NIGER
FY2015

Control of Neglected Tropical Diseases

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Table of Contents

Acronyms and Abbreviations

AE	Adverse Event
ALB	Albendazole
APOC	African Program for Onchocerciasis Control
BCC	Behaviour Change Communication
CDD	Community Drug distributor
CDTI	Community-Directed Treatment with Ivermectin
CIH	Center for Integrated Health (Centre de Santé Intégré or CSI in French)
CSW	Child Survival Week (Semaine de Survie de l'Enfant or SSE in French)
FHI 360	Family Health International 360
DHD	District Head Doctor (Médecin Chef de District in French)
DHMT	District Health Management Team (Equipe Cadre de District in French)
DQA	Data Quality Assessment
DSA	Disease Specific Assessment
HD	Health District
HKI	Helen Keller International
ICT	Immunochromatographic test
IEC	Information, Education and Communication
ILMS	Information and Logistics Management System (Système d'Information et de Gestion Logistique or SIGL in French)
INPCS	International Network for Planning and Control of Schistosomiasis (Réseau International Schistosomiases Aménagement et Lutte or RISEAL in French)
IVM	Ivermectin
JSI	John Snow Inc.
LF	Lymphatic Filariasis
MDA	Mass Drug Administration
M&E	Monitoring and Evaluation
MoPH	Ministry of Public Health (Ministère de la Santé Publique in French)
NECP	National Eye Care Program (Programme National de Soins Oculaires or PNSO in French)
NGO	Non-Governmental Organization
NHIS	National Health Information System
NOPCP	National Office of Pharmaceutical and Chemical Products (Office National des Produits Pharmaceutiques et Chimiques or ONPPC in French)
NPEO/LF	National Program for the Elimination of Onchocerciasis and Lymphatic Filariasis (Programme National de Dévolution de l'Onchocercose et d'Elimination de la Filariose Lymphatique or PNDO/EFL in French)
NSSCP	National Schistosomiasis and Soil-Transmitted Helminthiasis Control Program (Programme National de Lutte contre la Bilharziose et les Géohelminthes or PNLBG in French)
NTD	Neglected Tropical Diseases
NTDP	Neglected Tropical Diseases Program
NVD	National Vaccination Day (Journée Nationale de Vaccination in French)
PC NTDs	Neglected Tropical Diseases targeted through Preventive Chemotherapy
Pre-TAS	Pre-Transmission Assessment Survey

PZQ	Praziquantel
RDNE	Regional Directorate of National Education (Direction Régionale de l'Éducation Nationale)
RDPH	Regional Directorate of Public Health (Direction Régionale de Santé Publique in French)
RPRG	Regional Peer Review Group
SAE	Serious Adverse Events
SAFE	Surgery, Antibiotics, Facial Cleanliness and Hygiene, and Environmental Improvements
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCORE	Schistosomiasis Consortium for Operational Research and Elimination
STH	Soil-Transmitted Helminthes
TA	Technical Assistance
TAS	Transmission Assessment Survey
TEC	Trachoma Expert Committee
TIPAC	Tool for Integrated Planning and Costing
TT	Trachomatous Trichiasis
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

Integrated mass drug administration (MDA) campaigns have been conducted in Niger for 7 consecutive years with support from the United States Agency for International Development (USAID) that is supporting the country's efforts to control/eliminate 5 neglected tropical diseases targeted through preventive chemotherapy (PC NTDs), namely lymphatic filariasis (LF), onchocerciasis, schistosomiasis (SCH), soil transmitted helminthes (STH), and trachoma. Program partners include the National Eye Care Program (NECP; previously known as the National Program for the Prevention of Blindness), the National Schistosomiasis and Soil-Transmitted Helminthiasis Control Program **(**NSSCP), and the National Program for the Elimination of Onchocerciasis and Lymphatic Filariasis **(**NPEO/LF). Since 2011, funding from USAID has been provided through the END in Africa project managed by Family Health International 360 (FHI360) to Helen Keller International (HKI), which provides in-country technical/financial assistance to the Ministry of Public Health (MoPH). Other partners, such as The Carter Center (TCC) and the International Network for Planning and Control of Schistosomiasis (INPCS), also have a long history of supporting the MoPH activities targeting trachoma and SCH, respectively.

Every year, as recommended in the 2012-2016 NTD Master Plan, the planning process for the NTD activities of the MoPH is carried with the participation of the MoPH, HKI, FHI360, USAID, and all other technical and financial partners involved in NTD control/elimination in Niger. During these meetings, a consensus is reached regarding the health districts (HDs) eligible for treatment against the different PC NTDs and the strategies for improving mass drug administration (MDA) campaigns, monitoring and evaluation (M&E), advocacy, social mobilization, and other technical areas supporting the major program activities.

Based on the work planning session for fiscal year (FY) 2015 organized by the END in Africa project in Niger in June 2014, the following goals were set for FY2015 for the activities that will be supported by USAID:

(1) Maintain 100% geographic coverage for mass administration of drugs for LF in 27 (HDs, SCH in 11 HDs, trachoma in 13 HDs, and STH in in 4 HDs[1] ;

(2) Conduct a second round of treatment in the 2 HDs that failed the transmission assessment survey (TAS) in 2013 and have a high antigenemia prevalence. The threshold for passing the TAS was $\leqslant$20 antigenemia-positive children, but the Bouza-Keita evaluation unit detected 98 positive children (a 5.9 % prevalence);

(3) Conduct pre-transmission assessment survey (pre-TAS) in 7 HDs that have completed 5 effective rounds of LF treatment ($\geqslant$65% epidemiological coverage and 100% geographic coverage);

(4) Conduct TAS in the 4 HDs (tentatively scheduled around July 2015) where pre-TAS will be conducted in September 2014 (FY2014); and

(5) Conduct trachoma impact assessment surveys in 5 HDs (at district level) and 1 sub-district level assessment survey in 1 HD.

[1] The Neglected Tropical Diseases Program in Niger (NTDP) only counts treatment for STH when it is coupled with that of SCH. Thus, in FY2015, there are 11 HDs being treated for SCH (7 with PZQ alone and 4 with PZQ+ALB), and the 4 HDs receiving PZQ+ALB will be counted as being treated for STH. There are 27 HDs being targeted for LF treatment (with IVM+ALB), and while these HDs will be treated for STH *de facto*, they will not officially be counted by the NTDP.

All mapping is scheduled to be finished by the end of FY2014 with completion of the mapping of the 4 HDs in Agadez region for trachoma and LF mapping in Arlit and Fillingué HDs. Independent monitoring will be organized during and after the MDA to better supervise and assess program performance, and trigger mop-up treatment if coverage is found to be low.

In FY2015, the MoPH will include indicators for the 5 PC NTDs among those for which information (data) is collected by the National Health Information System (NHIS). This will enable the NTDP to have regular access to data at all levels of the health pyramid at the same time as all of the other MoPH programs, and to have access to integrated data for better decision-making. The usual data collection materials will be used and will be assessed at sub-regional, regional, and national evaluation meetings held immediately after the MDA campaign.

Several activities have been included as part of strategic plan strengthening, notably the creation of an NTD Task Force (a multi-sector committee that will play an advocacy role), the annual MoPH planning meeting, the national launch of the MDA campaigns, a national review meeting for MDA campaigns and micro-planning meetings for NTD activities. Cross-border meetings are planned with Burkina Faso to ensure better organization of MDAs within communities that are located along the borders. A meeting of national and international SCH experts will be held in November 2014 to realign Niger's SCH treatment strategies with World Health Organization (WHO) guidelines. The NTDP has started the process of reviewing/updating the present NTD Master Plan (an updated version already exists), which now includes an M&E plan for NTDs in Niger. This revised/updated Master Plan will be presented to the MoPH hierarchy for validation so that inclusion of the M&E plan becomes official (approved by the MoPH) and this will also make the NTD Program accountable to the Minister of Health, as this is the document that will be used to demonstrate whether the NTDP was or was not performing activities as planned with quality. Furthermore, it should be noted that the NTDP has identified post-MDA surveillance for LF and trachoma as one of the key starting from FY2015. The competence of the NTDP to manage the different disease control/elimination programs has to be strengthened so that the quality of MDA campaigns, M&E and other NTDP activities can be improved and also so that disease recurrence can be prevented. Niger is therefore requesting technical assistance in several areas to improve the quality of program implementation , including: capacity-building in general program management; development of a national NTD database; Data Quality Assessment (DQA); training on WHO's joint request and joint drug reporting forms and on the forthcoming severe adverse events (SAE) management guidelines from WHO; technical assistance on the Tool for Integrated Planning and Costing (TIPAC); and assistance with the development and validation of post-MDA surveillance protocols, particularly for trachoma and LF.

Overall, the END in Africa FY2015 work plan is in line with Niger's 2012-2016 NTD Master Plan and will move the country closer to achieving the goals of controlling/eliminating the 5 PC NTDs while also strengthening the national data collection systems.

Country Overview

The Republic of Niger is a land-locked, secular republic covering an area of 1,267,000 km^2 that shares border with Mali, Nigeria, Algeria, Libya, Burkina Faso, Benin, and Chad. It is divided into 8 administrative regions and 42 health districts (HDs). The country's population is about 17 million in 2014, with a projected population of 19,212,354 in 2015. The country is one of the poorest in the world but has significant natural resources, such as uranium and oil.

Niger's health system is based on the health pyramid recommended by the World Health Organization (WHO). It consists of 3 levels:

- **Central level** (responsible for strategic support), which includes the central administration (3 general departments and 15 central departments), 8 national specialized reference centers, 16 national programs, 3 national hospitals, and 1 national reference maternity hospital.

- **Intermediate level** (responsible for technical support) includes 8 Regional Directorates of Public Health (RDPHs), 6 regional hospital centers, and 2 regional reference maternity hospitals.

- **Peripheral level** (responsible for operational support) which includes 42 HDs, 33 district hospitals with 26 functioning operating blocks, 829 centers for integrated health (CIH) and 2,499 health posts. Community involvement is established at the different levels through health committees, management committees, community-based organizations and mutual health insurance groups (groups in which members contribute a fixed amount of money each month, and receive financial support when they fall ill to cover the cost of treatment). “Relais” (village-based health workers) are also involved as community drug distributors (CDDs) during the MDA campaigns.

The MSP of Niger receives the following support for NTDs, in addition to the United States Agency for International Development (USAID) funding:

- **The State**: Provides up to 100 million FCFA a year that is used to support mass drug administration (MDA) campaigns. However, it should be noted that although allocated to the Neglected Tropical Diseases Program (NTDP), these funds are not always received by the NTDP. Other aspects of the State’s support include the salaries of health and education agents, space for storage and meetings, water, electricity, and vehicle use.

- **Conrad N. Hilton Foundation**: Provides funding through The Carter Center and HKI to support the National Eye Care Program’s (NECP) implementation of the full SAFE (Surgery, Antibiotics, Facial cleanliness and hygiene, and Environmental improvements) strategy in Niger, with special focus on trachomatous trichiasis (TT) surgery, face washing, behavior change communication (BCC) through radios and school health, latrine construction, and monitoring and evaluation (M&E). MDA campaigns for trachoma is also supported through the procurement of 1% tetracycline ointment for children under six months.
- **Schistosomiasis Control Initiative (SCI):** Supports the National Schistosomiasis and Soil Transmitted Helminthiasis Control Program (NSSCP) through the International Network for Planning and Control of Schistosomiasis (INPCS)/SCI as part of impact assessments in the HDs of Tillabéri, Dosso, Maradi, Niamey and Zinder regions. In addition, it provides support to the National program for the elimination of Onchocerciasis and LF (NPEO/LF) for the organization of hydrocele surgery camps.

- **Schistosomiasis Consortium for Operational Research and Elimination (SCORE) via INPCS/SCI:** Provides financial support to the NSSCP to implement the "SCORE" studies to find a better strategy for schistosomiasis (SCH) morbidity control and SCH elimination as a public health problem in collaboration with the University of Georgia.

- **Sightsavers**: Provides support to the NPEO/LF for surveillance activities in 5 HDs that were previously endemic for onchocerciasis. .

- **World Vision**: Provides occasional support to the NSSCP for the procurement of praziquantel (PZQ).

- **African Program for Onchocerciasis Control (APOC)**: Provides support to the NPEO/LF for onchocerciasis surveillance activities.

USAID history of support

USAID support for the integrated NTDP in Niger started in 2007. The integrated NTDP brought together 3 disease-specific programs: the NSSCP, the NECP, and the NPEO/LF. From 2007 to 2011, USAID support was provided by the then Neglected Tropical Diseases (NTD) Control Program managed by Research triangle Institute (RTI) International through SCI/INPCS. Since 2011, USAID support in Niger has been provided by the End in Africa Project managed by FHI 360 through HKI. USAID funding continues to support the NECP, NSSCP and NPEO/LF to implement integrated NTD activities throughout the country, including mapping, MDA, strengthening of data collection efforts, community social mobilization, advocacy, and supply chain management, .

With USAID support the NTDP has made significant progress towards the elimination of lymphatic filariasis (LF) and trachoma. Thirteen out of the 33 HDs endemic for trachoma have reached the threshold to stop MDA for trachoma at the district level while the first transmission assessment survey (TAS) organized in 2013 demonstrated that 3 (Say, Tera and Kollo) out of the 30 HDs endemic for LF can stop MDA for LF. Many more HDs will conduct disease specific assessments (DSAs) in the next 2 years after which many HDs will stop MDA for the 2 diseases.

National NTD Program overview

In the current national NTD Master plan (2012-16), 3 diseases are targeted for elimination: LF, trachoma and onchocerciasis, whereas SCH and soil transmitted helminthiasis (STH) are targeted for morbidity control.

Lymphatic filariasis

Baseline LF mapping began in 2003, with mapping of the last districts suspected of being endemic taking place between 2013-2014 (Arlit, Bilma, Fillingué). Arlit and Bilma had never previously been mapped. Fillingué had been mapped; however, due to an elevated number of hydrocele and lymphedema cases in Fillingué, the National Coordinator wanted to remap the district. MDA began in 2007 in 9 HDs and gradually scaled-up until 2011 to all 30 HDs that had been identified to be endemic. In 2013, 3 HDs successfully reached criteria for stopping MDA, leaving 27 HDs under treatment. The mapping in Bilma in 2013 showed 0% LF microfilaremia, while the results for Fillingué and Arlit are not yet available (mapped in FY2014).

- The MoPH elimination strategy for LF consists of:

- Mass treatment with ivermectin (IVM) and albendazole (ALB), with a target of reaching at least 65% of the at-risk population.
- Surgery for hydrocele cases and care for lymphedema cases.
- Improved monitoring of MDA.
- Implementation of BCC using information, education and communication (IEC) materials that focus on disease prevention and improving participation in the MDA campaigns.
- Vector control.

Schistosomiasis and soil transmitted helminthes

The NSSCP was officially launched in 2004. Forty-one of the 42 HDs in the country (all except Bilma) were found to be endemic for SCH. Biennial MDA with PZQ started in 2004-05, targeting school aged children and high risk adults with funding from SCI/INPCS and then with funding from USAID NTD control Program from 2007. In 2010, sentinel site monitoring revealed high reinfection rates, and as a result of this discovery, Niger decided to treat all areas of the river valley regions (Tillabéri, Dosso and Niamey Urban Commune) on an annual basis and other regions once every 2 years (Maradi, Diffa, Agadez, Tahoua and Zinder).

From November 2004 to May 2007, 3 successive surveys were conducted by the Center for Medical Research and Health in 8 sentinel sites located in the regions of Tillabéri, Dosso and Tahoua. The overall average prevalence in the original investigation was 75.4%. A year later, following MDA, the average prevalence significantly decreased to 37.4% and 2nd year prevalence was 35.7%.

All 42 HDs in Niger are endemic for STH; according to WHO definitions, Niger has a moderate prevalence for STH (between 20% and 49.9%).

The MoPH control strategy for SCH and STH consists of:

- Annual or biannual MDA with PZQ (SCH) and ALB (STH) based on disease prevalence and intensity, reaching at least 75% of the targeted population.
- While not part of the NSSCP, children ages 12-59 months also receive de-worming medications during National Vaccination Days (NVD), which generally distribute de-worming medications twice per year.
- Implementation of BCC using IEC materials that focus on disease prevention and improving participation in the MDA campaigns.
- Improvements to the supply of clean water and sanitation.

Onchocerciasis

Onchocerciasis mapping was conducted 1974-1976, and there were 5 HDs endemic for onchocerciasis. Vector control measures took place between 1976 and 1987 supported by the Onchocerciasis Control Program. In 2002, the disease was declared under control by WHO and no longer a public health problem. Niger has never conducted Community Directed Treatment with Ivermectin (CDTI) in the 5 onchocerciasis HDs, since the prevalence in these HDs is lower than the threshold requiring treatment. Once MDA for LF in these 5 HDs has been completed, Niger will be eligible for starting the elimination verification process. In FY14, epidemiological and entomological surveys were planned for the three districts that passed the TAS in 2013 (Kollo, Say and Tera) to demonstrate onchocerciasis elimination in those districts. The entomological surveys are currently underway with the epidemiological surveys to follow immediately after. Boboye will conduct TAS at the end of FY14, and if it passes, it will then conduct the onchocerciasis surveys with support from APOC and Sightsavers; Gaya will conduct TAS in 2016, and if it passes, will then conduct onchocerciasis surveys. There is no request from USAID for funding onchocerciasis surveys in

FY15. Currently the Ministry of Public Health (MoPH) strategy for onchocerciasis consists of surveillance through entomological and epidemiological assessments.

Trachoma

Trachoma control efforts began in Niger in 2002 following district-level baseline mapping surveys. Out of the 42 HDs, 33 were considered endemic and required MDA (⩾10% trachomatous inflammation follicular among children ages 1-9 years) and 5 were non-endemic (<10% TF). The remaining 4 HDs in the region of Agadez were not surveyed at the district level at that time but completed mapping in FY14; however, results are not yet available. The NECP has shifted from a control to an elimination strategy and has set a blinding trachoma elimination date of 2018. The MoPH elimination strategy for trachoma consists of the WHO-endorsed SAFE (Surgery, Antibiotic therapy, facial cleanliness, and environmental improvement) strategy and M&E.

Table 1: Status of the National NTD program in Niger

		MAPPING GAP DETERMINATION			MDA GAP DETERMINATION			DSA NEEDS	ACHIEVEMENT
A	B	C	D	E	F		G	H	I
Disease	Total No. of districts in COUNTRY	No. of districts classified as endemic	No. of districts classified as non-endemic	No. of districts in need of initial mapping	No. of districts under a 'current MDA schedule' (prior to work plan discussions)		No. of districts in need of MDA at any level, but MDA not yet started, or prematurely stopped (prior to work plan discussions)	No. of districts requiring DSA	No. of districts where criteria for stopping district-level MDA has been achieved
					USAID-funded	Others			
LF	*42*	*30*	*10*	*2*[2]	*27*	*0*	*0*	Pre-TAS: *7* TAS: *4*	*3*
Onchocerciasis		*5*	*37*	*0*	*0*	*0*	*0*	*5*[3]	*0*
SCH		41	1	0	35[4]	6[5]	0	0	0
STH		42	0	0	42[6]	0	0	0	0

[2] Waiting on final results from Fillingué and Arlit mapping conducted in FY2014.

[3] HDs are awaiting the stopping of LF MDA before epidemiological and entomological assessments can be conducted to verify elimination. These are planned in FY2015 with financial support from Sightsavers and APOC.

[4] Not all HD are treated annually as per WHO guidelines.

[5] Treated through SCORE study.

[6] Currently, all HDs are treated either through SCH or LF treatment schedules; however, HDs treated through LF are not officially counted by the NSSCP as receiving treatment. Since SCH MDA occurs biennially in most HDs, those receiving STH treatment through SCH will also receive STH treatment every other year, except for the river valley HDs, which receive annual SCH treatments.

Tracho ma		33	5	4[7]	20[8]	0	0	6	13

Goals/Deliverables for 2015

Overall goal

The overall goal of the NTDP in FY2015 is to reduce morbidity due to SCH and STH, and to eliminate LF, onchocerciasis, and blinding trachoma by mass preventive chemotherapy and other complementary strategies by 2020 (2018 for trachoma). The other activities to support control and elimination include the treatment of morbidity cases, improved M&E, BCC, vector control, capacity strengthening for health agents at all levels, environmental improvement, and operational research.

Specific goals

The specific goals vary depending on the diseases targeted and the endemicity of the HDs for each disease. Therefore, in FY2015, the MoPH has the following specific goals for USAID support only:

1. **Specific goals for SCH and STHs**:
   - Mass distribution of PZQ in 11 HDs (Niamey I, Niamey II, Niamey III, Dosso, Boboye, Gaya, Doutchi, Ouallam, Diffa, Mainé Soroa and N'guigmi). Of these 11 HDs, 4 will be treated with PZQ + ALB (Dosso, Doutchi, Niamey I and Ouallam)[9].

2. **Specific goals for trachoma**:
   - Mass distribution of Zithromax and tetracycline eye ointment in 13 HDs (Diffa, Mainé Soroa, N'guigmi sub-district, Aguié, Mayahi, Téssaoua, Guidan Roumdji, Madarounfa, Dakoro sub-district, Gouré, Magaria, Matamèye and Zinder Commune).
   - Conduct an impact survey in 5 HDs (Guidan Roumdji, Madarounfa, Mayahi, Téssaoua and Mainé Soroa).
   - Conduct a sub-district level survey in 1 N'Guigmi sub-district following 1 additional round of MDA, as recommended by the Trachoma Expert Committee (TEC) in their July 2014 meeting.

3. **Specific goals for LF**:
   - Mass drug distribution of IVM + ALB in 27 HDs (Tillabéri, Niamey II, Niamey III, Boboye, Gaya, Tessaoua, Guidan Roumdji, Madarounfa, Aguié, Dakoro, Mayahi, Zinder Commune, Mirriah, Matamèye, Magaria, Tanout, Gouré, Diffa, Mainé Soroa, N'Guigmi, Tahoua Commune, Madaoua, Birnin' Konni, Illéla, Bouza, Keita and Tchintabaraden).
   - Organize a second round of treatment in the HDs of Bouza and Keita, the 2 HDs that failed the TAS survey with high number of ICT positives. The population of these 2 HDs consists primarily of nomads. This marginal group is difficult to reach during the MDA regular campaigns because they are always on the move usually across the border to other countries when mass treatment campaigns are under way. A second campaign will locate these populations on

[7] The NECP plans to finish mapping the 4 HDs in Agadez before the end of FY2014.

[8] 20 HDs on MDA treatment schedules, among which there are 7 HDs that will undergo impact assessment at the end of FY2014, and the results may reveal that some HDs will be able to stop district-wide MDA.

[9] The 27 HDs being treated for LF will receive IVM+ALB; however, these are not officially counted as STH treatments by the NTDP, which is why only the 4 HDs receiving PZQ+ALB are mentioned in the specific goals for SCH and STH. Of the 41 SCH endemic HD, only 11 will require treatment in FY15 according to the country's national treatment plans.

their return from migration and treat them, which will improve epidemiological coverage. Given the TAS failure, it is important to optimize treatment before the next pre-transmission assessment survey (pre-TAS) planned for 2016.

- Conduct pre-TAS in 7 HDs (Diffa, Mainé Soroa, N'Guigmi, Gouré, Magaria, Matamèye and Tanout).
- Conduct TAS in 4 HDs (Niamey II and Niamey III, Zinder Commune and Mirriah).

Planned Activities

There are no activities that are specifically gender-focused. However, MDA activities at the operational level are conducted largely by women due to cultural reasons that enable women to enter any household and treat all household members, whereas if men were conducting the distribution, they would not be permitted to enter certain households, resulting in a lower treatment coverage.

Strategic planning

HKI has continued to support the NTDP to develop annual NTD operational plans. The FY2015 work plan is developed to conduct activities in several areas including:

- **NTD Coordination meetings -** Quarterly meetings will be held, during which strategies will be agreed on, issues/difficulties discussed and solutions found, and advocacy documents will be developed for the MoPH and other technical and financial partners. The meetings will also provide an opportunity to decide on agendas and activities of the programs, to assess the status of activity implementation over the previous three months, and to share lessons learned and recommendations for program improvement. These meetings will enable the NTDP and its partners to identify or refine target geographic areas for MDA or other interventions, as well as specific sectors of the population which need particular attention. The meetings are organized by the national NTD focal point and bring together HKI's NTD Coordination, the national NTDP Coordinators, the follow-up/assessment managers, the representatives of the MoPH departments involved in the control of NTDs and the other partners involved in the control of NTDs.

- **The tool for integrated planning and costing (TIPAC) training -** Training on the TIPAC is an important training session scheduled for FY2015 which will enable the NTDP to better estimate costs and identify gaps in NTDP financing. Training will include staff from the central level of the MoPH, as well as NTD Coordination personnel. From each region, 2 persons will be trained (they may include the administrative and financial heads and the NTD focal points).

- **Micro-Planning Workshops -** In preparation for the FY2015 MDA campaign, HKI will provide support to the NTDP to hold regional micro-planning workshops. The main goal of the meetings will be to develop a base budget for all of the activities included in MDA with full involvement of all stakeholders. The micro-planning meetings will be held in each region with the participation of the central level (national NTDP and Health Education Office coordinators and agents) and HKI. The recommendations made at these meetings will be reviewed and used to create a working document.

- **National Post-MDA Review Meeting –** An evaluation and planning meeting is held at the end of the mass distribution campaign each year to capitalize on the lessons learned from the NTD program. The workshop brings together all key stakeholders (health, education and partners) to share the results of the campaign by HD, to identify areas of strength, areas for improvement, the lessons learned, and to make recommendations to improve future campaigns. To prepare for this national meeting, each

region holds a regional assessment meeting that brings together the Governor, the administrative authorities, traditional leaders, RDPH, Regional Department of National Education (RDNE), District Head Doctors (DHD), and the NTD focal points for education and health. A similar assessment meeting is also held at the district level with the CIH heads, education sector heads and the administrative authorities and traditional leaders. The NTD programs also present their main activities for the coming year at these meetings for feedback from the partners.

- **Development of the MoPH's FY2015 Annual NTD Action Plan -** Niger has put in place a NTD Master plan for 2012-2016. HKI will provide support for the MoPH's NTDP to develop its FY2015 Annual Action Plan in line with its Health Development Plan and WHO guidelines and to update activities. The plan will be developed at a workshop that will bring together all of the stakeholders involved in NTD control (national NTD coordinators, MoPH directors, educational health representatives, and regional representatives) and the technical and financial partners. The goal of the workshop is to provide the MoPH's NTD program with a Work Plan for calendar year 2015, which will be presented to the Minister of Public Health.

- **Validation Workshop for Follow-up and Assessment Plan of the 2012-2016 National NTD Master Plan -** The MoPH has developed a draft follow-up and assessment plan as part of the implementation of the National Master Plan to Control NTDs. HKI will support the MoPH in finalizing and validating the document. The validation in FY2015 of the M&E plan of the NTD program's NTD Strategic Plan will serve two purposes: 1) the 2012-2016 Master Plan does not itself contain and M&E section, so this M&E plan will service that purpose; and 2) it will make the NTDP accountable to the Minister of Public Health, as this is the document that will be used to demonstrate whether the program was or was not performing activities as planned and with quality. The plan describes the data collection mechanism within the framework of follow-up and assessment of the activities to control NTDs in Niger. The data will also be used to track all follow-up and assessment indicators as described in the Master Plan.

- **SCH expert program review meeting -** The NTD program's PZQ distribution strategy has thus far been based on the NSSCP national strategy which states that the HDs in the river valley are assumed to be hyper-endemic and therefore must be treated every year, whereas the other HDs with endemic villages are meso-endemic and can be treated every 2 years. The surveys conducted to assess the impact of treatment are currently being finalized. Once they are completed, the NSSCP will have a complete prevalence map for each HD. Following the recommendations from the WHO expert review workshop held in Ouagadougou in 2012, the NTDP will hold a program review meeting including in-country expertise and program partners to examine the updated prevalence data and re-assess the national strategy so that it conforms to WHO guidelines. During the meeting, Niger in-country experts, with support from international experts, will analyze the variations in SCH prevalence by HD and propose the best possible strategy for reducing morbidity, or eliminating the disease, based on the endemicity level as defined by WHO. This change in strategy will take effect during the FY2016 MDA.

- **Cross-border meetings -** HKI will support the MoPH's NTD program in organizing a cross-border meeting with Burkina Faso as part of the cross-border coordination recommended by WHO, to enable better coordinate MDA and surveillance. The meetings will also provide an opportunity for the programs to exchange information about their experiences. The dates and places will be agreed jointly with program coordination across these countries.

NTD Secretariat

The END in Africa project will continue to assume the telephone and internet expenses for the NSSCP, the PNEO/LF and the MoPH's NTD coordination as part of its support for the national NTDP. It will also pay for the MoPH's NTD program fuel in order to carry out program implementation and supervision activities, as well as office supplies to bolster daily operations.

Advocacy

Several activities have been planned to ensure ongoing activities and to conform to the spirit of the Master Plan which stipulates the need to increase advocacy as a strategic priority:

National launch of the mass distribution campaign: The launch, which provides the program with an official seal of approval and improves the program's visibility, will be sponsored by the Minister of Public Health. It will bring together all stakeholders involved in the control and elimination of NTDs (communities, schools, administrative authorities, traditional and religious leaders, MoPH managers and all of the partners).

Creation of a task force: This is an intersectoral steering committee (representatives delegated by the Prime Minister's Office, National Assembly, the Ministries of Health, Education, Finance, Water, the Environment, Population, the Promotion of Women and Protection of Children, the Interior and Communication) will advocate for the integration of activities and will be responsible for validating the major strategic direction and finding additional funding for activities, if required. The committee will receive operating resources and hold quarterly meetings. The committee will act as a pressure and advocacy group for the NTD program with the high authorities of the MoPH and other partners. The program will call on the committee for the organization of MDA planning meetings and of awareness-raising tours, a sensitization strategy to diffuse the right information about NTDs, their causes, how to prevent them and how to get treated when affected (in Niger, known as a “caravans”) at the community level.

Advocacy meetings: The meetings will be held in the HDs. These are planning meetings held by the District Health Management Team (DHMT) which brings together the administrative authorities, religious and traditional leaders, non-governmental organizations (NGOs) and local associations, education inspectors and opinion leaders. The meetings help to improve program visibility and to gain the buy-in of local communities and, in particular, of local associations to ensure greater ownership of the activities.

Social mobilization

Mobilization of communities in an effective and timely way is critical to the success of Niger’s control and elimination achievements, as good social mobilization yields high drug coverage, and strong participation in surveys. Once the MoPH sets the campaign dates, the NTDP begins its preparations. In advance of the campaigns, radio and television messages about NTDs (trachoma, LF, SCH and STH) already created will be broadcast nationally and at the regional and district levels in several languages to mobilize the population. HKI and partners already have broadcast contracts with most community radio stations. Radio broadcasts will be synchronized during the distribution campaign to ensure that the same message is given to listeners at the same time.

In addition to community radio stations, and for the purposes of interpersonal communication, town criers will be recruited at the community level to disseminate messages. The town criers will inform communities about community distribution schedules. The help of women liaisons will also be sought to improve communication, specifically towards other women, as they can more easily access households, but also because many NTDs affect women and their children more than adult men. As part of IEC, posters,

flip charts and brochures about NTD prevention strategies, which have already been developed, will be printed and provided to health workers and CDDs during their MDA training sessions to distribute in their communities. Finally, an awareness-raising caravan will be organized in certain HDs immediately after the national launch to ensure better program visibility and greater mobilization of rural populations. Criteria for HDs to be targeted by these caravans will be based on lowest MDA coverage during the previous MDA, or, in the case of LF, the 2 HDs that failed the TAS with high antigenemia. Two HDs will be selected per region in a total of 3 regions. The selected HDs are: Bouza and Keita for LF, Dakoro and Matameye for SCH, and Doutchi and Madarounfa for trachoma.

Mobilization of specific target groups

The campaigns will be held during the school year to reach schools and involve teachers and supervisors. Emphasis will be put on schools for the distribution of posters, flip charts, and brochures to ensure that students become an entry point for awareness-raising in the communities. Actions will be taken to create an exchange with neighboring countries to ensure that cross-border communities are fully involved. The HDs have already found innovative strategies to reach nomadic and remote populations, including mobile teams and inclusion in NVD activities. This year, 2 NVD/Child Survival Week (CSW) campaigns combined with deworming of children 12 to 59 months old are planned with the United Nations Children's Fund (UNICEF) support. The results of these campaigns will be included in the NSSCP results.

A second targeted treatment campaign for LF will be carried out in the HDs of the HDs of Bouza and Keita, located in the north of the Tahoua region, which failed the TAS evaluation with high number of antigenemia positives (using immunochromatographic (ICT) cards). The populations in these districts are largely nomadic and people live in areas difficult to access due to security, thus social mobilization among these communities will be increased via awareness-raising caravans in order to increase participation in the MDA campaigns. These will help increase participation, as the caravans will create a public spectacle which draw people out of their homes to come listen to the messages given about MDA and then participate in the MDA itself. Messages will be transmitted via pictures and films projected on a large screen and will be focused on the consequences of these diseases, if not presented, and will be combined with commentary about what is being shown. Afterwards, a question and answer period will be held with the community, which will allow community members to ask questions about what they saw or have heard and receive accurate responses.

Capacity building/training

Cascade Training/Retraining for MDAs

In order to ensure capacity building for all involved at each level, Niger's NTD program will train/retrain trainers at the national level (central MoPH directors, program and health education agents); at the regional level (RDPH, RDNE, regional NTD health and education focal points and education inspectors); at the district level (DHD, educational counselors, district NTD health and education focal points and the heads of epidemiological monitoring); and at the village level (CIH heads, teachers, and CDDs).

This training/retraining of health staff at all levels will take place before the MDA campaign. The MoPH Directors and the NTD coordination will attend a training of trainers and will then be responsible for training regional staff who will then train district staff in MDA and monitoring. In turn, the district staff will be responsible for training health center staff who then will train CDDs and teachers.

In FY2015, cascade training for MDA will be conducted using the new training module which emphasizes the Information and Logistics Management System (ILMS), a system brought to Niger through technical assistance from John Snow Inc. (JSI). As part of the assistance provided by JSI, the training module was revised in 2014, which contains an augmented section on proper drug management, dosing, and drug reporting. This training module will be used in the FY2015 MDA.

A post-training follow-up plan will be set up to monitoring performance at different levels. The quality of training provided by regional trainers will be evaluated during the training sessions held for CIH heads and the heads of the educational sectors. The performance of community health agents and teachers during drug administration (dose pole, data reporting, and supervised drug administration) will be used as indicators. A monitoring guide has been created for this purpose and will be provided to all involved.

Training of Biomedical/Laboratory Technicians

Training biomedical/laboratory technicians will be provided before assessments for LF, SCH, and STH. These same laboratory technicians in targeted districts will be trained as part of the implementation of the LF post-elimination surveillance system. For LF, the training will concern blood smear preparation and identification of microfilaria; for SCH/STH, the training will concentrate on procedures for using Kato Katz kits and urine filtration. In total, 30 persons will receive training on these different procedures.

Independent Monitors

Independent monitoring of MDA was implemented for the first time in FY2014 and served as a valuable tool to help supervise the quality of MDA. This activity will also be implemented in FY2015 and will begin with a training of 15 persons independent to the NTDP to ensure they are unbiased when collecting data. In particular, independent monitoring will be specifically prioritized in Bouza and Keita districts for the first round LF MDA in those two districts, as they had failed the TAS with a high number of ICT positive cases; the independent monitoring will help collect qualitative data during the first round to identify areas to improve MDA for the second round.

Electronic Tablet training for Trachoma Impact Assessments

Survey teams conducting the trachoma impact surveys will be trained to use tablet computers to collect data which will save time and human resources in entering data after the surveys and ensure more timely availability of data on which to make future programmatic decisions. Training on these tablets will be integrated into the trainings generally held prior to survey implementation and not as a separate activity. Twenty survey team members have been budgeted for these surveys.

Table 2: Training Targets

Training Groups	Training Topics	Number to be Trained			Number Training Days	Location of training(s)	Name other funding partner (if applicable, e.g., MOH, SCI)
		New	Refresher	Total			

oPH Directors NTD coordinators	Training of Trainers for MDA training and monitoring: ensuring correct quantities of drug are being calculated (for each distributor to distribute and given to each MDA participant, community mobilization, SAE, reporting, drug destruction (as applicable)	7	2	9	1	Niamey; NSSCP meeting room	NA
RDPH Staff DHMT Staff RDNE Staff	MDA training for CIH and sector heads and MDA monitoring: ensuring correct dosing, community mobilization, SAE, reporting	42	184	226	1	Regional and district capitals	NA
CIH heads Sector heads	MDA training for CDDs and Teachers And monitoring: ensuring correct dosing, community mobilization, SAE, reporting	358	821	1179	1	District capitals	NA
CDDs Teachers	MDA distribution: dosing, community mobilization, SAE, reporting	16,300	32,578	48,878	1	Villages	NA
Independent monitors	MDA	15	20	35	3	Niamey; HKI meeting room	NA
Laboratory technicians	LF post-MDA surveillance LF pre-TAS Kato-Katz and urine filtration for SCH/STH	10 10 10	10 10 10	20 20 20	5 3 3	Niamey; NSSCP meeting room	NA
Trachoma survey team members	Data collection using tablet computers for trachoma impact surveys	20		20	3	Niamey; NECP meeting room	NA

Mapping

No mapping activities have been scheduled for FY2015 given that the NTDP is completing all mapping in FY2014.

MDA

The existing MDA gap is the lack of funds for treatment of severe adverse events, should any occur.

In Niger, MDAs consist of 3 parts: 1) planning for the MDA, including training of personnel to act as trainers, supervisors, and distributors; 2) MDA implementation; and 3) post-MDA evaluation, in which preliminary report data are reviewed, and teams discuss issues that arose during the MDA, how they were resolved, and make recommendations to improve the next year's MDA.

Two MDAs are planned for FY2015:

- The first will be conducted in November 2014 and will concern all of the targeted HDs across the country where MDA is required for each disease. The November 2014 MDA will target 11 HDs for SCH (7 with PZQ only; 4 with PZQ+ALB); 4 HDs for STH[10];) 13 HDs for trachoma (azithromycin + tetracycline 1% eye ointment); and 27 HDs for LF (with IVM+ALB). Two strategies will be used for MDA: the community-based, door-to-door strategy carried out by CDDs and the school-based distribution strategy carried out by teachers.

- The second MDA for LF will take place in August 2015 in the HDs of Bouza and Keita, which did not pass the TAS in 2013. These two districts have highly mobile populations; thus, special measures will be taken to ensure at least 65% epidemiological coverage through increasing the number of CDDs in these areas, thereby decreasing the number each one needs to reach; ensuring transportation to mobile and hard to reach areas; and increasing community mobilization through the awareness-raising caravans. In addition, independent monitoring during the first MDA round will help identify issues to improve the second round. While the two rounds of MDA will be conducted as full MDAs targeting the entire population eligible to participate (80% of the at-risk population), the second round is also likely to function as a mop-up round, as the persons not present during the first round will likely have returned to their home villages. Biannual treatments for LF fits within WHO guidelines.

As part of the SCORE study, SCI/INPCS will carry out mass distributions against SCH in all endemic villages of the six SCORE HDs (Kollo, Say, Téra, Tillabéri, Loga and Fillingué), and will also ensure coverage in the villages that are not enrolled in the SCORE study, to follow the national policy. The Carter Center will purchase tetracycline 1% eye ointment for children 0 to 6 months old and other persons ineligible to take Zithromax® for use during the trachoma MDA. The United Nations Children's Fund (UNICEF) will support the deworming of all children between the ages 12 and 59 months twice during the year throughout the county as part of NVD/CSW.

All of these drug distribution strategies will be carried out based on the protocols defined by WHO and according to MoPH guidelines.

Table 3: USAID-supported districts and estimated target populations for MDA in FY15

NTD	Age groups targeted (per disease workbook instructions)	Number of rounds of distribution annually	Distribution platform(s)	Number of districts to be treated (as of August2014)	Total # of eligible people targeted (as of August 2014)

[10] These 4 HDs are the same 4 HDs being treated for SCH with PZQ+ALB. Only the 4 HDs that will receive PZQ + ALB will officially be considered as treating STH in FY2015; however, 27 other HDs will be treated *de facto* through LF.

LF	5 years and older	1[11]	Door to Door, in schools	27	10,427,722
Onchocerciasis	NA	NA	NA	NA	NA
SCH	5 years and older	1	Door to Door, in schools	11	1,989,241[12]
STH	5–14 years and at-risk adults[13]	1	Door to Door, in schools	4	690,456[14]
Trachoma	Total population	1	Door to Door, in schools	13	5,751,863

MDA Challenges

As shown below in Table 4, the programmatic and epidemiological coverage in certain districts was less than adequate. This is primarily due to the following reasons:

- The mobility of the inhabitants of certain areas at given times during the year creates a denominator problem for indicator calculation.
- The significant distances between communities treated by a single distributor. This leads to fatigue among the CDDs, and MDA not being completed.
- The high number of people each distributor has to treat (500 per CDD). This is particularly problematic in sparsely populated areas, where CDDs may need to travel long distances to reach their 500 person target.
- Insufficient social involvement due to the lack of budgetary resources allocated to social mobilization. Social mobilization was budgeted in MoPH's budget; however, it was also under-budgeted.
- Small financial incentives provided to CDDs, coupled with insufficient training on reporting, leads to inaccurate reporting, including incomplete reports from some CDDs.
- The campaign disruption caused by the NVDs[15].
- Poor control of the drug inventory for remaining stock post campaign, leading to incorrect requests for drug for the next year.

The program will use the lessons learned during previous campaigns to address these problems and improve the FY2015 campaign, with emphasis placed on the following:

[11] Two LF MDA rounds are planned for FY2015 in the HDs of Bouza and Keita, which failed the TAS.

[12] This population figure includes the 690,456 who are counted as being targeted for STH treatment in the 4 HDs listed.

[13] At-risk adults are treated as part of the LF MDA (27 HDs) and in 4 HDs that will receive the PZQ/ALB. However, the MoPH does not officially recognize the LF treatments as STH treatments when the HDs treated by the LF program are not target by the SCH/STH program (deworming is considered to take place only through the SCH/STH program) – however, we have included these as targets in the workbooks since they are in-fact STH treatments in endemic HDs.

[14] This population is inclusive only of the 4 HDs that will receive PZQ +ALB. The 27 HDs that will receive IVM+ALB are not officially counted.

[15] In 2013, a polio case was detected in the Tahoua region. As a response to this, the number of NVDs has increased from approximately 3-4 per year to one at least every two months. Because of the seriousness of the disease and the global eradication effort underway, all health personnel must take part in these campaigns. This leads to disruption of health activities at all levels and in all programs. Dates for the NVD weeks are often not announced until a few days before the campaign is set to start, meaning that these campaigns are difficult for the NTD program to plan around.

- Training will be reoriented towards parts of MDA that have been ignored in the past, including reporting, to enable those involved to better master the calculation keys, improve drug implementation to avoid shortages and ensure quality data reporting at all levels.

- Capacity-building for everyone involved with the ILMS for better drug allocation.

- Increase of number of CDDs to reduce the number of people each CDD has to treat in zones that are difficult to access, such as desert and nomadic areas, and an increase in the travel expenses of meeting attendees in these areas will improve the working conditions of the CDDs so that they can better access their targets. In these areas, one CDD will treat 250 people instead of 500 to make the work more manageable, with the goal that this will improve overall coverage.

- Increase in the number of CIH heads' number of days to supervise CDDs to discover any potential errors in the reports as early as possible.

- Creation of awareness-raising caravans with full community participation to improve ownership of program activities in the HDs with poor coverage and in the 2 HDs that failed the TAS with high antigenaemia prevalence, Bouza and Keita.

- Inclusion of drug recovery at the CIH level in the budget to enable storage at the HD level to enable the NTDP to better forecast the drug needs for the subsequent MDA.

- In addition to awareness-raising caravans in the HDs that failed the TAS, live radio discussions will be held with the local population and as many women community liaisons as possible will be recruited, as they are able to enter all households, whereas men are barred from certain households, if they are not related to the family.

- Cross-border issues will be discussed during meetings with the NTD programs of neighboring countries that have the same NTD public health concerns. In FY2015, a meeting between Niger and Burkina Faso has been planned.

Table 4: Explanation of low USAID-supported program and epidemiological coverage
Epidemiological coverage targets are defined below.
Programmatic coverage targets are >=80% eligible population

NTD	Total number of districts treated in FY13	Epidemiological coverage targets	Number of districts that did not meet coverage targets in FY13*	Reason(s) for poor district performance	Proposed remediation actions
LF	30		Epi: 05		

		>=65% epi coverage	Program: 05	-The mobility of the inhabitants of certain areas -The significant distances between communities treated by a single distributor -The high number of people each CDD has to treat (500 per CDD) in nomadic areas	-Schedule the MDA after the rainy season, the beginning of school year -Increase transportation costs - Reduce the number of people treated by each distributor (in rural areas with dispersed populations)
Onchocerciasis	0	>=65% epi coverage	Epi: NA		
			Program: NA		
SCH	29	>=75% epi coverage of SAC	Epi: 06		
			Program: 06		
STH	36	>=75% epi coverage of SAC	Epi: 08		
			Program: 08		
Trachoma	16	>=80% epi coverage	Epi: 10		
			Program: 10		

Drug and Commodity Supply Management and Procurement:
All drugs for the FY2015 campaign, as well as tools (dose poles, registers), will be received and stored in the National Office of Pharmaceutical and Chemical Products (NOPCP) storage units (NOPCP is a structure of the MoPH responsible for management of medicines), per an agreement signed between HKI and NOPCP. In order for the NOPCP to effectively and correctly manage the supply chain for MDA drug and materials, it is very important that drug orders are made to NOPCP 6 to 8 weeks in advance (it takes 2 weeks to package drugs and 3-4 weeks to transport them to the HDs). The national coordinators will develop their distribution plan that will be sent to the NOPCP for execution 2 months in advance of the distribution. Using the distribution plan, the NOPCP is able to ensure the delivery of supplies (drugs, dose poles, and registers) to the HDs. The district NTD focal points will then deliver the drugs and tools from the HDs to the CIHs. At the end of their training at the CIHs, the CDDs and school directors will return to their villages with the necessary quantities of drugs and tools for distribution in their schools and health areas. There are two possible scenarios for drugs to be delivered to schools, depending on the heads of district-level health and education institutions: either the trained teachers will be supplied with drugs and tools for all packages at the level of their CIHs right after training, or they will be supplied by the heads of the educational sectors.

One other function of the NOPCP is to control the quality of all drugs entering Niger. To that end, it is also important that drugs arrive well in advance of the MDAs so that the NOPCP may test the drug and ensure that it meets the quality standards required by the government prior to implementation of MDA.

After the MDA, CDDs will be expected to send all remaining drug stocks to the CIHs. CIHs managers should then return all remaining stock to the HDs during evaluation workshops. Immediately following completion of the regional evaluation meetings, the task of conducting a physical count of the remaining drugs will be assigned to the national level.

Expired products and empty bottles will be managed at all levels:

- At the CIH level: at the end of the campaign and after sub-regional assessments and physical inventory of the drugs and tools, CIH heads are authorized to dispose of or destroy the empty

boxes and bottles used during the campaign in accordance with set disposal/destruction procedures.

- At the HD level: A destruction committee is responsible for destroying all expired drugs in accordance with destruction procedures.

Several improvements will be made to the drug supply chain management process in FY2015 based on the technical assistance received from JSI in 2013 and 2014. This includes basing the quantification of NTD drugs for FY2015 on the drugs remaining in-country post-2014 campaign in each eligible district. The WHO Joint Request form will be used for IVM and ALB, whereas END in Africa will procure PZQ, and the International Trachoma Initiative will manage the Zithromax® donation. Once the drugs arrive in-country, the MoPH will work to clear the drugs and then they will be stored at NOPCP's storage facilities.

It should be noted that no case of severe adverse event (SAE) has been reported in Niger since the launch of the integrated mass distribution campaigns; however, should they occur, SAEs will be reported immediately within 24 hours to the National NTD Coordinator, who will inform national officials and the HKI NTD Coordinator concurrently. The HKI NTD Coordinator and the HKI Country Director will then inform the HKI headquarters/regional teams, who will inform FHI360, who in turn, will inform USAID. The MoPH is responsible for informing WHO and the pharmaceutical companies of any SAE that occurs during MDAs. In case of reporting of a case of SAE, the following immediate measures will be taken:

- At the local level, the case will be directed to the nearest health center able to provide treatment; however, as there are no current funds to pay for these patients' care, the patients themselves will need to pay for their own treatment. A team of investigators made up of the regional focal point, the focal point for the district where the incident occurs, and the district head doctor, will arrive on the scene to make the initial preliminary investigation and inform national officials and HKI. HKI will cover costs related to medical treatment if a causal relationship is established. Formal communication will then be sent to traditional officials, and opinion leaders will be enlisted to inform communities about all cases of adverse events, whether or not these have been proven to be related to the MDA. This is because if the NTD program does not address these issues, the communities may think that the program is hiding information from them, making them less likely to participate in future MDAs. The leaders are asked to state that the medication that these persons received is the same that all other persons received, and that these medications can lead to side effects, severe or minor, in certain people, but that this adverse event is an isolated case and not everyone will develop them. Community radio stations will also be asked to quell or address any possible rumors. Case management of minor side effects will be handled by national medical officials, though paid for by the cases themselves.

- In terms of mild or minor side effects, there has been a decrease in the number of cases over the years of mass treatment. Minor adverse events (AEs) will be managed at the community and CIH levels. However, as the CIHs don't have drugs for managing undesirable side effects, their supply is included in the cost recovery system. Note, however, that this is a fairly difficult task. In the event of serious side effects, patients must be referred to a hospital for proper treatment. Fortunately, no serious side effects have been reported to date.

Table 5: END in Africa Drug and Commodity Procurement (USAID-specific)

Drug/commodity	USAID support mechanism (e.g., ENVISION, SCORE, END)	Quantity (tablets/tubes) to be procured	Date of application (MM/YR)	Expected delivery date of drugs (MM/YR)
PZQ	End in Africa	4,973,104 tablets	10/2014	04/2015
ICT Cards	END in Africa/HKI	7000 cards	10/2014	05/2015
Kato-Katz kits	End in Africa/HKI	1 kit per laboratory technician for training (60 kits)	10/2014	02/2015

ICT = Immunochromatographic test

Supervision

Supervision of the MDA is one of the most important activities of the campaign. In FY2015, while supervision will continue to be carried out in all districts, extra supervision will be provided in areas where problems have been reported previously, such as districts with low coverage. Several levels of supervision are conducted during the MDA campaign to ensure adherence to the protocols and best practices established by the MoPH to help mitigate issues that might cause bottlenecks, and to ensure quality data collection. Supervision is conducted during planning meetings, trainings, IEC activities, advocacy activities, drug logistics/management activities, distribution, data collection, and evaluation meetings to ensure compliance with MoPH and WHO guidelines.

In FY2015, supervision will take place at all levels, and supervision pools will be set up by level to ensure the quality of activities. The goal of supervision by level is to detect shortcomings in MDA execution in time to implement effective solutions. A supervision guide will be made available to all teams to standardize their work methodology and facilitate decision-making.

- At the national level, teams of national supervisors will include the national NTD focal point, disease-specific coordinators, team members from programs (NSSCP, NPEO/LF, NECP), the Health Education Office (Bureau de Santé Scolaire), and some central-level directors. These teams of national supervisors will conduct supervision missions to supervise preparation meetings, training of CIH workers, distribution, data recording and reporting, and final evaluation of the campaign.

- At the regional level, a team of supervisors made up of regional directors (health and education) will provide supervision of trainers (training for CIH managers and leaders in the disease sectors) and distribution in the HDs.

- A second team for technical support made up of regional focal points (health and education) will be in charge of supervising the district-level and CIH training sessions, distribution, and evaluations. They will check that distribution registers, dose measurements, supervised drug administration, data recording and reporting and handling of side effects are implemented correctly.

The HKI NTD Program Coordinator will work with the national NTD focal point and disease-specific national coordinators to ensure that supervision will be executed with the utmost rigor. This will be

accomplished through supervision conducted by the NTD Program Coordinator (and his staff) during the MDA; an independent monitoring activity that will be carried out independent from the national program to try to eliminate bias; and restitution meetings to discuss any issues encountered, leading to improvements in the next MDA. Involving the program coordinators in the development and implementation of supervision programs will allow for greater ownership of activities and ensure that they are implemented in accordance with MoPH regulations.

Every person involved in supervision must provide a daily debriefing of the activities carried out during the campaign. Supervisors will be allocated communication expenses to enable them to inventory all problems found in the field in real time and to communicate with the NTDP coordination regarding their management. When problems arise during supervision, the supervisors will have the authority to provide appropriate solutions, depending on the seriousness of the reported issue and the level of responsibility/quality of the supervision team. In any case, problems that cannot be solved on site will be referred to the national level for investigation and appropriate action within 24 hours of notification. The supervisors will have communication funds for this purpose so they can report problems that arise in the field in real time.

Supervision during MDA will incorporate a review of the quality of the data being collected, such as whether registries and tally sheets are being filled out correctly. Independent monitoring of MDA was implemented for the first time in FY2014 and served as a valuable tool to help supervise the quality of MDA, and this activity will also be implemented in FY2015. This activity helps to validate the data collected by CDDs and reported by the NTDP.

Short-Term Technical Assistance

With support from END in Africa, the NTDP is requesting the following technical assistance support in FY2015:

- **NTD Program Manager training:** To strengthen the capacity of the NTDP coordinators and their management of their respective programs, and their joint management of the integrated program, they have requested participation in the NTD Program Manager's training course, or for in-country technical assistance (TA) to provide the equivalent.

- **Integrated NTD database:** The national program is requesting technical assistance to train MoPH staff to construct and manage a national database for NTDs. This database will build upon the national data collection system and provide a platform for the storage and analysis of national NTD data. The database will also be compatible with the WHO joint request form, streamlining the drug application process in Niger.

- **Data Quality Assessment:** In FY2015, the national NTD program will request technical assistance to conduct a data quality assessment to assess the quality of reported NTD data in Niger and the ability of current NTD data management systems to collect, transmit, document and report quality data.

- **TIPAC training:** TA will be requested to provide training on the TIPAC, to enable the National Program to better estimate costs and identify gaps in NTD program financing.

- **SAE Management training:** Although Niger does not have a history of SAEs, with the introduction of the new handbook and guidelines from WHO on SAE management, the National Program has requested a training in its use, to enhance their ability to respond to SAEs if they arise.

- **Development of post-endemic surveillance protocols for trachoma and LF:** The NTD Program in Niger has reached the stopping-MDA phase for trachoma and LF in certain districts, and has requested assistance in developing post-endemic surveillance protocols for trachoma and LF surveillance to ensure that they conform to WHO guidelines. The National Blindness Prevention Program is aware that the trachoma surveillance guidelines are likely to change; the surveillance protocol will not be developed prior to the new guidelines being released.

- **Assistance with planning and implementing NTD activities:** The HKI Niger office has been short-handed over the last three months and are unable to provide Niger's National NTDP with the level of support required. Because the NTDP has a history of not completing all the activities in its annual action plan, it is important that they start off FY2015 with a solid timeline of activities. This will include dissecting all planned activities into pieces and planning, week by week, what needs to be accomplished for each activity to occur at the macro-level, enabling the program to stay on target through the end of the project. In addition, the technical experts will be able to provide support in the field and to the Niger program and disease workbooks to ensure accurate and complete reporting.

Table 6: Technical Assistance request from END in Africa

Task-TA needed	Why needed	Technical skill required	Number of Days required and anticipated quarter
NTD program manager training	To strengthen the managerial capacities of NTDP	NTD Program management expertise	1 week, 2nd Quarter
Assistance to create a national database	To assist the NTDP with data management	Expertise in database creation	2 weeks; 2nd Quarter
DQA training	Shortcomings in data collection, quality assessment and processing	DQA expertise	2 weeks; 3rd Quarter
TIPAC training	To identify program and funding gaps in reaching control and elimination targets	Expertise in TIPAC	2 weeks; 3rd Quarter
SAE management training to improve the program's ability to respond to SAEs	New handbook/guidelines from WHO on SAE management	SAE management expertise	3 days; 4th Quarter
Development of post-treatment surveillance protocols for LF and trachoma	Requirement for elimination verification and to ensure disease recrudescence is detected early	Surveillance protocol expertise	1 week; 3rd Quarter
Assistance with planning and implementing FY2015 Q1 activities to ensure timely start to FY	HKI Niger NTD staff is short-handed and cannot provide the National NTDP with the support required	Planning and implementing NTD DSAs, USAID disease and program workbooks	1 month; 1st Quarter

Monitoring & Evaluation

Distribution registers will be provided to CDDs and teachers for data collection. These registers are filled out by CDDs and teachers who send them to the CIH managers at the end of the campaign. The CIH managers will compile the data they receive in the summary registers that they send to the District Health Manager, who in turn compiles all data from all the CIHs in the health area. Two copies of the summary registers are made, the first for the district archives and the second to be sent to RDPH. The RDPH compiles the data for all districts into a single summary report of the region's data.

Production of a report for each implemented activity and for each level (HD, RDPH, and National) using the outline provided to regional focal points. These various reports must be sent at the same time as the vouchers, within 45 days after the administration of the last package or after the sub-regional evaluation (the HD), and from the regional the RDPH level.

In addition, specific emphasis will be placed on data quality through the following activities:

- Close supervision at all levels, including independent monitoring;
- Use of supervision checklists for supervision teams to ensure that supervision is being conducted thoroughly and completely at each site;
- Full involvement in NTD activities of the CIH manager who oversees the NTD data for the HD; this person is based at the HD and is sometimes is the same person as the district- NTD focal point;

After the regional evaluations, results by region are sent to the national level at least one week prior to the national evaluation. The national level should be able to finalize and transmit the campaign results to HKI within one week after the national evaluation so that HKI can meet the deadline for submitting results. Each HD must produce an overall summary report of activities at the end of each MDA campaign. These reports should be sent to the national level, which is responsible for producing a summary by program. HKI will ensure that the first semi-annual report to FHI360 will be available in March 2015, and the second in September 2015.

Additionally, the following M&E activities related to assessing disease epidemiology and impact of MDA will be conducted in FY2015:

- LF pre-TAS: 7 HDs will be included in the FY2015 pre-TAS (Diffa, Mainé Soroa, N'Guigmi, Gouré, Magaria, Matameye, and Tanout). These HDs have had at least 5 effective rounds of MDA coverage and are thus eligible for the pre-TAS to determine if they are eligible to progress to the TAS.
- LF TAS: TAS is planned in 4 HDs (Niamey II, Niamey III, Mirriah and Zinder Commune) in FY2015 based on the results of the FY2014 pre-TAS planned for September 2014. Once results are received, and if microfilaremia prevalence is <1%, then TAS eligibility forms will be completed for these districts and the applications submitted to the WHO NTD Regional Peer Review Group (RPRG) for their review and approval. Conducting the TAS in these districts will enable the MoPH to determine if transmission has been broken, and thus if MDA can be halted and post-endemic surveillance can begin.
- Onchocerciasis epidemiological assessment: MDAs have never been conducted for onchocerciasis specifically except through LF MDAs in Niger, as the prevalence of onchocerciasis during baseline surveys demonstrated that MDA was not warranted, but an epidemiological assessment is planned for FY2015 to confirm elimination. Entomological and epidemiological assessments will be carried out for onchocerciasis in one formerly endemic HD where LF treatment was stopped (Boboye). The epidemiological assessment will be done in 30 villages at least 15 kilometers apart. This activity will be carried out with Sightsavers and APOC. The entomological surveys will be conducted during the three-month rainy season and will be supported by Sightsavers; no USAID funding is required. The results of these evaluations will help Niger start documenting the elimination of onchocerciasis infection in the country.

- Trachoma post-MDA surveillance: Thirteen HDs have achieved the criteria for stopping trachoma treatment to-date. Although the full protocol for surveillance still needs to be developed and validated, the program plans to implement post-MDA surveillance in these districts with two sentinel villages established in each HD, per year. This will enable the MoPH to detect recrudescence of the disease over time and respond appropriately, as necessary. The national program has asked for external assistance to develop a protocol to be followed to conduct surveillance (see "Technical Assistance required" section). However, the National Program is aware that new surveillance guidelines are forthcoming and will not develop their protocol until the guidelines have been released.

- Trachoma impact assessments: The program will conduct trachoma impact assessments in 5 HDs in FY2015 (Tessaoua, Mainé Soroa, Guidan Roumdji, Madarounfa, and Mayayi) and 1 sub-district (N'guigmi). If prevalence of TF is <10% at the district level, these HDs will be eligible to stop district-level treatment and will need to conduct sub-district level surveys; if the prevalence is <5% at the sub-district level in N'guigmi, then that sub-district will have reached its active trachoma elimination target.

- LF post-MDA surveillance: Active and passive LF surveillance will be conducted in FY2015 in the HDs of Téra, Say and Kollo which have stopped MDA. For active monitoring (i.e. TAS I), the presence of LF antigenemia will be conducted in a number of different villages using ICT cards, which will be purchased with END in Africa funds. Regarding the passive monitoring, when patients have their blood taken in health facilities' laboratories for other reasons, their blood will also be tested for LF antigenemia. Those patients staying in hospitals or other health facilities will also be checked for nocturnal microfilaremia by doing blood tests between 10:00 pm and 2:00 am. Prior to starting these activities, the National Program will ensure that all those involved in the monitoring activities will have the proper training to conduct the procedures. The national program has requested TAs to develop and validate a formal passive surveillance protocol.

- Independent monitoring of MDA: To improve coverage during distributions, independent monitors will conduct independent monitoring under the supervision of the HKI NTD M&E Manager and the Assistant to the HKI NTD Coordinator. This activity will be conducted in 6 districts (Doutchi and Mainé for Schisto; Téssaoua and Diffa for trachoma; and Bouza and Keitafor LF). These districts may change once the results of the 2013 campaign become available. These districts have been selected because there has historically been coverage or operational issues. This activity will assist the NTDP to better understand, monitor, and mitigate these issues.

- Data Quality Assessment (DQA): the DQA will help strengthen the data quality of the Niger NTD Program through a review of the consistency in data and reporting at the various levels, as noted above in the TA section. The National Program is planning for the DQA to take place in the Tillabéri region, as Tillabéri has historically had some reporting challenges, so this activity can help address those; in addition, this location will cut down on travel days for program actors and minimize unnecessary costs, due to its proximity to Niamey.

In order to strengthen the national data management system, HKI will provide assistance to the MoPH to hold a finalizing and validation workshop for the M&E section of its Strategic Plan for the Control of NTDs. Once the document is validated, the NTDP will require TA to create a national database of neglected tropical diseases, as noted above in the 'Technical Assistance section'.

Table 7: Planned Disease specific Assessments by Disease

DSA Type	# DSA Targeted with USAID Support (as of 07/2014)	Names of districts where DSA to take place
LF Pre-TAS sentinel/spot check site	7	Gouré, Tanout, Magaria, Matameye, Diffa, Maine Soroa, N'guigmi
LF TAS: Stop MDA	4	Niamey II, Niamey III, Mirriah, Zinder Commune
LF TAS: Post-MDA Surveillance (I or II)	3	Say, Téra, Kollo
Trachoma impact survey	6	Guindan Roumdji, Madarounfa, Mayahi , Téssaoua, Mainé Soroa districts, and N'Guigmi sub-district

Planned FOGs to local organizations and/or governments

Table 8: Planned FOG recipients

FOG recipient (split by type of organization)	Number of FOGs	Activities
Central (MOH)	01	• MoPH Annual Work Plan
		• National NTD launch
		• Supervision at Central Level
		• Annual Post-MDA Review Meeting at National Level
		• Micro-planning workshop
		• Training of Trainers
		• 2012-2016 NTD Master Plan Follow-up/Assessment Plan validation workshop
		• Cross-border meetings with Burkina Faso
		• Monitoring of district-level FOGs
		• LF Pre-TAS in 7 HDs: Diffa, Mainé, N'Guigmi, Gouré, Magaria, Matameye and Tanout
		• FL TAS in the Niamey 2, Niamey 3, Mirriah, and Zinder HDs
		• Trachoma Impact Survey in 5 HDs and 1 sub-district • (Guidan Roumdji, Madarounfa, Mayahi, Mainé and Téssaoua districts; N'Guigmi sub-district)
Agadez	02	• Preparation of Distribution
		• Distribution
		• Evaluation

Diffa	03	• Preparation of Distribution
		• Distribution
		• Evaluation
Dosso	04	• Preparation of Distribution
		• Distribution
		• Evaluation
Maradi	05	• Preparation of Distribution
		• Distribution
		• Evaluation
Niamey	06	• Preparation of Distribution
		• Distribution
		• Evaluation
ONPPC	07	• Drug storage
		• Drug repackaging
		• Put drug in place
		• Quality control of drug
Tahoua	08	• Preparation of Distribution
		• Distribution
		• Evaluation
Tillabéri	09	• Preparation of Distribution
		• Distribution
		• Evaluation
Zinder	10	• Preparation of Distribution
		• Distribution
		• Evaluation

Summary of NTD partners working in country

Table 9: NTD partners working in Niger and summarized activities

Partner		Location	Activities	Is USAID providing financial support to this partner?
HKI		National level, All regions	Overall technical and financial support to the national integrated NTDP, including advocacy, BCC, work planning, implementation, supervision, M&E, and data management and reporting	Yes
		Niamey, Maradi, Diffa and Zinder with assignments in the field in Dosso, Tillabéri	Support for the NECP: Hilton Trachoma project: BCC, TT surgery camps, school education	No
The Carter Center		Niamey with field assignments in Diffa, Zinder, Tahoua and Maradi	Support for the NECP (BCC, latrine building, TT surgery camps)	No
			Purchase of tetracycline ointment for trachoma mass treatment campaigns	
SCI/RISEAL		Niamey with field assignments	Support for the SCH and STH Program (BCC, DSAs, MDA and Research), support for the NPEO/LF (hydrocele surgery)	No
Sightsavers		Assignments in Niamey	Support for onchocerciasis surveillance	No

Looking Ahead

The most significant gaps in terms of controlling PC NTDs in Niger are:

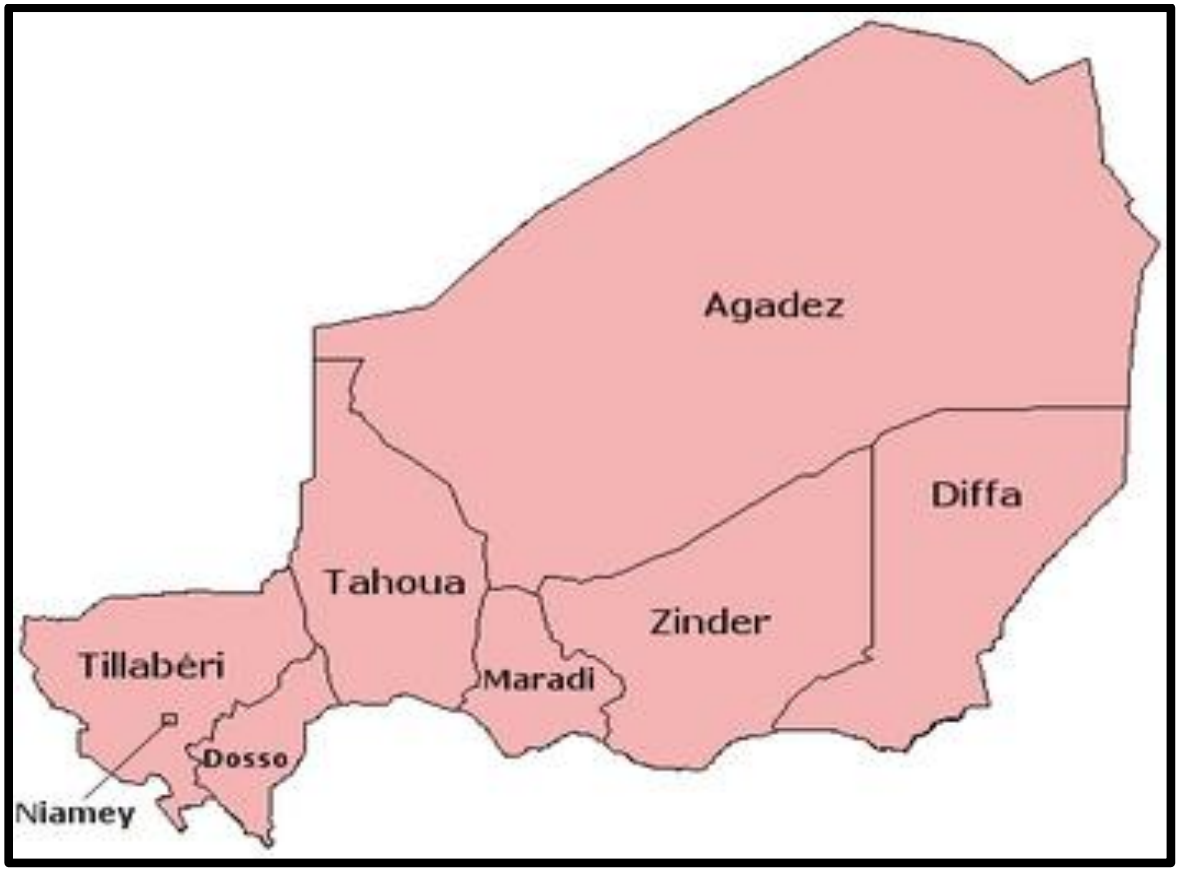
The need to address the high prevalence of antigenemia in the districts of Bouza and Keita, as demonstrated in the TAS in those districts. Therefore, the National Program would like to conduct 2 rounds of LF MDA in the HD of Bouza and Keita in FY2015, given the high number of ICT-positive cases found during the TAS. The NTDP will combine this extra MDA round with increased community mobilization (including the usage of awareness-raising caravans); improved training for CDDs and decreasing the number of persons each CDD much reach from 500 to 250; as well as better training for supervisors, to ensure that they are able to detect and resolve issues early in the campaign.

Table 10: Remaining gaps to be addressed

Identified gap or activity	Would external support be needed – funding or technical (outside of existing partners)?	Estimated time needed to address activity	Estimated cost to carry out activity
2nd MDA round in Bouza and Keita (2 HDs that failed the TAS in 2013 with a high prevalence of antigenemia)	Financial support required	1 week for MDA	$20,045

Figure 1: USAID NTD support map of Niger

The map below shows the 13 regions of Burkina Faso, which will all be supported in FY2015 by the USAID NTDP for the control/elimination of the 5 targeted PC NTDs.



*All 8 regions and all 42 HDs of Burkina Faso are supported for the control/elimination (support for mapping, MDA, DSA and BCC activities) of at least 1 PC NTD.
** Appendix 3 (provided as an attachment) shows the names of the regions and HDs being supported by USAID for the control/elimination of the 5 NTDs targeted through preventive chemotherapy.

APPENDICES

The following appendices are being provided together with this work plan narrative as separate attachments:

1. Country staffing/partner org chart - (PDF)
2. Work plan timeline (MS Word)
3. Table of USAID-supported provinces/states and districts - (MS Excel)
4. Program Workbook (MS Excel)
5. Disease Workbook (MS Excel)
6. Country budget (MS Excel)
7. Travel Plans (MS Word