

# Cameroon MBS Results Brief

## What Do the Data Mean?

### INTRODUCTION

With funding from the U.S. President's Malaria Initiative, the Breakthrough ACTION project, managed by Johns Hopkins Center for Communication Programs, collaborated with the Cameroon National Malaria Control Program and North and Far North Regional Health Delegations to implement a Malaria Behavior Survey (MBS) on the psychosocial determinants of malaria-related behaviors from a representative sample of households. The study, fielded during the 2019 rainy season (September–October 2019) used a cross-sectional survey with structured questionnaires administered to a random sample of women (15–49 years old) and men (18–59 years old) of reproductive age.

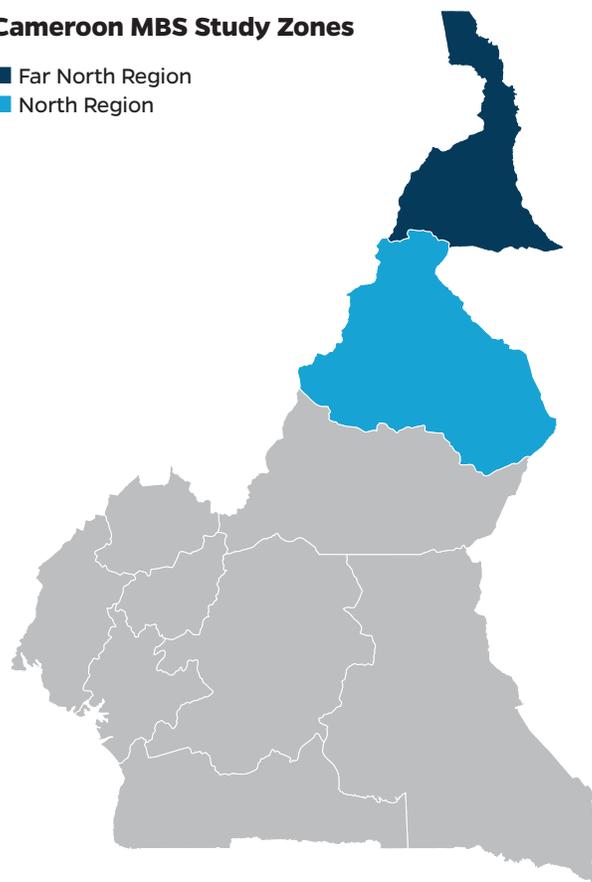
The goal of this study was twofold: to provide a better understanding of the sociodemographic and ideational characteristics associated with malaria-related behavioral outcomes in Cameroon and to determine the appropriate focus of social and behavior change (SBC) programmatic activities.

### WHAT DO THE DATA MEAN?

For each intervention area, this MBS results brief summarizes the key implications and recommendations for SBC activities informed by the psychosocial factors measured in the survey. Statistically significant correlations from multiple-regression analysis, when available and appropriate, form the basis of most recommendations. Regression results are reported across the two regions when statistically significant. The full and detailed results of the MBS can be found in the Cameroon MBS Survey Report on the [MBS website](#).

### Cameroon MBS Study Zones

- Far North Region
- North Region



Breakthrough ACTION collected information from:



**2,756**  
households



**4,514 total**  
**respondents**  
(3,545 women  
and 949 men)



U.S. President's Malaria Initiative

Breakthrough  
**ACTION**



# Malaria Case Management

## BEHAVIORS AT-A-GLANCE

Of the 2,098 caregivers with a child at home under five years old:

**20% North** **20% Far North**

of caregivers had children under five years of age with fever within the two weeks prior to the survey



**72% North** **76% Far North**

of children under five with fever in the last two weeks who were taken to a health facility/CHW and were tested for malaria



**52% North** **82% Far North**

sought any kind of care for their febrile child within 24 hours of fever onset

**33% North** **57% Far North**

took their febrile children to a health facility or CHW promptly\*

*\*prompt care seeking is defined as going to the health facility or CHW the same as the onset of fever or the following day.*

**65% North** **71% Far North**

of children under five with confirmed malaria who received an ACT from a health facility/CHW



## SBC RECOMMENDATIONS

**1 CHALLENGE: Caregivers do not always promptly seek appropriate care (health facility or CHW) for children with fever. To address this, SBC activities should:**

- **Promote messages that discourage self-medication and stress the benefits of appropriate care-seeking.** Respondents who do not favor giving their children the medication they have at home when their child has fever were nearly **twice as likely** to seek care promptly than their counterparts who agreed they would start medication they have at home. Considering that 82% of caregivers in the North and 76% in the Far North have attitudes favoring self-medication, it is important for SBC activities to prominently address this perception to make a change.
- **Position immediate care-seeking as a community norm.** Those who perceived prompt care-seeking for fever as the norm in their community were **43% more likely** to seek care appropriately than those who do not perceive it as a norm.
- **Increase knowledge of appropriate timing of care-seeking.** Respondents who knew that care for fever in children should be sought promptly (same/next day) at the onset of fever were **nearly four times more likely** to seek care promptly than those who did not know.
- **Increase knowledge of artemisinin-based combination therapy (ACT).** Those who knew that ACT is an effective drug for malaria in children were **three times more likely** to seek appropriate care promptly for fever than similar respondents who did not report this knowledge.

**2 CHALLENGE: Some health care providers do not abide by the national malaria treatment guidelines. To address this, SBC activities should:**

- **Improve provider counseling skills to effectively address caregivers who insist on unnecessary injections.** Caregivers who expressed preference for injectable antimalarials were **1.8 times more likely** to seek care promptly than their counterparts who did not have a preference. Since 79% of respondents in the North and 63% in the Far North prefer their child with fever to be treated with an injection rather than tablets, SBC activities should encourage providers to praise caregivers who bring their child with fever for testing and treatment, explain thoroughly why an injection cannot be given for uncomplicated malaria, and counsel them on administering oral ACT tablets.
- **Enforce the national policy to provide free ACTs to health facility clients.** Respondents who reported that clients are **not** made to pay for antimalarial drugs for children in health facilities were roughly **2.5 times more likely** to seek prompt care at a health facility or from a CHW than respondents who reported that clients are made to pay for ACTs at health facilities. Further research with health care providers can shed light on the factors that influence provider decisions to not respect the national policy regarding free malaria services.

# Insecticide-Treated Nets

## BEHAVIORS AT-A-GLANCE

The **use:access ratio** indicates the ratio of people who slept under an insecticide-treated net (ITN) the previous night (use) to the population who could have slept under a net, assuming each net in the household is used by up to two people (access).

ITN Use:Access ratio:

**0.83** North **1.00** Far North



ITN Access:

**55%** North **53%** Far North

Net use in households with enough nets (reported used every day the previous week by sex and reported used the previous night by age group):

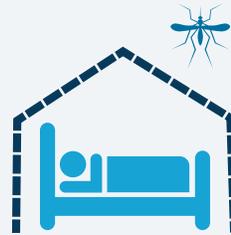
### NORTH REGION

Men **73%**  
 Women **77%**  
 Children under 5 years **84%**  
 Children 5-17 years **70%**  
 18 years or older **76%**

### FAR NORTH REGION

Men **85%**  
 Women **89%**  
 Children under 5 years **94%**  
 Children 5-17 years **86%**  
 18 years or older **86%**

ITN care in the household:



**26%** North **31%** Far North  
 Of nets suspended, folded up or tied up to minimize damage

**42%** North **53%** Far North  
 Of nets suspended, not tied up, and vulnerable to damage



**25%** North

**16%** Far North

Washed with detergent  
 (Not recommended)



**73%** North

**81%** Far North

Washed with macabo/  
 soft bar soap  
 (Recommended)



**71%** North

**81%** Far North

Dried in the sun after  
 last wash  
 (Not recommended)



## SBC RECOMMENDATIONS

**1 CHALLENGE:** Consistent net use every night all year long is not universally practiced. To address this behavior, SBC activities can:

- **Promote self-efficacy, or a person's confidence in their ability to regularly use and maintain an ITN.** A person's belief that they are able to hang an ITN, care for it, and sleep under it consistently throughout the year was a significant predictor of ITN use. In the North Region, people were **3.8 times** more likely to consistently use a net if they believed they had the ability to perform this behavior and **1.8 times** more likely in the Far North Region.

- **Raise risk perception of malaria.** Reinforcing the concept that the whole population is susceptible to malaria may increase consistent ITN use. In the North, those who felt susceptible to malaria were **1.4 times** more likely to regularly sleep under an ITN and in the Far North Region **2.3 times** more likely. To do this, SBC programs may need to identify and debunk myths and misconceptions about who is susceptible to malaria, and emphasize that malaria risk is year-round.

- **Promote high ITN use rates as a social norm.** Respondents are more likely to sleep under an ITN if they believe that at least half of their community is also sleeping under an ITN. In the North Region, this perceived social norm is associated with a **1.3-fold increase** in ITN use and a **2.5-fold increase** in the Far North Region. ITN use among the population with access to an ITN is very high (see Behaviors-at-a-glance). Net use champions in the community can model this behavior and support the net use social norm.

**2 CHALLENGE: Preventative net care behaviors are only moderately practiced. Promote net care behaviors to increase the longevity of available nets. To improve net care, programs can:**

- **Promote the daily practice of folding up the net to keep it out of the hands of young children and avoid other household risk factors.** Despite the majority of nets being hung above the sleeping space, ITNs were not usually folded up or tied in a manner that protects them from possible damage (i.e., holes) during the day when they are not in use. In the North Region, **42%** of all ITNs in the household were hung but not tied or folded. In the Far North Region, **53%** of ITNs were hung but not tied or folded.

- **Advocate the use of only soft bar soaps for washing ITNs (such as Macabo).** Nearly 70% of households in both regions reported using a soft bar soap, demonstrating that these soaps are widely available in Northern Cameroon. However, **25%** of North Region households and **16%** of Far North Region households still reported using a strong detergent to wash ITNs, which can impact the performance of the insecticide.
- **Remind households to dry ITNs in the shade where there are no sharp edges that could damage the net.** In the North Region, **71%** of ITNs were reportedly dried in the sun after the last washing. In the Far North Region, the proportion was **81%**. Drying ITNs in the shade helps to maintain the effect of the insecticide and physical integrity and keeps the net protective against malaria-transmitting mosquitoes.

# Antenatal Care and Intermittent Preventive Treatment During Pregnancy

## BEHAVIORS AT-A-GLANCE

Of the 1,021 women (out of 3,545) who reported a pregnancy during the two years preceding the survey:

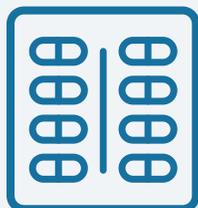


**82% North 79% Far North**

reported attending at least one antenatal care (ANC) visit

**63% North 59% Far North**

reported attendance at four or more ANC visits (national recommendation)



**73% North 65% Far North**

reported receiving at least one dose of intermittent preventive treatment during pregnancy (IPTp)

**43% North 45% Far North**

reported receiving at least three doses of IPTp



**81% North 81% Far North**

of all women surveyed reported intending to obtain IPTp should they become pregnant in the next two years



## SBC RECOMMENDATIONS\*

**1 CHALLENGE: Many women do not go for ANC early and often enough to get the recommended number of doses of IPTp. To address this, SBC activities should:**

- **Increase knowledge by women of child-bearing age of the number of IPTp doses to be administered during each pregnancy.** Knowing the recommended number of IPTp doses increased the odds of intending to obtain IPTp during future pregnancies by **1.92 times** in the North Region and **3 times** in the Far North. However, less than 30% of Far North respondents knew that pregnant women should receive IPTp three or more times during pregnancy. In the North Region, 40% of women of reproductive age knew pregnant women should receive 3 or more IPTp doses.
- **Emphasize that antenatal care should start as soon as the woman knows she is pregnant.** Only 47% of women in the North Region and 51% in the Far North Region were aware of this recommendation. Early ANC attendance should be promoted widely to women of reproductive age and to secondary audiences who can support them, including their partners.

- **Clarify that pregnant women should attend at least four ANC visits during each pregnancy.** In the Far North, only 39% of women of reproductive age knew this recommendation, compared to 53% in the North Region. This should be a key message of malaria in pregnancy activities and should be clearly stated during household visits by CHWs and during the first ANC consultation at the health facility.

**2 CHALLENGE: Some women do not attend ANC and do not access IPTp. To address this, SBC activities should:**

- **Build positive attitudes and self-efficacy about ANC and IPTp.** Women in the Far North with positive attitudes about ANC and IPTp were **3 times more likely** to report their intent to obtain ANC and IPTp in future pregnancies and those with high-self efficacy to attend ANC were **1.5 times more likely** to report this intent. In the North, intention to use IPTp in future pregnancies was about **two times higher** among women with high perceptions of response efficacy of IPTp (**2.3 times**) or with positive perceptions about ANC and IPTp services (**nearly 2 times**).

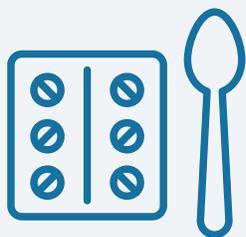
\* Intention to obtain IPTp during next pregnancy was used as a proxy for IPTp behavior during the last pregnancy due to sample size constraints.

- **Leverage existing high levels of perceived severity of malaria in pregnancy.** More than 80% of households in the North and Far North Regions agree that when pregnant women get malaria, the effect on her and her unborn child is very serious.
- **Build community norms around IPTp.** Perceiving that use of IPTp is a community norm increased the likelihood of women reporting they intend to use IPTp in future pregnancies by **1.6 times** in North Region and **1.7 times** in Far North. However, less than two-thirds of respondents from North Region (62%) believed that the majority of pregnant women in their community take medicine to prevent malaria during pregnancy, whereas only about half of respondents in Far North Region felt this was the norm (52%). Building this norm with community role models stands to make an impact on ANC and IPTp rates, especially if they include women who have previously given birth, as nearly 30% of women believed that women who had given birth before did not need to visit the health facility early in the pregnancy for ANC.

### **3 CHALLENGE: Malaria is not always a common discussion topic in households. The data shows that to address this problem behavior, SBC activities could:**

- **Encourage women of reproductive age to talk about malaria with their friends and family.** Women who had discussed malaria with others in the past six months were **over twice as likely** to intend to access IPTp in future pregnancies.

# Seasonal Malaria Chemoprevention



**92% North 98% Far North**

reported eligible children taking the first seasonal malaria chemoprevention (SMC) under direct observation from the distributor or given later by the caregiver

## BEHAVIORS AT-A-GLANCE

Of the 1,195 households surveyed:



**38% North 39% Far North**

reported hearing about potential SMC side effects from the distributor



## SBC RECOMMENDATIONS

### **1 CHALLENGE: Key SMC messages are not well understood by households. Programs can:**

- **Improve understanding of SMC as a three-day cycle for maximum protection against malaria.** Despite 82% of North Region households and 89% of Far North Region households having heard of SMC, only **46%** in the North Region and **55%** in the Far North knew that children must take SMC drugs for three days a month to prevent malaria. Increasing understanding of the full course of SMC, and why it is important, could increase uptake and adherence on day two and day three.
- **Add additional pre-campaign mobilization and mid-campaign sensitization messages around SMC, emphasizing malaria risk.** In the North Region, **51%** of households felt that healthy children do not need to take SMC, compared to **28%** in the Far North. This is likely a combination of low perceived risk from malaria and poor understanding of SMC as a preventive intervention. Messages that increase malaria risk perception, especially for children under five, and increase understanding of the role of SMC as a prophylactic might contribute to greater adherence to the full course of SMC.
- **Focus on determinants other than caregivers' self-efficacy, or belief in their ability, to give their children SMC drugs since it is already very high.** Caregivers believed strongly that they were able to give SMC medications to eligible children, with **95%** of households in the North and Far North confident in their ability to make sure their children take the preventive malaria medication during the rainy season. In addition, **96%** of households in both regions felt they could give the second and third doses of SMC.
- **Continue to promote the high perceived effectiveness of SMC drugs in combination with an understanding of SMC as a three-day course to improve day two and day three uptake.** Men and women overwhelmingly believe that the medication given to children during the rainy season to prevent malaria is effective. Ninety-five percent of households in the North region and 92% in the Far North agreed that it was effective. However, **40%** of households felt a child has the same chance of getting malaria whether or not the child takes SMC despite the high perceived effectiveness of SMC drugs. SBC messages should link SMC effectiveness to completion of the full dose during each cycle of the campaign.

**2 CHALLENGE: Trust between community health workers (CHWs) administering SMC and families in the community has been problematic in the past. The interaction between CHWs and households is important to build trust and understanding of the SMC campaign. Interactions were inadequate during the 2019 campaign. Building trust requires time and effort; to facilitate this work, future campaigns can:**

- **Increase communication training for CHWs, provide standardized tools to improve household interactions, and improve the quality of household and CHW interactions.** In the North Region, **62%** of households felt they were forced to accept SMC by CHWs. In the Far North, **34%** of households believed this to be true. Households should be allowed to weigh the perceived benefits and risks of SMC and make a choice about SMC participation.
- **Include community and religious leaders as a mobilization channel to increase trust and acceptance of CHWs during SMC.** Despite households overwhelmingly supporting door-to-door SMC distribution, a significant proportion of households did not trust the people who distributed SMC to their household. In the North Region, **30%** of households did not trust the CHWs, compared to **20%** in the Far North Region.
- **Ensure CHWs are trained to discuss potential side effects of SMC with each household.** Less than **40%** of households in both regions reported CHWs explained potential side effects of SMC medication. Honestly explaining the potential side effects may increase trust in the CHW and is necessary for the caregiver to weigh perceived benefits and risks and make an informed decision about SMC participation.
- **Continue to include community and religious leaders as part of the mobilization plan to encourage households to welcome CHWs and increase adherence to the SMC regimen.** In both the North and Far North, more than **90%** of respondents believed that community leaders and religious leaders support the distribution of SMC to prevent malaria during the rainy season.

# Media Habits and Channels

## AT-A-GLANCE



**30%**

of those surveyed reported owning a radio

**26% North**  
**34% Far North**



More men than women reported weekly radio listenership

<b>North</b>	<b>Men 49%</b>	<b>Women 28%</b>
<b>Far North</b>	<b>Men 70%</b>	<b>Women 31%</b>



Of people from poorer households, only **7% in the North and 9% in the Far North** would be reached by radio programs



The top preference for radio listenership is **early morning to the end of the morning in both regions** (North: 55% of men and 59% of women; Far North: 55% men and 58% of women)

**21%**

of those surveyed reported owning a television (no difference between North and Far North). Among men and women in households with a television, 70.9% in the North and 77.3% in Far North reported regular television viewing



The only population groups that can potentially be reached via television at a significant level are men and women with secondary education or higher, urban residents, and those from the three upper wealth quintiles



Reported owning a mobile phone

**50.6% North**  
**56.3% Far North**

The **oldest age groups** were the most likely to report unshared phone ownership across regions



Can receive SMS messages on their phones among the population owning a mobile phone

**88% North** **85% Far North**



Can receive audio files on their phones among the population owning a mobile phone

**53% North** **50% Far North**



Can receive photographs and videos on their phones among the population owning a mobile phone

**38% North** **45% Far North**



**52%**

reported being exposed to a malaria-related message in the past six months

Exposure to malaria-related messages was significantly more common in the Far North Region (**61%**) compared to the North Region (**40%**).



Sources of malaria message exposure were:

**53% Community health workers** (North 40% and Far North 60%)

**41% Health facilities** (North 25% and Far North 50%)

**32% Friends or family** (North 33% and Far North 32%)