

## Allocating ITNs in the context of COVID-19 transmission

1, July 2020

### Remember the COVID-19 infection prevention measures<sup>1</sup>

- Maintain physical distance of at least one meter from all others, except immediate members of the family or people with whom you share accommodation
- Regularly and thoroughly clean your hands with an alcohol-based sanitizer or wash them with soap and water. WHO recommends washing hands often with soap and water for at least 20 seconds. If soap or hand sanitizer are not available, rub hands vigorously with wood ashes
- Avoid going to crowded places
- Avoid touching your eyes, nose and mouth
- Practice respiratory hygiene by coughing or sneezing into a bent elbow or tissue and then immediately dispose of the tissue<sup>2</sup> and wash your hands
- If you have fever or respiratory symptoms, you should stay home and not go to work
- Wear a fabric mask if there is widespread community transmission, and especially where physical distancing cannot be maintained
- Correctly use and dispose of any COVID-19 infection prevention materials provided. Follow national government guidance for disposal
- Maintain all other measures described even when wearing protective equipment
- Keep up to date with the latest guidance and regulations put in place by WHO and the national government

NOTE: As the pandemic evolves, WHO updates the infection prevention measures based on new scientific findings. Check for any updates on

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>.

**Core AMP documents:** *Key guidance for distribution of insecticide-treated nets (ITNs) during the COVID-19 pandemic*

*General considerations for safe ITN distribution during the COVID-19 pandemic*

<https://allianceformalariaprevention.com/about/amp-guidelines-and-statements/>

### Decide on allocation of ITNs per household

ITN allocation is one of the most important decisions that national malaria programmes need to take at the outset of the campaign planning process. ITN allocation will depend on the strategy adopted and the level of confidence in the data used for macro/micro planning, as well as for pre-positioning of ITNs for distribution. Where no household registration will take place in advance of the ITN distribution, it will be critical to consider data and experiences from the previous campaign in terms of whether ITNs were or were not sufficient and potential reasons. Data gathered in the three-year period since the last campaign, such as for EPI or other campaigns, also need to be taken into account, to decide how ITNs should be allocated to households. It is important to decide whether a maximum number of ITNs per household should be established and, if this is being considered, when the final

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<sup>1</sup> <https://www.WHO.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

<sup>2</sup> Follow WHO and national guidance on waste disposal. Waste should be disposed of appropriately where it will not be in the environment risking contaminating others. See also: <https://www.who.int/publications/i/item/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance>

decision will be taken to inform SBC planning. ITN allocation should be considered not only for targeted households, but also for special populations, such as nomads, internally displaced persons, orphanages, barracks, etc.

Where macro and micro quantification indicate gaps that cannot be addressed with the ITNs available (see below on possible adjustments for allocation and capping of ITNs), countries should consider how to determine which areas will be left out (these should be geographically discrete, such as a district or a group of communities for example, in urban and peri-urban areas with lower malaria transmission) in advance to facilitate the SBC messaging and to ensure that the households missed can easily be identified and supplied with ITNs later.

Where household registration will not take place in advance of the ITN distribution, ruptures in stock of ITNs are possible during the distribution. Ruptures may occur whether or not a cap has been set on the number of ITNs any household should receive. It is equally possible, where household registration has not taken place in advance of the ITN distribution that a surplus, sometimes significant, of ITNs may be pre-positioned and then need to be transported elsewhere to fill gaps.

The social and behaviour change plans, audiences, channels and messages should ensure that the possibility of stock ruptures is taken into account, including messages on how households will be served where initially supplied ITNs to the targeted area are insufficient to cover them. Equally, early engagement and advocacy with local government and health authorities will be important to ensure that there is clear understanding that the ITNs are the property and responsibility of the Ministry of Health and decisions around their management will be taken centrally to ensure high accountability to the funding partners, as well as achievement of key campaign indicators for ITN access and, in turn, use throughout the targeted areas. During macroplanning, a contingency plan and budget should be established by the logistics sub-committee for management of reverse or lateral ITN movement.

During the household registration and/or ITN distribution, if ITNs are insufficient to reach all households, a system should be put in place to register or record areas that have not been served in an effort to quantify needs to complete the distribution when additional ITNs become available. If routine distribution data are showing poor uptake due to low attendance at health facilities related to COVID-19 (e.g. compared with the previous year's data for the same time period), consider shifting some routine ITNs to use for campaign distribution to complete registration and distribution to targeted households<sup>3</sup>.

Where routine ITN distribution is functional and mass campaign distribution is not possible, consider adjusting the routine distribution target groups to get more ITNs into households through this channel, even if it means redirecting the campaign ITNs to increase availability for routine distribution facilities.

Different ways of allocating ITNs are described below. National malaria programmes may have further suggestions for ways of allocating ITNs or different channels being used for their distribution (e.g. schools, communities, etc.)<sup>4</sup> that can be adapted to ensure that sufficient ITNs are available in households to cover all household members.

### **Where household registration is not a separate phase of activity, plan for contingency stock for pre-positioning**

Where household registration is not taking place, a contingency stock of up to 10 per cent should be added to the microplanning figures and this additional quantity pre-positioned<sup>5</sup> to ensure sufficient

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<sup>3</sup> Only with the agreement or pre-agreement of the donor organization.

<sup>4</sup> See: *The continuous distribution toolkit*. [www.continuousdistribution.org](http://www.continuousdistribution.org)

<sup>5</sup> See logistics brief for considerations related to quantities to be pre-positioned at each level of the supply chain.

ITNs are available for all households in the target area. The percentage for contingency stock will need to be determined at the national level based on compiled microplanning results. In many countries, ITN quantification for procurement includes a 10 per cent contingency stock and, where this is the case, decisions on where the contingency stock should be delivered and in what quantities can be taken on the basis of the validated microplanning results.

Where a higher percentage of contingency stock is required based on uncertain quality of microplanning population updates (e.g. for urban and peri-urban areas) or for other reasons, this should be justified and approved by funding partners. No matter what method of ITN allocation is selected, the ITN quantification should include the contingency stock in the calculations. Because of average delivery times, it is unlikely to be possible to have new stock of ITNs delivered in time for planned distribution dates if additional ITNs are required. It may be possible to mobilize additional ITNs to fill geographically defined gaps at a later date and, where national malaria programmes identify major gaps, these should be communicated to funding partners and the RBM Partnership to End Malaria's Country Regional Support Partner Committee for support in mobilization of additional resources. In this case, the national malaria programme will need to implement a multi-phase campaign, typically moving from peripheral districts to the urban capital (if targeted), which will have additional financial and human resource implications.

Where the total number of ITNs procured (including the 10 per cent contingency stock) is insufficient to meet the campaign needs, planning will need to be done with a focus on redistribution of available ITNs. In this case, contingency stock for pre-positioning could come from redirecting ITNs planned for areas with lower malaria burden (for example, some parts of urban areas). Or, to come closer to achieving the universal coverage targets, a lower cap could be set in those areas with a lesser malaria burden to ensure more ITNs are available to areas with higher malaria burden. The planning for variable caps based on malaria burden will allow households in high burden and more remote areas to be covered to the maximum extent possible.

Contingency stock should not be taken from routine stock unless the situation with COVID-19 has significantly reduced routine health facility visits by pregnant women and children under one/five years of age as demonstrated in national health system data from health facilities. As above, ensure that there is agreement from funding partners before redirecting ITNs from one channel to another.

### **Allocate ITNs to households based on the number of people in the household**

Use number of people, not sleeping spaces, to determine the number of ITNs required for each household. Simple registration forms can be used during the door-to-door registration and/or distribution and allocation can follow the normal method (one ITN for every two people, usually rounded up in the case of an uneven number of people). Where registration is not taking place first, and if there are concerns about insufficient ITNs being available, then an adapted method can be used (e.g. allocation of one ITN for three people). While some countries have previously chosen to allocate ITNs on the basis of sleeping spaces, there will be no means to verify the existence of sleeping spaces in a household, since the recommendation is not to enter households in the period of COVID-19 transmission. Allocation by sleeping spaces, which are subjectively defined in many cases, may lead to significantly increased ITN needs that will create difficulties if stocks are insufficient to reach all households in the targeted area.

### **Use fixed number of ITNs per household**

For any of the ITN distribution strategies (single phase door-to-door, community-led, self-registration and modified fixed site, adapted fixed site)<sup>6</sup> in order to minimize the need for contact between

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<sup>6</sup> See: *Key guidance for distribution of insecticide-treated nets (ITNs) during the COVID-19 pandemic.*  
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registration teams and households, as well as the time spent at each household, consider removing the registration and allocating a fixed number of ITNs per household during door-to-door distribution. This will also facilitate any needed quantification for resupply of teams in areas where this is required. See above for recommendations on determining number of ITNs to allocate per household.

- Setting a fixed number of ITNs per household may be particularly important if using a system where a community health worker or representative is responsible for picking up ITNs for a number of households. An unequal allocation of ITNs to different sizes of household may put the community health worker or representative at risk of aggression if people do not understand why there are variable numbers of ITNs per household.
- Setting a fixed number of ITNs per household may also be important in areas with insecurity to ensure that teams can move in and out as quickly as possible in an effort to reduce risks. See also: *Operational guidance for ITN distribution in complex operating environments*. <https://allianceformalariaprevention.com/amp-tools/tools-resources/>
- [Setting a fixed number of ITNs per household may be important in all or parts of countries where teams could be at risk if different numbers of ITNs are allocated to households during the door-to-door distribution. National malaria programmes will be able to identify these areas based on their knowledge and determine how many ITNs to provide to households there](#)
- [Setting a fixed number of ITNs per household may also be considered where countries have identified issues with capacity of campaign workers at the community level to clearly understand allocation based on people/sleeping spaces \(e.g. based on reports from the previous campaign\) and training opportunities are limited in order to ensure correct and consistent allocation of ITNs](#)

Where quantification for a fixed ITN allocation per household leads to gaps based on ITNs available, countries should consider allocating different numbers of ITNs to households in different areas. For example, in high malaria burden areas, four ITNs per household could be provided while in low malaria burden areas, two or three ITNs could be provided. Where gaps are identified in terms of ITNs or different allocation strategies will be applied in different areas targeted for the distribution, it is important to determine which areas are receiving what in advance to facilitate the SBC messaging.

Where a fixed number of ITNs per household is opted for as the allocation strategy in the context of COVID-19, it is unlikely that it will reflect what has been agreed in terms of campaign indicators, so national malaria programmes are advised to justify this approach and ensure that discussions have taken place with funding partners to avoid later problems when reporting.

### **Allocate ITNs to households based on the number of sleeping spaces**

Where countries opt to allocate ITNs by sleeping spaces, they should also collect the number of people per household to allow a high-level comparison and assess where the number of sleeping spaces reported may be inflated. This will not provide an accurate picture but may give an idea of where the ratio of sleeping spaces to people requires verification or further investigation. Countries should also recognize that allocation by sleeping spaces may provide more ITNs to urban and less poor households who typically have more rooms and therefore more sleeping spaces (and potentially fewer people) and may penalize rural and most poor households who have fewer rooms and sleeping spaces (and potentially more people). Where sleeping spaces will be the basis for ITN allocation, ensure that training and job aids for door-to-door teams include clear definitions of what does and does not constitute a sleeping space, in addition to the definition of a household.

### **Decide on capping the number of ITNs per household**

Ideally, no cap (maximum number of ITNs per household) should be set in terms of the maximum number of ITNs that a household can receive. However, where no household registration will take place in advance of the ITN distribution to inform the number of ITNs required, national malaria

programmes may need to consider fixing a cap in order to ensure that sufficient ITNs are available for maximum coverage of households in the targeted area.

During the validation of microplans, it will be important to consider the data from the previous campaign registration and distribution, as well as information reported on missed areas, to ensure that the population estimates are realistic (not over- or underestimated significantly). It is only after microplans have been validated that consideration should be given to whether or not a cap should be set and, if so, at how many ITNs per household. In countries that have used ICT4D for data collection or that have a comprehensive database from previous campaigns, these data can provide a basis for quantification of population in the absence of household registration data.

Decisions should also be taken on whether the same cap will be applied everywhere or whether a higher cap will be set in areas with more malaria burden to ensure maximum population access while a lower cap is set in areas with lower malaria burden. The decisions around capping must be taken early to allow the SBC subcommittee to develop messages and ensure they are consistent and standardized about the ITN allocation, particularly if it varies throughout the targeted area.

Where it is decided that a cap is required, set the maximum number of ITNs per household based on the average household size (as per national census, recent Malaria Indicator Survey [MIS], Demographic Health Survey [DHS] or Multiple Indicator Cluster Survey [MICS] or other available data). Use previous campaign and new data (such as from CHW registers, updated figures for catchment area populations from health facility staff, information from ongoing community level programmes, information collected as part of community-level COVID-19 response, etc.), as well as national data related to the average household size in different parts of the country, to determine the number of ITNs per household that should be provided to achieve sufficient ITN access with the ITNs available.

#### **Use community data sources to create household lists and quantify ITNs needed**

Using existing data available through community health workers, women's group representatives, mother's clubs, village chiefs or other sources will be important to establish population figures for the targeted area during the microplanning phase.

Where there are community structures on the ground that can put together lists of households in their community by name of household head and size of household, these can be during or after the microplanning phase to determine the number of ITNs needed where households are provided a fixed number or where allocation is done by people in the household. This will allow decisions to be taken based on community-level data to achieve the best outcomes possible.

Where there are lists of households already in existence through other community level activities (e.g. integrated community case management (iCCM), mother-child health or neglected tropical disease programmes) but they do not contain the information required for the ITN campaign (e.g. they collect only the number of population target group in the household and not necessarily the total number of people in the household), these can be used to estimate the ITNs required using allocation by people and fixed ITN allocation to determine needs for the community.

Where community lists will be used as the basis for determining the ITN allocation, ensure that clear communication is in place to explain that ITN allocation has been calculated prior to starting the distribution (whichever method is used) and the basis on which the number of ITNs for each household has been determined. Where use of community-level information/data is adopted, identify a focal person in the community and at the district or sub-district level to respond to questions or issues arising.

### **Accounting for special populations**

National malaria programmes must ensure that all population groups in the targeted areas receive ITNs, including nomads, internally displaced people, orphanages, barracks, homes for people with mental or physical disabilities, etc. Information about these populations should be collected in advance of microplanning and ITN allocation should be based on decisions taken by the national malaria programme and key partners on the basis of ITNs needed and ITNs available. For example, for orphanages and barracks, one ITN per sleeping space is most appropriate given sleeping patterns, while for camps of internally displaced people, a fixed number of ITNs to be distributed directly to families or with other food or non-food items may be more appropriate. Where partners are managing camps of internally displaced people or refugees, they should be engaged for the ITN distribution in terms of both allocation and reporting and accountability. See also: *Operational guidance for ITN distribution in complex operating environments*. <https://allianceformalariaprevention.com/amp-tools/tools-resources/>

As much as possible, special populations should be covered at the same time as households where ITN mass distribution is taking place. If ITN needs exceed ITNs available, it will be necessary to prioritize which special groups should be covered first. This should include IDPs, refugees and nomads who will have higher vulnerability to malaria infection as a first priority, leaving boarding schools, barracks and other institutional populations, which are easily identified and targeted for later distribution and have lower vulnerability, as a secondary priority.

### **Allocating ITNs through routine distribution**

Ensure that routine ITN delivery is fully operational, including pre-positioning extra stocks in case of transport disruptions in-country. If no other option exists for getting ITNs into households (door-to-door distribution, community-led distribution, modified or adapted fixed site distribution), it is critical to ensure that health facility (and community, where this is an established channel) distribution of ITNs to the most vulnerable populations to malaria – children under five and pregnant women – can continue. Where campaign distribution is not possible and people are still accessing community and/or health facility services, consider adapting and expanding the criteria for routine distribution (e.g. one ITN for each person attending a health facility with suspected symptoms of COVID-19 or one ITN for each case of severe malaria) to ensure as many people as possible, particularly those with higher vulnerability in case of COVID-19 and/or malaria infection, have access to ITNs.

Routine and continuous distribution of ITNs should continue both during and after the mass ITN distribution (if feasible and if already implemented per national policy). Where mass campaign distribution is not possible, continuous distribution should be accelerated and reinforced to protect the most vulnerable populations from malaria infection and death. Distribution through routine and continuous channels should be modified, as needed, to ensure that strategies adopted minimize risks for, and prevent unnecessary exposure to, increased transmission of COVID-19 for clients and health workers.

National malaria programmes should provide instructions to health facility staff or community health workers around how the ITNs should be recorded in the monthly reports for ITNs distributed to people who are outside the routine ITN target group (most often pregnant women and children under the age of one, though this may be expanded to children under five or further, such as to people diagnosed with severe malaria, where mass campaign distribution is not taking place).

### **Decide what to do with leftover ITNs**

Decisions should be taken at the macroplanning stage about what should be done with any ITNs remaining at the end of the distribution to ensure that information about the control and management of the ITN stock can be communicated from the first advocacy meetings. This is

especially true where plans are to move ITNs back up the supply chain for potential redistribution to other areas where a campaign is taking place in phases.

Alternatively, remaining ITNs may be left at or moved to the nearest health facility in order to allow households with individuals displaying COVID-19 symptoms and/or having been tested positive for COVID-19 to be provided with a separate ITN to sleep under while they are sick and recovering, as well as to cover new sleeping spaces or replace worn out ITNs.

**Update risk assessment and mitigation plans based on ITN allocation decisions**

Based on the final decisions for ITN allocation, risk assessment and mitigation plans should be updated to describe how stock shortages or ruptures, or stock surplus following the distribution, will be managed in addition to all other risks associated with the campaign planning and implementation.