



USAID
FROM THE AMERICAN PEOPLE

 **BASICS**

IMPROVING CHILD HEALTH IN TIMOR-LESTE

BASICS III

INTRODUCTION

USAID/BASICS and IMMUNIZATIONbasics jointly implemented *Timor-Leste Asistência Integrada Saúde* (TAIS or Timor-Leste Integrated Maternal and Child Health Care Project). Begun in mid-2005, TAIS provided technical support to the Ministry of Health to expand effective, proven newborn and child health interventions throughout Timor-Leste. Core interventions included malaria prevention, nutrition and micronutrient care, Integrated Management of Childhood Illnesses (IMCI), Essential Newborn Care, Healthy Timing and Spacing of Pregnancy, and immunization for vaccine-preventable childhood diseases.

TAIS worked to build capacity at all levels in the Ministry of Health, but focused primarily on improving services at the district, sub-district, and community levels.

RESULTS AND ACHIEVEMENTS

For each technical focus area, see the chart on pages 7 to 10 of this chapter for links to key implementation materials, including: policies and strategies, assessments, job aids, communications tools, and training curricula.

Malaria

TAIS was responsible for the health promotion aspects of a joint initiative by the Ministry of Health and USAID to reduce malaria in the most endemic districts of Timor-Leste by providing long-lasting insecticide-treated bed nets (LLINs) to families with at least one child under the age of five. The project achieved significant results in ensuring effective use of the nearly 80,500 nets that were distributed between October 2005 and December 2007 by developing an innovative model through which *aldeia* chiefs (equivalent to mayors) and community volunteers were trained to provide clear information on proper net use at the time of distribution, make regularly-scheduled follow-up monitoring visits in homes, collect information on satisfaction and experiences, and encourage sustained net usage.

Evaluation data revealed that in January 2006 in Baucau at least 80% of recipients were correctly using the nets and a similar assessment in Manatuto in October 2007 yielded 90% correct use. Moreover, the 2007 Timor-Leste Survey of Living Standards (2007 TLSLS) revealed that, 62.9% of children under five nationally slept under a mosquito net the night before; an increase from 47.7% in 2001. These improvements are quite significant in that it is well established that sleeping under an LLIN can help decrease malaria transmission in endemic areas by 45%, reduce premature births by 42%, and cut all-cause child mortality by as much as 63%.

An added feature of the LLIN effort was the inclusion of all recipient families in a newly developed database that can facilitate other community-based interventions.

Nutrition

National strategies implemented by TAIS included the promotion of optimal Infant and Young Child Feeding and de-worming in response to the alarming nutritional status of children Timor-Leste (well exemplified in a 2007 national survey):

- 48.6% of under-5 children in Timor-Leste are underweight and 14.6% are severely underweight
- 53.9% of children are stunted and 23.8% are severely stunted.¹
- 24.5% of under-5s suffer wasting and 7.5% suffer severe wasting severely.²

¹ Stunting is indicative of long-term deficiencies in nutrition and/or poor health.

TAIS assisted the MOH in the development of a national-level workshop on Infant and Young Child feeding, which created a significant change for interest in child nutrition. As a result:

- Nutrition received increased priority within the Ministry of Health and by UNICEF. For example, nutrition became the first unit for training the initial cadre of PSFs charged with community-based health promotion.
- With assistance from TAIS and AUSAID, the MOH was able to develop, test, disseminate and promote 13 key IYCF messages for health care workers. These messages also were integrated into the IMCI protocol for counseling on feeding.
- With TAIS providing critical inputs, the MOH drafted a breastfeeding policy, which is expected to lead to legislation protecting breastfeeding and restricting the marketing of breast milk substitutes.
- The TAIS CCQI process (see below) has helped to operationalize Essential Nutrition Actions, promoted at health facilities through general supervision for nutrition services in Manatutu district. TAIS expanded use of the supervision tool to 4 additional districts, while other partners covered other districts for nutrition supervision.
- TAIS data collection systems helped to identify specific activities as contributing to infant and child nutrition, including: child weighing, counseling and Vitamin A.

Integrated Management of Childhood Illnesses (IMCI)

Another key way in which TAIS addressed high rates of child mortality rates in Timor-Leste was by developing a common platform on which IMCI could be sustained as the primary protocol for delivering treatment services for children. TAIS achieved this by convening a performance-focused IMCI facility review in late 2006, using an adapted version of WHO's health facility assessment tools for IMCI. The review culminated with a workshop in which Timorese physicians led the charge for reinforcing IMCI, ultimately thwarting increasing calls to abandon the practice from the country's large corps of visiting Cuban doctors, who generally viewed IMCI as a model for nurse-managed classification of symptoms as opposed to diagnosis and treatment. Another result of this review and workshop, IMCI interventions were included in the principle policy document for Timor-Leste's Basic Service Package, which is the foundation of the country's Five-year Health Sector Strategic Plan.

With respect to project implementation, the 2006 review informed TAIS' development of 7 training modules and a revised IMCI chart booklet. Through these, the project worked with the Ministry to organize and co-facilitate national facilitator and district-level refresher trainings for health personnel in 2008. At project-end, a total of 382 health personnel from 13 districts had received basic IMCI training, and 188 in 11 districts had received refresher training. This enabled 182 facilities across 13 districts to have at least one staff person trained in the updated IMCI protocol. It is estimated that these facilities provide access to about 60% of Timor-Leste's 186,543 under-5 population children under the age of five. The impact of such coverage is all the more important in light of the country's high disease burden in this age group. For example, the 2007 Timor-Leste Survey of Living Standards estimated that diarrhea prevalence among under-fives is 9.4% and malaria prevalence is 28.8%.

In 2009, TAIS finalized updates to supportive supervision tools with the IMCI Working Group, a collaborative coordinating body of child health partners whose primary objective is to update relevant tools and policies. Completion of the updates was followed by a series of orientation workshops for the IMCI core team (made up of representatives from the MOH, UNICEF, WHO, CARE, and TAIS), district MCH coordinators, and NGO supervisors from World Vision and CARE. An additional benefit of the rapid assessment and IMCI review was facilitating TAIS' leveraging support from UNICEF to supply all 182

² Wasting is indicative of weight loss or insufficient weight relative to height and is often the consequence of starvation or severe disease (diarrhea in particular).

facilities with equipment, including ARI timers and a six-month supply of commodities to initiate treatment of diarrhea with zinc and low-osmolarity rehydration salts where personnel are trained in IMCI.

As TAIS-trained providers are deployed to an increasing number of public sector facilities equipped with the proper equipment and medications and following IMCI protocols, the number of children benefiting from improved care will increase.

Essential Newborn Care

Working in collaboration with HAI to confront the main contributing factors to Timor-Leste's neonatal mortality rate of 43 deaths per 1,000 live births,³ TAIS developed tools on Essential Newborn Care (ENC), including: training materials, job aids, an equipment checklist for newborn care, and supervision tools. The two projects subsequently worked together to provide ENC training to 16 midwives at the hospital level and 18 district level trainers from 6 districts in 2007. Ten of these midwives were retrained as ENC trainers in January 2009 with the expectation that over the next 2 years at least all 65 community health centers (CHC) and all 5 referral hospitals will have midwives on staff trained in ENC. The newborn health initiative of TAIS has promoted immunization for tetanus toxoid and the promotion of breastfeeding as part of ongoing support for newborn health while the MOH incorporates other best practices.

TAIS and HAI supported the Ministry of Health at the policy level by supporting development of Timor-Leste's 2008 national plan of action to improve newborn health (developed with Ministry representatives at a regional workshop on Maternal Newborn and Child Health and Family Planning in August 2007), emphasizing awareness-raising at the community level, particularly by showing the film, "Women's War," and facilitating community discussions of those issues. Ongoing activities include a review of the proposed National Newborn Health Strategy and the Newborn Health Action Plan to promote activities that will decrease neonatal mortality and improve newborn health through a national level workshop. UNICEF has established a task force to finalize the strategy, but also envisions the addition of maternal health.

Healthy Timing and Spacing of Pregnancy (HTSP)

The TAIS birth spacing program aimed to improve access to information on child spacing through the use of both traditional and non-traditional sites, such as places of employment (in recognition of the influence that people with jobs hold and, thus, their ability to effectively communicate with their families about the virtually unknown subject of HTSP). TAIS initiated advocacy for child spacing in April 2007, but implementation of specific activities was delayed due to civil unrest and several management changes at the Ministry of Health. Supported by a request from the Mission and renewed political stability, TAIS was able to resume activities on integrating child spacing into child health programs in 2008.

Beginning in November 2008, TAIS held community mobilization and strategic planning meetings on how best to integrate child spacing at facility and community level, organized in partnership with the DPHS and local NGOs, including OXFAM.

This was followed by a rapid assessment of family planning services for the integration of child spacing into maternal and child health programs in Oecussi District. A total of 9 health facilities were assessed and 94 people including health care providers, mothers and men visiting MCH programs and religious leaders were interviewed. The assessment team concluded that more than 3,000 child deaths could be averted annually in Timor-Leste if births occurred after minimum intervals of 36 months as against the predominant practice of births below a 24 months interval.

³ According to the 2003 DHS

Immunization

Managed by IMMUNIZATION basics, TAIS' work on the Expanded Program on Immunization (EPI) in Timor-Leste was designed to address three significant issues identified by the project during a 2005 assessment:

1. Five separate EPI schedules were in circulation, as well as different materials; most of them with mistakes.
2. Vaccinators repeatedly made poor decisions with respect to immunizations, such as refusing to give multiple antigens and restarting series unnecessarily.
3. Inappropriate population percentages were being used to calculate target groups, resulting in artificially inflated reported coverage. Once the MOH corrected this problem of population estimates, the actual immunization coverage figures were shown to be much lower.

Since 2006, TAIS has been an active partner in Timor-Leste's EPI Working Group—together with the Ministry of Health, WHO, UNICEF, and the National Training Institute—notably contributing significantly to a revised and expanded National EPI policy (which was first drafted in 2004). Crucial new sections or information were added on contraindications, multi-dose vaccine policy, injection safety, and other areas.

Also in collaboration with EPI partners, TAIS provided trainers and technical support for nationwide training in 2007 and 2008, as well as follow-up via multiple supportive supervision visits to all hospitals and CHCs in the country, during which time some facilities have been visited two or three times. The project then played a lead role in developing job aids to support vaccinators in areas of need identified during supportive supervision. For example, one job aid summarizes correct decision-making regarding which vaccinations to give based on a child's age and vaccination history, and another shows correct vaccine administration techniques.

EPI has clearly contributed to improved immunization coverage rates recorded since 2005, as shown in Table 1. While the figures, as provided by the Ministry of Health, are subject to the weaknesses described above, they provided the best current measure of coverage.

Table 1
Timor-Leste DPT1 and DPT3 coverage rates, 2003-2007⁴

Year	<i>2008</i> <i>DPT3</i>	<i>2008</i> <i>DPT1</i>	<i>2007</i> <i>DPT3</i>	<i>2007</i> <i>DPT1</i>	<i>2006</i> <i>DPT3</i>	<i>2006</i> <i>DPT1</i>	<i>2005</i> <i>DPT3</i>	<i>2005</i> <i>DPT1</i>	<i>2004</i> <i>DPT3</i>	<i>2004</i> <i>DPT1</i>	<i>2003</i> <i>DPT3</i>	<i>2003</i> <i>DPT1</i>
Coverage	79%	85%	70%	76%	64%	71%	49%	58%	57%	66%	71%	84%

Cross-cutting issues and systems support

Behavior Change Communications

TAIS worked across programs to lay the foundation for increased, appropriate, child-health preventive behaviors and service utilization using the state of the art in Behavior Change Communication (BCC) and community mobilization and participation techniques. These cut across other interventions outlined above. For example, TAIS introduced into health promotion in Timor-Leste the concept of counseling for feasible behaviors as part of a community consultation using a negotiation-counseling approach. Working with the MOH and Catholic Relief Services, TAIS developed the above-referenced insecticide-treated bed net distribution process involving extensive community participation and promotion efforts carried out in seven

⁴ DPT3 is the most widely used international indicator of EPI performance, and DPT1 is often used as an indicator of access to services. Drop-out rates are surprisingly small.

districts. In addition, TAIS has worked to improve health workers' treatment of and communication with clients during vaccination encounters.

In FY2008, TAIS seconded two long-term staff members to the Health Promotion section of the Ministry of Health. The culmination of TAIS's BCC work has been overseeing a long, participatory process with the MOH and other partners to develop a harmonized and research-based National BCC Strategy, and is now working with stakeholders to develop a complementary implementation plan.

In addition, TAIS created a calendar of simple messages that it is training catechists and priests to give at Mass or in Vespers in areas of preventive and improved health practices, and encouraging the use of health facilities.

Continuous Coverage and Quality Improvement

TAIS initially developed and field tested Continuous Coverage and Quality Improvement (CCQI), a problem solving process to reinforce the implementation of health services according to national standards, in March 2006 in Ermera district. However, early implementation of the approach was interrupted between April and August 2006 due to civil unrest

When CCQI efforts restarted in September 2006, the model was revised with TAIS staff to ensure ownership and internalization of the process and also to instill a sense of confidence with tools and facilitation of the use of measurement methods. In essence, these changes reduced the number of tools and steps used to collect data, and advanced the idea of prioritizing technical areas instead of developing tools and beginning implementation of CCQI in all areas (IMCI, EPI, and nutrition) concurrently.

While the intention was to initiate the process at the district level in each district and then have district public health offices (DPHO) carry it forward, experience showed that the DPHOs desired and needed additional support to effectively roll out CCQI. Staff members were thus redirected to carrying out sub-district workshops in Baucau from April through June 2007.

During the next phase of CCQI roll-out (in Manatutu district), WHO began implementing its district team problem solving DTSP model in a non-TAIS district (Aileu) district. Compared to CCQI, DTSP is more of a planning model than a quality improvement mechanism. Following national elections in July 2007, the new Minister of Health evaluated both CCQI and DTSP in the larger context of national health reform, and concluded that the two models should be merged (the process of which had already begun between TAIS and WHO) as a support mechanism for at-scale roll-out of National Basic Services Package (BSP) and introducing a major new strategy for community level service delivery – SISCa (*Sistema Integrado de Saude Comunitaria*).

When it was clear that the BSP rollout process was to replace the CCQI and DTSP approaches, TAIS changed its strategy to place more emphasis on supportive supervision.

Supervision, Monitoring and Evaluation

Since the Project's inception, TAIS played an integral role in the development and management of the National Community Health Volunteer (PSF) program, shifting to a leading role in the implementation and monitoring and evaluation tool development for the more recently-introduced SISCa initiative.

The PSF program was initially designed for a pilot test in 4 districts over two years (including two in this study). However, SISCa (*Servico Integrado da Saude Comunitaria*, or in English Integrated Community Health Care), the initiative of the newly appointed Minister of Health in 2007, required the PSF program to expand rapidly to cover all 13 districts in the country during 2008 as the SISCa was intended to reach all 442 *sucos* with assistance in the areas of health promotion, prevention of diseases, treatment for sickness and rehabilitation.

TAIS worked to develop monitoring tools for the operations of SISCa and has been also using the supervision tools for basic services in nutrition and vaccinations to reinforce the quality of services provided. This process helped to focus the type of intervention needed to ensure implementation. This monitoring has also an informative process for moving toward an integrated supervision tool for the quality of care provided at the SISCa and recommending improvements to the recording and reporting of data in order to understand the contribution of SISCa to the extended coverage of health care.

This effort to build and reinforce the Community based service of the SISCa will be the focus of the follow-on project, TAIS II. Increasing access to services, and community participation in health status improvements will be part of the results in this next phase. TAIS II will also strengthen the use of behaviour change communication interventions both for improvements in management and improvements in community level choices for healthier behavior.

Title	Type	Description
BASIC SERVICES PACKAGE (BSP)		
Basic Services Package for Primary Health Care and Hospitals	Policy	National policy document that was revised and re-defined in 2007 to target primary health care services in relation to the Millennium Development Goals (MDGs 4, 5 and 6).
List of essential equipment for health posts.	Checklist	List of essential equipment for health posts, based on expected services to be delivered.
EXPANDED PROGRAM FOR IMMUNIZATIONS (EPI)		
National Immunization Strategy	Strategy	National strategy document that was improved and revised to clarify vaccination standards.
Training of Trainers' Guide for Immunization Training Workshops	Training Guidelines and Curriculum	<ul style="list-style-type: none"> • Immunization in Practice (IIP) modules • Technical guidelines (draft)
Kalendario Semanal 2008 - 2011 (Weekly calendar 2008-2011)	Job aid	Tetun-language chart of dates, weeks, and months that simplifies calculating the age of child and providing the correct interval for the next dose after a vaccination.
Vaccination schedule	Job aid	Tetun-language vaccination schedule, including contra-indications.
Pertanyaan dan Jawaban tentang imunisasi (Question and Answer Booklet for health workers and community leaders)	Job aid	Tetun-language question and answer booklet for health workers and community leaders.
Monitoring wall chart	Job aid	Tetun-language wall chart for monitoring EPI service providers.
Supportive supervision checklist on EPI	Supervision tool	Supervision Checklist for skills and attitudes in EPI amongst service providers.
BEHAVIOR CHANGE COMMUNICATION (FOR COMMUNITY MOBILIZATION AND SERVICE PROVISION IMPROVEMENT)		
Situational Assessment of Key Health Behaviors and Sub-Behaviors for Improving Child Health	Assessment Report	Literature review of studies done in Timor-Leste concerning 14 key child health behaviors.
Community Consultation on Child Health Practices in Timor-Leste	Assessment Report	Formative research on child health behaviors, using TIPs (Trials of improved practices)
Behavior Change Communication Strategy for Child Health	Strategy	National document outlining key child health messages, behavior change approaches, and processes to develop tools and interventions.

Title	Type	Description
BEHAVIOR CHANGE COMMUNICATION (cont.)		
Strengthen Communities in the area of Health through SISCa	Guidelines	Tetun-language guidelines for SISCa (<i>Sistema Integradu de Saude Communataria</i> – Integrated System for Community Health), detailing the services to be provided during monthly outreach services to 442 village centers.
Evaluation of National Family Health Promoter Program	Assessment report	Rapid assessment of Timor-Leste’s <i>Promotor Saude Familiar</i> (community health volunteer) program.
Saude Diak Familia Kontente (behavior change communication messages on family health for dissemination in churches)	BCC booklet and calendar	Booklet and calendar of 12 themes for 12 months worth of simple and short messages for child health based on C-IMCI community behavior; to be read out by catechists at weekend mass in all chapels
National Health Promotion and Community Mobilization Policy	Policy and strategy	Draft revision of Timor-Leste’s 2004 health promotion strategy, requested due to several changes in national policy for the country’s community health volunteer program. Also, BCC strategies had been developed for Child health and reproductive health
NEWBORN CARE		
Fase Liman (Hand Washing)	Job aid	Tetun-language photo poster for hand washing techniques for health care workers in relation to newborn care.
Basic Neonatal Resuscitation at Birth	Job aid	Poster summarizing the neonatal resuscitation algorithm
Wall Chart for Newborn Care	Job aid	Bahasa-language poster summarizing newborn care for normal and sick babies.
Supportive Supervision Checklist on ENBC	Supervision Tools	Supervision Tools for Essential Newborn Care service providers.

Title	Type	Description
HEALTHY TIMING AND SPACING OF PREGNANCY		
Rapid Assessment of Family planning services in the Oecussi district	Assessment report	Baseline rapid assessment of family planning skills and services, and knowledge of birth spacing advantages.
Assessment Guide— Rapid Assessment of Family planning services in the Oecussi district	Facility CS assessment tool	Tools used in the rapid assessment of family planning skills and services, and knowledge of birth spacing advantages.
Supportive Supervision Checklist on Child Spacing	Supervision Checklist	Checklist for supervision of child spacing service providers.
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESSES		
Integrated Management of Childhood Illnesses.	Job aid	IMCI chart booklet, designed to serve as a quick reference on updated IMCI protocols for healthcare providers.
Technical Updates	Report summary	Documentation of decisions taken by the child health working group to updated IMCI protocols.
Supportive supervision checklist on IMCI	Supervision checklist and data entry template for reporting	IMCI supportive supervision tool .
NUTRITION – INFANT AND YOUNG CHILD FEEDING		
National Nutrition Strategy	Strategy and implementation options	National nutrition strategy, issued in 2005 and covering all Essential Nutrition Actions for mothers and children (using the UNICEF life cycle model).
MALARIA		
Long Lasting Insecticide Treated Bed Net Distribution for the Prevention of Malaria in Children Under Five Years of Age	Activity report	Draft report of Timor-Lestes 2005 to 2007 LLIN distribution campaign.