MCHIP Country Brief: Timor-Leste

Selected Health and Demographic Data for Timor-Leste	
Maternal mortality ratio (deaths/100,000 live births)	557
Neonatal mortality rate (deaths/1,000 live births)	24
Under-5 mortality rate (deaths/1,000 live births)	64
Infant mortality rate (deaths/1,000 live births)	45
Contraceptive prevalence rate	22
Total fertility rate	5.7
Skilled birth attendant coverage	30%
Antenatal care,4+ visits	55%
* *Sources*: *UN data; **WHO; ***Timor-Leste 2009 Demographic and Health Survey; ****UNICEF; *****World Bank.	

Health Area

- Immunization

Program Dates	April 1, 2011–December 31, 2013					
Total Mission Funding	Redacted					
Geographic Focus	No. (%) of Districts	54%	No. of Secondary Districts	2	No. of facilities	342
Country and HQ Contacts	Dr. Ruhul Amin, Country Representative, Pat Taylor, Country Support Team Lead, Kelli Cappelier, Immunization Technical Manager					

INTRODUCTION

The Millennium Challenge Corporation's Threshold Project on Immunization (MCC-TPI) in Timor-Leste was implemented by John Snow, Inc. (JSI), through USAID's global Maternal and Child Health Integrated Program (MCHIP), from April 2011 to October 2013. Known as *Imunizasaun Proteje Labarik* (Immunization Protects Children, or IPL), the project worked with the Ministry of Health (MOH) at the national, district, and local levels to increase child immunization coverage.

IPL was an effective project in a difficult environment. At the start of project implementation, Timor-Leste reported the lowest administrative and official immunization coverage in the WHO/SEARO, estimating 66.7% DTP3[1] and 68.2% measles coverage, with a slight downward trend reported by the Ministry of Health in 2011.[2] The goal of IPL was to raise the national average of DTP3 and measles vaccination in infants from 67.5% to 81.5%. As a practical strategic decision, IPL focused its efforts in the seven (of 13 total) districts with the largest number of unvaccinated children, which were identified based on HMIS data, and in its last six months extended activities to two additional districts.

Detailed Major Activities

ACTIVITIES	LOCATION	TOTAL SESSIONS	TOTAL PARTICIPANTS
Community leaders training	Suco Council Offices	138	2,894
Uma Imunizasaun tool at sucos	Suco Council Offices	156	4,851
School orientations	Junior High Schools	41	2,115
Uma Imunizasaun tool at CHCs	CHCs	87	2,303
Micro-planning at CHCs	CHCs	216	-
Health worker training	CHCs	21	401
SISCa, outreach, and mobile clinics supported	Communities	2,796 (424 SISCa and 2,372 outreach)	-
Total supervision visits at different health facilities	**CHCs and HPs**	**228**	**-**

IPL focused activities on the aspects of the immunization system that needed to be strengthened: community participation, local government and civil society engagement, communication, SISCa and outreach, health staff capacity and performance, cold chain and logistics, micro-planning, and district- and national-level partnerships. IPL's positive impact was the result of its balanced approach that addressed both the supply (immunization services) and demand (public understanding and participation) deficiencies described in IPL's baseline study.

KEY ACHIEVEMENTS

Various analyses of vaccination coverage, including comparisons between IPL and non-IPL focus districts, and analyses based solely on numbers of children vaccinated (a logical approach, given the unreliability and yearly ups and downs in target populations) show significantly better coverage in IPL districts. The average coverage of DTP3 and measles, based on national coverage, was reported at 61.6% in 2011 compared to 78% in 2012, toward the end of IPL implementation. This increase is very close to achieving the target of 81.5%, but the target could

[1] Third dose of diphtheria-tetanus-pertussis containing vaccine.

[2] 2009/2010 Timor-Leste Demographic and Health Survey (TLDHS).

not be attained in large part due to a national stock-out of measles vaccine the first half of 2013. The project had no control over this, but worked diligently with partners to resolve the stock-out crisis. Before IPL implementation, a decline in coverage of all antigens had been reported, reaching a low in 2011. However, data from 2012 illustrated a sharp rise in coverage for all antigens. In IPL focus districts an increase of almost 16% was reported, while that for non-focus districts was only 7%. This increase corresponds to the uptake of IPL's field interventions (and also the MOH's determination of a smaller target population, although the changes attributable to IPL support still appear to be significant.) While the individual effects of various project interventions cannot be identified, it seems very likely that together the package of activities contributed to this increase.

Selected Indicators for IPL's First Quarter (April–June 2011 and April–June 2012)

INDICATORS	APRIL–JUNE 2011	APRIL–JUNE 2012
Average coverage of DTP3 + measles*	61.6%	78%
% of CHCs with current micro-plans, maps, full-service strategies	31%	92%
Improved vaccinator ranking on quality measures	0%	54%
Number of staff in focus districts trained in IIP and CCVM	0	192
% of health facilities with good vaccine management	17%	74%
% of health facilities reporting vaccine stock-out in past three months**	8%	73%
Number of teachers and religious leaders who received EPI orientation in the quarter	0	46
% of CHCs with updated list of missed children by *suco*	0%	31%
% of CHCs holding quarterly micro-plan reviews with wide civil society participation	24%	92%
% of CHCs with active system for identifying and following up left-outs and drop-outs	4%	33%

IIP: Immunization in Practice; CCVM: Cold Chain and Vaccine Management

**National coverage*

***National measles stock-out in 2013*

Partnering with communities

At baseline, IPL documented minimal community advocacy for or participation in the delivery of health services. To address this deficiency, IPL implemented activities to increase awareness, demand, and use of services. Results were achieved through engaging community and religious leaders, partnering with schools and the Ministry of Education (MOE) to transmit health lessons, and the use of the *Uma Imunizasaun (my village, my home)* tool. After receiving training from IPL on immunization and other health topics, community leaders in many low-coverage sub-districts became effective vaccination advocates in their communities. IPL partnered with the MOE to develop health lessons and gave orientations on vaccination and other health topics in middle schools throughout its focus districts. Use of the *Uma Imunizasaun* (UI) tool enabled local volunteers to monitor vaccinations of their community's infants and guide home visits to motivate parents when a child fell behind. Use of the tool greatly increased community engagement in vaccination and resulted in more infants being vaccinated as soon as they were eligible. The

IPL program review found the UI tool was one of IPL's most effective activities. Community respondents said that it helped them to track which children were up to date on their immunizations and which were not. It enabled them to motivate parents of children who had not received all immunizations to get them immunized. Implementation of this tool was taken up by the local civil society organization (CSO) Clinic Café Timor (CCT), which expanded its use in 28 sub-districts.

Strengthening human resource capacity and planning of services

IPL's baseline survey documented that health workers had not received training on Immunization in Practice (IIP) or Cold Chain and Vaccine Management (CCVM) in recent years. In addition, the recording and reporting of data were very weak and supportive supervision needed further strengthening. To address these issues, IPL helped revise standard tools for district, sub-district, and outreach supportive supervision and participated in numerous supportive supervision visits. IPL also helped to involve MOH staff in supportive supervision visits and systematizing supportive supervision forms and procedures. The program also mentored local staff and participated in formal in-service training. IPL designed new tools (e.g., a *suco*-level vaccination register and an out-of-catchment-area form) and worked to improve staff skills in registering, reporting, analyzing, and using data.

> *"Before supportive supervision, we did not fully understand vaccine management, vaccine storage, and how to fill in and use the immunization monitoring chart. Before supportive supervision began, some vaccinators didn't know if immunization coverage was going up or down."*
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> -Mr. Izaquil Boaventura de Silva, Assistant District Public Health Officer, Liquica DHS

In 2011, IPL documented an absence of or weakness in district and sub-district micro-planning, which, done well, can improve the efficiency and effectiveness of immunization. IPL collaborated with national partners to adapt the standard WHO micro-planning guidelines, then helped facilitate annual micro-planning and quarterly updates at district and sub-district levels. Better use of data and mapping, as well as civil society engagement in planning, resulted in better locations for and scheduling of vaccination services.

Improving Service Provision

At baseline, many health facilities could not maintain the cold chain equipment properly nor fix minor problems with their refrigerators. IPL provided training within its focus districts for improved human resource capacity to maintain equipment to keep vaccines potent and safe. IPL also provided resources (new motorcycles and gasoline) and practical assistance (transport in project vehicles, help in vehicle management, and help in service provision) with delivery of vaccinations and other health services. Motorcycles and vehicles were donated to the MOH at the close of the project.

National-Level and Partner Engagement

The program participated with other key national partners in the high-level national EPI Working Group, which provided regular support and guidance to the MOH, reviewing and formulating policy papers, strategic guidelines, and training and communication materials for both EPI and the wider health system. IPL participated actively in national immunization activities.

IPL carried out several practical studies, the results of which were immediately used to improve immunization services:

- The baseline study (2011) of the immunization program in IPL's seven focus districts;

- A primarily qualitative study in the national capital, Dili, to understand factors leading to poor coverage despite good access to services (2012); and
- A program review aimed at extracting lessons learned and recommendations for continuing and expanding IPL's tools and approaches (2013).

The project organized closeout workshops in each of the project districts and, with funding from WHO, a national workshop to share project lessons and recommendations and to discuss parallel initiatives from other partners. Feedback on IPL's contributions at these workshops was gratifying: there were abundant laments that the project was ending too soon and many commitments from the MOH and partners to continue supporting IPL's tools and activities.

WAY FORWARD

Interventions implemented under IPL that appear to have achieved the greatest impact on service delivery and demand generation include support to SISCa services; mobile and outreach services with fuel, transport, maintenance, and mentoring; use of the UI tool to increase community participation and stimulate demand; and the introduction and support of micro-planning in districts and sub-districts. There is political will for IPL activities to continue in focus districts and for the other districts to adapt the same package of activities.

IPL's immediate impact on coverage was limited by national weaknesses in personnel and their distribution, the health information system, and vaccine procurement, distribution, and management, as well as by the difficulty of providing services for families in hundreds of villages with limited if any road access. These issues present Timor-Leste immunization partners with two challenges:

1. Maintaining political will and allocating human and other resources needed to address supply and demand sides of immunization, and
2. Addressing the national health system weaknesses that affect immunization as well as other health programs.