical distancing, scanning of trainees' badges rather than fingerprinting, health check, etc.)
 - Rooms were cleaned thoroughly before and after every session
 - Revised content for the shortened training sessions included door-to-door distribution techniques with the use of smartphones and hygiene measures and the importance of keeping at least one metre physical distance from any other person
 - Audiovisual files and an electronic version of the distribution guide shared with the distributors at the end of the training to enable them to review the content of the training once at home
 - WhatsApp groups created between trainers and distributors to facilitate exchanges after training

Distribution:

The original plan was to serve around 300 households per day for four days at each fixed site (5,825 distribution sites for 5,295 villages). Each fixed site was staffed with four distribution team members.

The change to door-to-door distribution meant that the number of days was increased. The distribution team consisted of four agents: the delivery agent, the technical agent, the distributor and the village chief. The technical agent, using a smartphone, scanned the coupon, which had been placed on a surface such as the floor or chair, without touching it. He then communicated the number of ITNs for the household to the distributor. Once they had received their ITNs, householders were asked to tear up the voucher in front of the distribution teams and put it in the waste. The village chief was responsible for managing the stocks of ITNs at the storage location. He supplied the delivery agent who was responsible for keeping the team provided with around 25 ITNs throughout the day.

The distribution teams were trained and equipped with masks, gloves and soap to wash their hands at least once every five households visited, using water requested from the household. Used masks and gloves were placed in a waste bag provided to each distribution team, then given to supervisors at the end of the day for destruction in health centres.

Supervision and monitoring:

At the national monitor and district supervisor levels, planned field-based activities were reduced in scale. A daily scrutiny of the distribution data uploaded from the smartphones and a virtual meeting each evening allowed supervisors and monitors to focus on problem areas and challenges that could then be addressed and resolved. At the local level, supervisors focused on ensuring that distribution teams adhered to the COVID-19 safety measures, as well as ensuring planning and management of the daily team movement plans. Their responsibility included checking the health of distribution team members each day and not allowing them to continue if they showed any COVID-19-like

symptoms. As yet, results of the local supervision have not been thoroughly analysed, although anecdotally, it seems that it was quite a challenge for distribution teams to adhere closely to the distancing regulations. In addition, a WhatsApp group has been created at the national level which integrates the actors at different levels in order to resolve any difficulties or issues arising during the distribution.

Logistics:

ITNs were received in-country and transported as planned from central level to department level and then to sub-division level. From there they were transported to village level storage where they would have been transported as required to distribution sites. In this case, the strategy was amended to get the ITNs from village storage to the door-to-door distribution teams. For each distribution team, an additional agent was employed (the delivery agent), responsible for working with the village storekeeper (the village chief) to keep the team supplied with ITNs on a regular basis, using a variety of transport means, such as motorbike, tricycle, etc. Given the high number of households to reach per day (120 or 17 per hour over a 7-hour day), a significant number of resupply trips were required to keep teams with sufficient ITNs given that each team carried one bale at a time (25 per person).



Delivery agents

Communication:

The plan for communication included radio and television slots, town announcers and advocacy at every level. Advocacy meetings were completed in advance of the household registration phase, engaging leaders for the entirety of the campaign process. In advance of implementation of the revised strategy, messages were modified slightly to inform about the change of strategy, the new dates and the measures being taken to prevent transmission of COVID-19. To ensure that householders not at home received their ITNs, town announcers were used to inform that coupons could be left with a neighbour who could take delivery of their ITNs as well as their own. As well as radio, television and town announcers, mobile messaging and audio call messages (for the less literate) were used. Community leaders were involved in local mobilization and were asked to be alert to any miscommunication that they heard about the ITNs or COVID-19 and to report these to the community supervisor. Following the distribution, communication reinforced the messages passed to households by the distribution teams, i.e. proper airing of new ITNs, use of ITNs, hanging techniques and measures to prevent COVID-19. The strong communication campaign led to there being no significant adverse rumours reported during the campaign. Since the household phone numbers were available in the database, text messages were sent to households to disseminate key information on the ITN campaign, malaria and how to care for the ITNs.



ITN distribution to the head of a household

Budget implications

Changes to the budget were made quickly in line with the new door-to-door strategy, taking into account Benin's specific geographic and logistical context and available human resources. Given the urgency of the situation and remaining funds in the country's grant, the Global Fund was able rapidly to approve the amendments. Important modifications included the necessary increase in days for community mobilization, briefings and training, supervision and distribution as well as for purchase of personal protective equipment. Benin projected an increase in total campaign duration from eight to 16 days to accommodate the new strategy. However, a post-campaign programme review will be important to evaluate the time, cost, staffing, logistics and ultimately coverage with ITNs with the implementation of the revised strategy.

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