

PMI

U.S. PRESIDENT'S MALARIA INITIATIVE

LED BY



USAID
FROM THE AMERICAN PEOPLE



This FY 2021 Malaria Operational Plan has been approved by the U.S. Global Malaria Coordinator and reflects collaborative discussions with national malaria control programs and other partners. Funding available to support outlined plans is pending final FY 2021 appropriation. Any updates will be reflected in revised postings.

U.S. PRESIDENT’S MALARIA INITIATIVE

Niger

Malaria Operational Plan FY 2021

The U.S. President’s Malaria Initiative (PMI)—led by the U.S. Agency for International Development (USAID) and implemented together with the U.S. Centers for Disease Control and Prevention (CDC)—delivers cost-effective, lifesaving malaria interventions alongside catalytic technical and operational assistance to support Niger to end malaria. PMI has been a proud partner of Niger since 2018, through investments totaling almost \$72 million.

The proposed PMI fiscal year (FY) 2021 planning budget for Niger is \$17.5 million. This Malaria Operational Plan (MOP) summary outlines planned PMI activities in Niger for FY 2021. See accompanying **FY 2021 Budget Tables** (Tables 1 and 2) for activities and budget amounts, available on pmi.gov. Developed in consultation with the National Malaria Control Program (NMCP) and key stakeholders, proposed activities reflect national and PMI strategies, draw on best-available data, and align with the country context and health system. Proposed PMI investments support and build on those made by the Government of Niger as well as other donors and partners. See **Annex A: Gap Analysis Tables** for information on commodities.

To accelerate the journey to self-reliance, PMI developed a programmatic inventory to assess the strengths and persistent challenges of Niger’s program. See **MOP FY 2020 Niger, Annex B: Program Inventory**. The activities proposed in this MOP are tailored to draw on strengths and foster improvements.

Since the FY 2020 MOP was developed, no new data, updated policy and/or strategic priorities relevant for the FY 2021 MOP have become available.

For more information about the malaria situation, malaria control progress, and intervention-specific data in Niger, please refer to the FY 2020 MOPs available on pmi.gov.

Annex A. Gap Analysis Tables

| Insecticide-treated Mosquito Net (ITN) Gap Analysis | | | |
|--|-------------------|------------------|-------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| Total targeted population ¹ | 22,752,368 | 23,591,989 | 24,465,615 |
| Continuous Distribution Needs | | | |
| Channel #1: ANC ² | 821,394 | 635,498 | 682,198 |
| Channel #2: EPI ³ | 1,016,475 | 502,076 | 522,920 |
| <i>Estimated total need for continuous channels ⁴</i> | 1,837,868 | 1,137,574 | 1,205,118 |
| Mass Campaign Distribution Needs | | | |
| 2020/2021/2022 mass distribution campaign(s) ⁵ | 14,375,179 | 7,708,784 | 16,470,397 |
| <i>Estimated total need for campaigns ⁶</i> | 7,986,211 | 4,411,138 | 9,424,727 |
| Total ITN Need: Routine and Campaign | 9,824,079 | 5,548,712 | 10,629,845 |
| Partner Contributions ⁷ | | | |
| ITNs carried over from previous year ⁸ | 1,164,200 | 1,145,173 | 283,199 |
| ITNs from MOH | 0 | 50,000 | 60,000 |
| ITNs from Global Fund | 9,768,698 | 4,411,138 | 10,231,881 |
| ITNs from other donors | 0 | 0 | 0 |
| ITNs planned with PMI funding ⁹ | 375,238 | 225,600 | 100,000 |
| Total ITNs Available | 11,308,136 | 5,831,911 | 10,675,080 |
| Total ITN Surplus (Gap) | 1,484,057 | 283,199 | 45,235 |

¹ Source: INS 2012 (demographic data)

² Targeted population for continuous ITN needs distribution were based on the following assumptions:

- ANC: Average projected number of pregnant women is 4.42% of the general population. 4.3% (2019), 4.51% (2020), 4.50% (2021) 4.40% (2022).

- Forecasting assumptions: First ANC coverage rate 78% (in 2019), 80% (in 2020), 85% (in 2021), 90% (in 2022) and ITN distribution rate: 70% (in 2020, 2021, and 2022) of pregnant women will receive 1 ITN during their first ANC visit.

³ Targeted population for continuous ITN needs distribution were based on the following assumptions:

- EPI: Newborn and under 1 year of age is estimated to be the same as the total number of pregnant women
- Forecasting assumptions: ITN distributed to children during their measles immunization visit. According to health statistics (year 2019), 97% received measles immunization. In addition, it has been considered an ITN distribution rate for 2020 to 2022 as follows 2020 (51.96%), 2021 (52.51%), and 2022 (53.05%). This rate is used as an assumption for ITN distribution.

⁴ Total quantity of ITN for continuous distribution; sum of ITN distributed through ANC and EPI channels.

⁵ Targeted population for the ITN mass campaign.

⁶ Forecasting assumptions for campaign distribution: using WHO recommended forecasting method 1 ITN for 1.8 persons. The 2020 mass campaign will cover all the districts of 3 regions (Dosso, Tillaberi, and Diffa) and meso-endemic districts of 3 regions (Maradi, Tahoua, and Zinder). These meso-endemic districts were not covered during the 2018 campaign because of a funding issue. Global Fund (GF) will acquire more ITNs, as it will support mass campaigns in selected regions. According to ongoing discussion, Niger plans to continue the rolling campaign till 2022 and swift to a national campaign in 2024. Therefore in 2021, the campaign will be implemented in 23 districts from the region of Maradi, Tahoua, Zinder, and Agadez (this includes districts which received nets in 2018 in addition and districts of the region of Agadez), and in 2022, the campaign will be done in all other 49 districts of 7 regions excluding those that received ITNs in 2021.

⁷ Current Global Fund grant ends in 2020. New grant is expected to start in 2021. PMI will procure quantities of ITN (PBO Nets) for routine distribution in 2022. The procurement of PBO nets follows new country guidance based on recent insecticide resistance and vector monitoring results. GF will procure 3 types of ITN in 2022. Thus GF will procure normal ITN, IG2 nets, and PBO nets for routine and mass campaign distribution.

⁸ Carryover is expected from 2020 stock as available ITN stock was not fully distributed to health facilities for routine distribution (ANC, EPI).

⁹ PMI contributes to the routine distribution and not for ITN mass campaign needs.

| Sulfadoxine-Pyrimethamine (SP) Gap Analysis | | | |
|---|------------------|------------------|------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| Total population at risk | 22,752,368 | 23,591,989 | 24,465,615 |
| SP Needs | | | |
| Total number of pregnant women ¹ | 1,026,742 | 1,062,551 | 1,077,266 |
| Total SP Need (in treatments) ^{2,3} | 1,837,901 | 2,132,381 | 2,443,336 |
| Partner Contributions ⁴ | | | |
| SP carried over from previous years | 42,550 | 1,742,952 | 2,035,271 |
| SP from Government | 0 | 0 | 0 |
| SP from Global Fund | 2,062,287 | TBD | 1,443,340 |
| SP planned with PMI funding | 1,554,800 | 2,424,700 | 900,000 |
| Total SP Available | 3,659,637 | 4,167,652 | 4,378,611 |
| Total SP Surplus (Gap) | 1,821,736 | 2,035,271 | 1,935,275 |

¹ The total number of pregnant women is estimated at 4.32% of the total population for 2019, 4.51% for 2020, 4.50% for 2021, and 4.40% for 2022. This is not the total number of ANC visits.

² The number of treatments should be calculated using the total number of pregnant women attending ANC and estimating the percentage who will attend ANC1, ANC2, ANC3, ANC4 to receive IPTp.

- In 2020, assumptions say 80% attend ANC1, 78% attend ANC2, and 62% attend ANC3 and more.
- In 2021, assumptions say 85% attend ANC1, 83% attend ANC2, and 68% attend ANC3 and more.
- In 2022, assumptions say 90% attend ANC1, 88% attend ANC2, and 74% attend ANC3 and more.

³ One treatment of IPTp is comprised of 3 SP tablets. Quantity of SP needs is the total need to cover 4 treatments cycle.

⁴ Current GF grant ends in 2020. New grant is expected in 2021, but procurement of SP by GF is not expected until 2022 based on the stock analysis. PMI procurement for 2019 was not received in 2019, but during the first quarter of 2020. Out of the total quantity of 1,600,000 treatments ordered for 2019, only 45,200 were received in 2019. The remaining stock of 1,554,800 treatments of SP were received in 2020. And PMI 2020 order of SP (quantity of 1,424,700) will be delivered in 2021 to take account the stock level. For 2021 and 2022, PMI will contribute to procuring SP products to cover country needs. Because of the long lead time of this product, PMI will continue to plan the procurement of SP each year.

| Seasonal Malaria Chemoprevention (SMC) Gap Analysis | | | |
|--|-------------------|-------------------|-------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| SMC drug (SP+AQ) Needs | | | |
| Population targeted for SMC ¹ | 4,294,922 | 4,338,445 | 4,476,330 |
| PMI-targeted population for SMC ² | 1,316,710 | 1,419,837 | 1,587,084 |
| Total SP+AQ Needs ³ | 18,736,826 | 18,221,469 | 18,800,586 |
| Partner Contributions (to PMI target population if not entire area at risk) | | | |
| SP+AQ carried over from previous year ⁴ | 0 | 2,426,350 | 0 |
| SP+AQ from Government | 0 | 0 | 0 |
| SP+AQ from Global Fund ⁵ | 13,101,850 | 9,912,750 | 12,729,700 |
| SP+AQ from other donors (World Bank) | 1,998,750 | 0 | 0 |
| SP+AQ planned with PMI funding | 5,496,850 | 6,185,340 | 6,914,750 |
| Total SP+AQ Available | 20,597,450 | 18,524,440 | 19,644,450 |
| Total SP+AQ Surplus (Gap) | 1,860,624 | 302,971 | 843,864 |

¹ Data source: Data statistics from INS 2012. In the case of Niger, the target is national coverage, 100% of children under five years of age.

Population targeted for SMC is the age group from 3 to 59 months. This age represents around 20% of the total general population of the targeted districts. NMCP is changing its target to include children up to 10 years of age, but this is not included in this gap analysis.

² Out of the 61 eligible districts in 2019 and 2020, PMI covers 17 districts (for around 31% of the targeted population) in the region of Tahoua and Dosso in 2019 and 2020. In 2021, NMCP will expand SMC in all the districts of Tahoua and 2 districts of Agadez meaning that there will be 67 eligible districts and PMI will cover 21 districts. In 2019 and 2020, 4 districts in Tahoua region are not eligible for SMC. In 2021 and 2022, we included all the districts of Tahoua on the list of eligible districts for SMC based on the revised national malaria strategic plan and stratification.

³ Forecast assumptions: We have considered that 100% of children will be covered. This assumption is based on the past performance of the last 2 years campaigns which is above 95% coverage. Current forecast was made with 4 cycles. However, in the revision of their malaria strategic plan, the NMCP plans to implement 3, 4, and 5 cycles based on the length of the malaria high transmission. But, we did not use these assumptions for this gap analysis.

⁴ The SMC 2020 campaign is fully covered and carryover is expected from 2020 because the World Bank will procure AQSP for the districts they supported over the last 3 years.

⁵ Current Global Fund grant ends in 2020. New grant is expected to start in 2021. GF is supposed to cover all the remaining eligible regions in 2021 and 2022.

| Rapid Diagnostic Test (RDT) Gap Analysis | | | |
|--|------------------|------------------|------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| RDT Needs | | | |
| Total country population | 22,752,368 | 23,591,989 | 24,465,615 |
| Population at risk for malaria ¹ | 22,752,368 | 23,591,989 | 24,465,615 |
| PMI-targeted at-risk population ² | 22,752,368 | 23,591,989 | 24,465,615 |
| Total number of projected fever cases ³ | 17,074,233 | 15,476,821 | 15,976,099 |
| Percent of fever cases tested with an RDT ⁴ | 26.0% | 36.0% | 41.0% |
| Total RDT Needs ⁵ | 4,433,325 | 5,512,315 | 6,521,300 |
| Partner Contributions (to PMI target population if not entire area at risk)* ⁶ | | | |
| RDTs carried over from previous year | 1,996,825 | 909,370 | 3,591,605 |
| RDTs from Government | 201,425 | 200,000 | 200,000 |
| RDTs from Global Fund | 3,727,400 | 5,194,550 | 2,838,775 |
| RDTs from other donors (World Bank) | 0 | 0 | 0 |
| RDTs planned with PMI funding | 1,250,000 | 2,800,000 | 2,920,175 |
| Total RDTs Available | 7,175,650 | 9,103,920 | 9,550,555 |
| Total RDT Surplus (Gap) | 2,742,325 | 3,591,605 | 3,029,255 |

¹ Geographic coverage: the entire population is at risk for malaria.

² PMI does not have a targeted population or area for case management commodities. PMI contributes with other donors to fill all the needs for RDT through the common basket for commodities management.

³ Total number of fever cases is estimated with assumptions of fever that could happen to each age group and considering reduction of cases with the use of ITN and drug-based prevention (SMC).

⁴ Percent of fever cases tested with an RDT is an estimate from fever that can be seen in public health facilities and at the community level (iCCM for children under 5 years of age) and taking into account health facilities coverage rate (which is around 50% in 2018, but according to the Ministry of Health's strategic development plan, this coverage will increase to 55% in 2022) and the public health facilities attendance rate (which is around 50%).

⁵ Total RDT needs is the total needs for public health facilities and iCCM (for children under 5 years of age). Forecast assumption says that every suspect malaria case which comes to health facilities will be tested with an RDT (90%) and by microscopy (10%).

⁶ Current Global Fund grant ends in 2020. New grant is expected to begin in 2021. PMI will procure quantities of RDTs in 2021 and in 2022.

| Artemisinin-based Combination Therapy (ACT) Gap Analysis | | | |
|---|------------------|------------------|------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| ACT Needs | | | |
| Total country population | 22,752,368 | 23,591,989 | 24,465,615 |
| Population at risk for malaria | 22,752,368 | 23,591,989 | 24,465,615 |
| PMI-targeted at-risk population ¹ | 22,752,368 | 23,591,989 | 24,465,615 |
| Total projected number of malaria cases ² | 3,919,839 | 4,807,527 | 5,522,539 |
| Total ACT Needs ³ | 3,164,220 | 3,924,975 | 4,567,787 |
| Partner Contributions (to PMI target population if not entire area at risk) ⁴ | | | |
| ACTs carried over from previous year ⁵ | 1,116,690 | 518,370 | 1,857,185 |
| ACTs from Government | 466,930 | 466,930 | 466,930 |
| ACTs from Global Fund | 1,043,446 | 2,860,860 | 1,512,330 |
| ACTs from other donors (World Bank) | 0 | 0 | 0 |
| ACTs planned with PMI funding | 1,656,420 | 1,936,000 | 1,992,910 |
| Total ACTs Available | 4,283,486 | 5,782,160 | 5,829,355 |
| Total ACT Surplus (Gap) | 1,119,266 | 1,857,185 | 1,261,568 |

¹ Geographic coverage: national. PMI does not have a targeted population or area for case management commodities. PMI contributes with other donors, such as the Global Fund, to fill all the needs for ACT by using a common basket for commodities management.

² These projected malaria cases are those that can be seen in public health facilities, private sector facilities, and at the community level. About 15% of need is estimated to come through the private sector.

³ This estimate is based on service delivery patient reporting from the public sector program.

Note: ACTs needs include quantities to be used in public facilities and community (for children under five years of age through the iCCM).

⁴ Current Global Fund grant ends in 2020. New grant is expected to start in 2021. PMI will procure quantities of ACT in 2021 and 2022 to ensure continuity of treatment.

⁵ Carryover from 2019 was due to late deliveries of ACT products during the last quarter of 2019 by partners, and these deliveries will not be distributed to health facilities until January 2020.

| Injectable Artesunate Gap Analysis | | | |
|---|------------------|------------------|------------------|
| Calendar Year | 2020 | 2021 | 2022 |
| Injectable Artesunate Needs | | | |
| Projected number of severe cases ¹ | 466,213 | 490,152 | 481,117 |
| Projected # of severe cases among children to be treated with injectable artesunate (90%) | 247,907 | 244,608 | 236,326 |
| Projected # of severe cases among adults to be treated with injectable artesunate (90%) | 84,259 | 83,138 | 80,233 |
| Total Injectable Artesunate Vials Needs ² | 1,103,064 | 1,193,555 | 1,349,952 |
| Partner Contributions | | | |
| Injectable vials carried over from previous year | 522,142 | 303,132 | 130,807 |
| Injectable vials from Government | 0 | 0 | 0 |
| Injectable vials from Global Fund | 444,955 | 656,230 | 199,953 |
| Injectable vials from other donors | 0 | 0 | 0 |
| Injectable vials planned with PMI funding | 760,606 | 365,000 | 220,000 |
| Total Injectable Artesunate Vials Available | 1,727,703 | 1,324,362 | 550,760 |
| Total Injectable Artesunate Vials Surplus (Gap) | 624,639 | 130,807 | -799,192 |

¹ Severe malaria is estimated at roughly 8% of malaria cases.

² This is the number of vials needed based on the demographic projection. Average number of vials needed per case varies from 3-6 depending on: weight with the intention of most patients being treated for one day with injectable artesunate; those being able to swallow continuing with a course of ACTs; and, what percent of cases are expected to be treated with injectable artesunate. Severe malaria is estimated at roughly 8% of cases. As an alternate treatment regimen, 10% cases of severe malaria are to be treated with injectable artemether for 2 days before most would transition to ACTs.

³ Injectable artesunate needs are compiled only for public facilities.

| Rectal Artesunate Suppository (RAS) Gap Analysis | | | |
|--|----------------|---------------|---------------|
| Calendar Year | 2020 | 2021 | 2022 |
| Artesunate Suppository Needs | | | |
| Number of severe cases expected to require pre-referral dose at community level ¹ | 55,994 | 65,981 | 72,332 |
| Total Artesunate Suppository Needs ² | 105,287 | 70,000 | 73,000 |
| Partner Contributions | | | |
| Artesunate suppositories carried over from previous year ³ | 118,580 | 41,000 | 0 |
| Artesunate suppositories from Government | 0 | 0 | 0 |
| Artesunate suppositories from Global Fund | 0 | 0 | 0 |
| Artesunate suppositories from other donors | 0 | 0 | 0 |
| Artesunate suppositories planned with PMI funding | 79,458 | 56,000 | 77,000 |
| Total Artesunate Suppositories Available | 198,038 | 97,000 | 77,000 |
| Total Artesunate Suppositories Surplus (Gap) | 92,751 | 27,000 | 4,000 |

¹ This is the number of suppositories needed based on historical service performance by community-level workers. There is a seeming capacity gap, regardless of product availability. This should be reassessed in light of community health worker capacity building.

² Quantity calculated is for artesunate 100 mg suppository for children under 5 years of age (for 2021 and 2022).

³ Carryover stock from 2019 to 2020 will expire in Sept 2020 and in Jan 2021. PMI Niger will closely monitor this stock situation especially for those expiring in Sept 2020 to ensure they can be used before.