



ENVISION Technical Brief Series

Creating Sustainable Soil-Transmitted Helminthiases Control Among School-Age Children

Lessons from the Philippines

CONTEXT

All 81 Philippine provinces are endemic for soil-transmitted helminthiases (STH). The highest levels of infection are found in the more than 42 million preschool and school-age children who are at risk. Establishing a sustainable national STH control program among this population will require coordination among multiple government departments. In the Philippines, where certain government agencies are decentralized, it will also take the commitment of local, provincial, and national levels of government to succeed.

In 2004, the prevalence of at least one STH in school-age children was 67%.¹ However, after 10 years of effective mass drug administration (MDA), the prevalence of STH among school-age children fell to 28% and heavy-intensity infections decreased from 23% to 3%.²

CHALLENGE

A major challenge in this effort is for the Department of Health (DOH) to collaborate with the Department of Education (DepEd) to create sustainable platforms for STH control among school-age children.

This brief illustrates how NTD program managers in the Philippines fostered collaboration to reduce the prevalence of STH among school-age children by 39%, even as lymphatic filariasis MDA was scaling down.

**MASS DRUG
ADMINISTRATION
(MDA)**



ADVOCACY



The timeline here shows how the Philippines implemented an effective STH MDA program for vulnerable groups over the past 20 years to achieve the World Health Organization's 75% MDA coverage goal.

TECHNICAL APPROACH

1990s	2002 – 2006	2007 – 2010	2011 – 2014	2015	2016
<ul style="list-style-type: none"> A national nutrition survey shows clinical signs of anemia among school-age children. The DepEd's Center for Health and Nutrition initiates and funds deworming medicines in schools. STH MDA for school-age children is administered in schools twice annually. 	<ul style="list-style-type: none"> DepEd STH MDA for school-age children continues within schools. DOH expands STH MDA to nonenrolled school-age children. The program is implemented at municipal health centers, with health workers distributing albendazole during fixed times and treating school-age children during other visits to the health center. Funding is through the DOH "Guarantisadong Pambata" (Guaranteed for Children) program. 	<ul style="list-style-type: none"> DepEd and DOH collaborate to pilot test coordinated STH MDA in schools and communities at the same time. 2007 is the first year that school-based and community-based MDA activities are synchronized, from the campaign to the distribution to the fixed-point MDA. The results of the pilot test provide justification for Congress to fund DOH to procure the medications for both school-based and community-based MDA. 	<ul style="list-style-type: none"> DOH coordinates with DepEd to implement the school-based and community-based STH MDA program funded by Congress. To fulfill Congress's MDA reporting requirements, the DOH STH Program Manager combines school-based and community-based data collection, resulting in more complete coverage analysis. The Philippines Sin Tax, a tax on all tobacco and alcohol products, produces incremental revenue to supplement the national health budget, including NTDs, under its "strengthening preventive health programs pillar." 	<ul style="list-style-type: none"> DOH implements "National School Deworming Day" to align STH MDA among the provinces. When inaccurate social media rumors emerge about MDA and adverse events among school-age children, the Secretary of Health quickly responds by holding a press conference on Deworming Day to reassure the public of the safety of STH MDA. 	<ul style="list-style-type: none"> The STH MDA program achieves 70% coverage in January after implementation challenges—such as torrential rain in the South and a "National Games Day"—conflicted with the MDA in some provinces. The STH MDA program increases coverage to 78% in July after DOH expands the timing of STH MDA to a one-month period determined by each region.

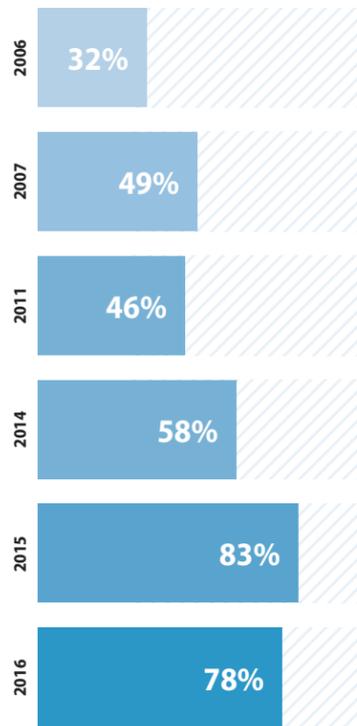
1990s 2002 – 2006 2007 – 2010 2011 – 2014 2015 2016

LESSONS LEARNED

1990s	2002 – 2006	2007 – 2010	2011 – 2014	2015	2016
<ul style="list-style-type: none"> "Don't let the perfect be the enemy of the good." Although data were limited, the Philippines uses the information in the national nutrition survey about anemia prevalence to start deworming in schools. Better data systems are designed as the program matures. 	<ul style="list-style-type: none"> Separate STH MDA programs for schools and communities contribute to MDA fatigue in the communities. Variability in the objectives and activities of school-based and community-based STH MDA programs leads to implementation, reporting, and resource allocation inefficiencies. For example, MDA timing is not synchronized between the programs, reporting requirements are not aligned, and targets are not identified effectively. 	<ul style="list-style-type: none"> Key stakeholders build consensus for a coordinated STH MDA pilot test that provides effective data necessary to justify scale-up. Meetings with provincial governors, municipality mayors, and village leaders help facilitate local buy-in for the pilot test. The pilot test provides an introductory opportunity for local, subnational, and national government departments to collaborate on MDA implementation. Reporting requirements are not aligned, and targets are not identified effectively. 	<ul style="list-style-type: none"> Roles and responsibilities for DOH ownership of harmonized STH MDA and coordination with DepEd are decided through ongoing dialogue and consensus building. A nationwide STH deworming program benefits from <ul style="list-style-type: none"> a national-level policy that institutionalizes the roles and responsibilities across the implementing and reporting activities of the different agencies, and a plan that harmonizes the timing of the MDA and all associated activities between both school-based and community-based MDA. 	<ul style="list-style-type: none"> Because MDA takes place on a specific day nationwide, national TV ads and social media are effectively mobilized throughout the country. Teacher information sessions and print pamphlets are needed to supplement STH MDA information disseminated through social media to empower teachers to correct misinformation spread online. 	<ul style="list-style-type: none"> Based on teacher feedback that real-time reporting is too burdensome during only one day of deworming, DOH expands the timing and reporting of MDA. The flexible STH MDA schedule facilitates implementation for both communities and schools.

GEOGRAPHIC MDA COVERAGE

MDA COVERAGE



TODAY

- To continue to strengthen STH MDA buy-in at local levels—which is important in the decentralized health system in the Philippines—social preparation meetings are organized by central and regional DOH staff and by DepEd with parent-teacher associations prior to the launch of MDA campaigns.
- Because currently there is no mechanism for private schools to report STH treatment, DOH plans to improve coordination between local government unit health workers and private schools through regular school visits before, during, and after MDA.





KEY TAKEAWAYS

The success and sustainability of the Philippines STH control program can be attributed to:

- **Champions:** The DOH Undersecretary for Health and the Assistant Secretary for Health are strong advocates for the NTD agenda. They have encouraged funding and coordination efforts and have championed the program with national and local leaders.
- **Coordination:** The government's financial stake in the program has improved interdepartmental coordination and increased growth in scale and coverage.
- **Accountability:** Congressional monitoring and reporting requirements have improved MDA coverage reporting.
- **Financing:** Early on, the program secured government funding through department budget lines. Over two decades, the program sustained and increased funding, ultimately securing support through annual congressional budget appropriations.

Over the next 6 years, the program will aim to reduce the prevalence of moderate-intensity to heavy-intensity STH infection to less than 1%.

Also, the program will continue to solicit feedback from health workers, teachers, provisional NTD coordinators, school division chiefs, governors, and village leaders.

WHAT YOU CAN DO

To implement sustainable STH MDA in your country, consider the following priorities:

- ◆ **Advocate for support from national NTD leadership** to address STH data, challenges, and opportunities.
- ◆ **Secure national-level government funding** specifically for STH and ensure it is adequate to cover all the program's needs, including procurement, human resources, training, reporting, and supervision.
- ◆ **Collaborate with local government leaders** to ensure they understand the importance of STH MDA and prioritize it in their community.
- ◆ **Recognize that achieving the ideal STH MDA campaign will result from incremental change.** Start by advocating for change, identifying windows of opportunity, incentivizing adoption among stakeholders, pilot testing, coordinating roles and responsibilities, and scaling up the intervention to different groups over time.
- ◆ **Pause and reflect: Modify MDA approach and platforms** based on reporting and feedback from health workers, teachers, and DOH and DepEd staff.

SOURCES

1. Baldo ET, Belizario VY, De Leon WU, Kong HH, Chung DI. (2004). *Infection status of intestinal parasites in children living in residential institutions in Metro Manila, the Philippines.* *Korean J Parasitol*, 42:67-70.
2. Philippines Research Institute for Tropical Medicine. *Report on the 2014–2015 National Survey on the Prevalence of Soil Transmitted Helminths (STH), Schistosomiasis and Other Intestinal Parasitic Infections among Public School Children in the Philippines.*

AUTHORS

Molly Brady, RTI International

Joshua Sidwell, RTI International

Roderick Poblete, RTI International

We acknowledge the Philippines Department of Health, under the leadership of Dr. Winston Palasi, STH focal point, in the development of this brief.

CONTACT US

ENVISION

701 13th Street, NW
Suite 750
Washington, DC
20005

www.ntdenvision.org

questions@ntdenvision.org

This publication was made possible thanks to funding from the US Agency for International Development (USAID) and the ENVISION project led by RTI International under cooperative agreement No. AID-OAA-A-11-00048. For more information, go to www.NTDenvision.org. The author's views expressed in this publication do not necessarily reflect the views of USAID or the United States Government.