

Kingdom of Cambodia

Nation Religion King

Ministry of Health



National Center for
Tuberculosis - Leprosy Control

Leprosy Active Case Finding “CONTACTSURVEY” Report March-April 2013

I. Background

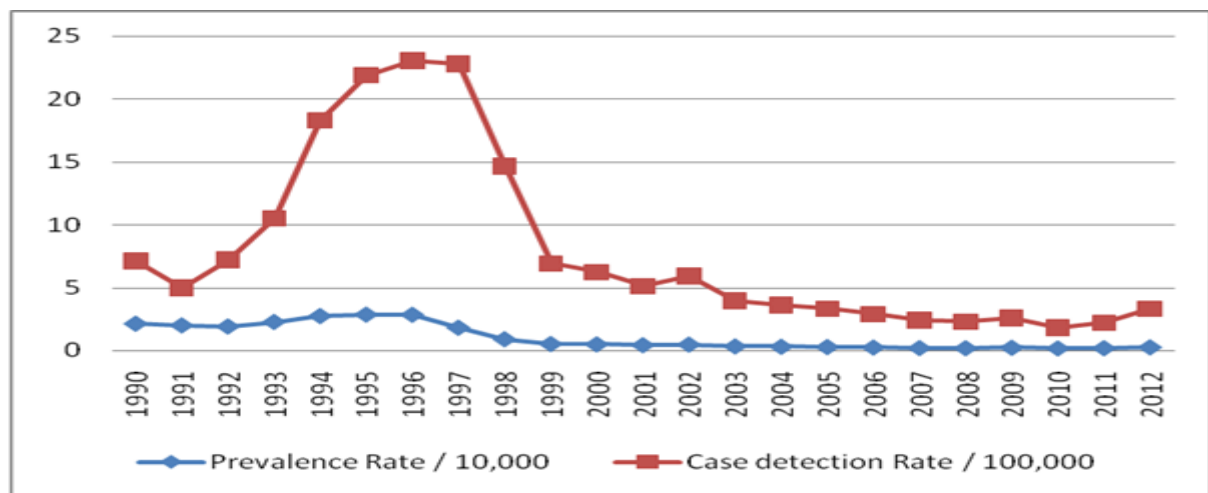
In 1984, the Ministry of Health of Cambodia established the National Program for Leprosy Control Program under the management of the National Centre for Hygiene and Epidemiology and then in 1997, it was integrated within the National Centre for Tuberculosis and Leprosy Control. Since then, the program has been working on various expertise, including case detection, diagnosis and treatment, health education and Behavior Change Communication, the implementation of multi-drugs therapy protocol as well as rehabilitation services provided to disabled leprosy patients. Under the joint efforts of the Ministry of Health and external funding organizations, much has been achieved regarding the national leprosy strategies. Further successes depend largely on early case detection and treatment, which requires a good level of medical expertise, staff motivation as well as awareness raising activities on some hot-spots of the communities.

More efforts are needed to strengthen and improve early case detection and to enhance the level of community awareness, as well as to reduce the stigma against leprosy patients.

The national leprosy statistics show that the level of case-detection through ongoing activities has decreased gradually from 1995, at 2,219 new cases, to 2009 and 2010 at 351 and 262 respectively. Since the beginning of the case detection campaigns in 2011, a new increase was noticed with 314 new cases in 2011 and 475 in 2012.

As presented on the below figure, the prevalence rate reached a high peak in 1996 at 2.84 cases per 10,000 inhabitants; since then, it decreased gradually to 0.17 per 10,000 inhabitants in 2010; in 2011 and 2012, it increased to 0.18 and 0.25 respectively.

Graph 1: Leprosy trend from 1990 to 2012 (Source: NLEP Health Information System 2012)



II. Rationale

The initiative of developing a Contact Survey approach was started in 2011. New Cases detected were noticeably found and identified among household and neighbor contacts of former leprosy affected persons (LAPs). Indeed, the percentage of new cases being detected from former patients' household members stood at around 20% in 2009 and 30% in 2010. Following this result, the NLEP and CIOMAL started a pilot project in 2011, in order to screen other hidden new cases that have failed to be detected through the routine supervision activities carried out by the national and provincial supervisors.

In May and June 2011, a first contact survey, conducted in 10 **operational districts** (OD), detected 97 new leprosy cases; the majority (53%) was found to be Pauci-bacilliary (PB) and 46% Multi-bacillary (MB). Moreover, 70% were men, 30% women, as well as 9% for both grade II-disability and children below 15.

In 2012, three additional surveys took place. In February and March, in 10 operational districts, 154 new cases were detected, of which 64% PB, 36% MB, 54% men, 46% women, 7.8% DG II and 12% children below 15; in May, in 5 operational districts, 26 new cases were detected, of which 70% PB, 30% MB, 38% men, 62% women, 3.8% DG II and 8% children below 15. In December, five additional operational districts were surveyed, and 102 new cases detected, of which 54% PB and 46% MB.

Table 1:

Contact survey	OD	MB	PB	Children	DG II	Total
May/June-11	10	46%	54%	9%	9%	97
Feb/March 2012	10	36%	64%	12%	7.8%	154
May-12	5	30%	70%	8%	3.80%	26
Dec-12	5	46%	54%	11%	4%	102
Total	30					379

The National Leprosy Elimination Program (NLEP), with the continued financial support from NOVARTIS, launched another contact survey to be implemented in March and April 2013.

Since 2011, 4 contact survey campaigns have already taken place, surveying in total 30 ODs out of 77 ODs. While the first 30 ODs were selected for having a minimum of 50 new cases in the last 10 years, the 13 above mentioned ODs were selected in view of geographical proximity and inconsistent data; the goal is however to cover all 77 ODs in Cambodia.

III. Contact Survey Arrangement

Under the leadership and management of National Leprosy Program Director, in close collaboration with CIOMAL and NOVARTIS, a series of meetings took place in March 2013, with key leprosy supervisors at national level, in order to efficiently prepare the contact survey at field level, prior to its implementation.

➤ Contact Survey teams

There were three survey teams, each responsible for specific ODs and composed of one or two national leprosy supervisors (male and female doctors), one provincial leprosy supervisor, one operational district supervisor and one driver; these teams were supported by CIOMAL staff, local health staff and village health support groups.

While the national team members will remain the same throughout the survey, the sub-national team members will change depending on the location surveyed.

➤ Mass Media and Community Theatre Promotion

In preparation for the survey, NLEP and CIOMAL launched a Mass Media campaigns through the Provincial Radio in order to promote and raise leprosy related knowledge among general population. One to three days before the arrival of the survey team, the Sovann Phum theatre troops performed a play on leprosy to raise

awareness to surrounding villages and places; in total, 27 performances took place during the March/April survey.

- Information Education and Communication materials (IEC) and evaluation questionnaires were distributed to the theatre audience.
- Target project ODs, Leprosy Affected Person located by ODs and HHs members estimated:

Table 2:

13 Operational districts covered in March/April 2013. Registered Leprosy Affected Persons (LAP) identified through the central Data-Base, by OD (see table 1):

Provincial	OD	Population	PR 2010 by OD	Former LAP cases according to central data-base 2001-2010	Estimated former LAP cases located by ODs	HC	Household member estimate (4.8)
Battambang	Mong Reussey	165,409	0.23	41	40	13	192
	Sampov Iou	50,396	0.38	18	12	6	58
Takeo	Daun keo	224,328	0.44	69	65	18	312
Kampot	Kampot	149,580	0.39	62	60	20	288
Prey Veng	Mesang	141,125	0.21	53	26	14	125
	Kamchey Mear	137,680	0.00	46	42	11	202
Kampong Cham	Chamka Leu	188,957	0.00	37	31	9	149
Banteay Meanchey	Mongkul Borey	275,663	0.35	108	80	22	384
Kampong Thom	Stong	146,925	0.21	48	42	10	202
Kratie	Kratie	173,023	0.06	56	47	13	226
	Chlong	140,026	0.07	30	30	7	144
Siem Reap	Kralanch	115,888	0.09	19	16	8	77
Pursat	Bakan	149,357	0.00	15	11	5	53
Total		2,058,357		602	502	156	2,410
			HC* Health Centre				

PR: Prevalence Rate

IV. Contact Survey objectives

Overall goal of the Contact survey:

- To see that Leprosy-affected people are diagnosed and treated at an early stage and that knowledge and awareness on leprosy issues are increased in the community.

Contact survey specific objectives:

- Diagnose potential leprosy-affected persons (LAP) through Contact Survey among the households and neighbors of former leprosy-affected persons screened in the last 10 years (2001-2010), in the project area.
- Raise awareness on leprosy in the community through distributing the Information Education Materials and Theatre campaign.
- Expertise on leprosy diagnosis of the NLEP and leprosy supervisors in the project area is improved.

Purpose of the Contact Survey Report

- To analyse key data, information collected from the contact survey.
- To understand the root causes of the key findings/results of the contact survey;
- To identify the relevant constraints and weaknesses as well as lessons learned of the contact survey implementation;

- To provide relevant conclusions and recommendations that should improve and strengthen the NLEP program's efficiency and effectiveness.

V. Methodology of the Report Writing

- The results of the contact survey have been used in accordance with secondary data and the existing statistics of the NLEP.
- 3 Consultative meetings took place with the national program director, key NLEP staff, CIOMAL and NOVARTIS prior and after the field work to explore lessons learned.
- Key information, data and statistics are synthesized into the final report.

VI. Results of the contact survey

Table 3 : Number of former leprosy and their household members examined and not examined

Province	Ods	Former LAPs				Total HH members including former LAPs	EXAMINED Household Members <i>including</i> Former LAP			Not examined HH members and former LAPs			
		Former LAPs	Former LAPs informed about visit	Last visited by LS			M	F	Total Examined	Absent	Moved abroad or to other provinces	REFUSAL	
				Before 2010	After 2010							M	F
Battambang	Mong Reussey	37	32	34	8	188	58	71	129	29	30	0	0
	LAP unlist	5	1			33	2	22	24	3	6	0	0
	Sampov Ioun	10	10	7	5	61	23	24	47	12	2	0	0
	LAP unlist	2	1			18	10	5	15	3	0	0	0
Takeo	Daun keo	62	62	56	21	285	103	117	220	33	32	0	0
	LAP unlist	15	10			72	26	28	54	10	8	0	0
Kampot	Kampot	60	43	50	20	244	63	82	145	71	17	0	0
	LAP unlist	10	1			48	18	20	38	3	7	0	0
Prey Veng	Mesang	33	31	37	8	158	42	63	105	38	15	0	0
	LAP unlist	12	11			74	21	28	49	15	10	0	0
	Kamchey Mear	42	33	42	3	175	41	82	123	15	37	0	0
	LAP unlist	3	0			12	5	5	10	0	2	0	0
Kampong Chhnang	Chamka Leu	27	13	27	4	171	58	79	137	8	26	0	0
	LAP unlist	4	0			20	8	9	17	3	0	0	0
Banteay Meanchey	Mongkul Borey	102	102	100	20	433	158	191	349	19	65	0	0
	LAP unlist	18	16			90	32	45	77	0	13	0	0
Kampong Thum	Stong	42	39	21	27	187	67	84	151	31	5	0	0
	LAP unlist	6	6			26	9	15	24	2	0	0	0
Kratie	Kratie	47	22	36	14	139	48	53	101	29	9	0	0
	LAP unlist	3	3			16	7	7	14	2	0	0	0
	Chlong	30	13	25	5	124	47	52	99	15	10	0	0
	LAP unlist	0	0			0	0	0	0	0	0	0	0
Siem Reap	Kralanch	17	17	21	1	81	21	29	50	8	23	0	0
	LAP unlist	5	5			32	12	18	30	1	1	0	0
Pursat	Bakan	11	5	11	0	48	13	18	31	4	13	0	0
	LAP unlist	0	0			0	0	0	0	0	0	0	0
	Total	603	476	467	136	2735	892	1147	2039	354	331	0	0
	%		78.94	77.45	22.55		43.75	56.25	74.55	12.94	12.10		
	LS: Leprosy Supervisor												
	*77.45% and 22.55%: we have noted these figures but can not draw conclusions without knowing the year of diagnosis												
	** No refusal												

- Around 78.94% of all LAPs were informed about the date of the contact survey.
- 74.55% (2039) of HHs' members were examined by the survey teams.
- 12.94% (354) of the total HH members were absent during the contact survey.
- 12.10% (331) of the total HH members moved to other provinces or abroad.

- In order to draw conclusions concerning visits by leprosy supervisors, the survey team should ask the former LAPs about the year of diagnosis, as well as the year of the last visit by a leprosy supervisor; this is a lesson learned during the present survey and will be the policy in the forthcoming survey. The NLEP's policy is to follow up all new diagnosed leprosy cases during 2 years after the end of treatment.

Table 4: Number of neighbors examined

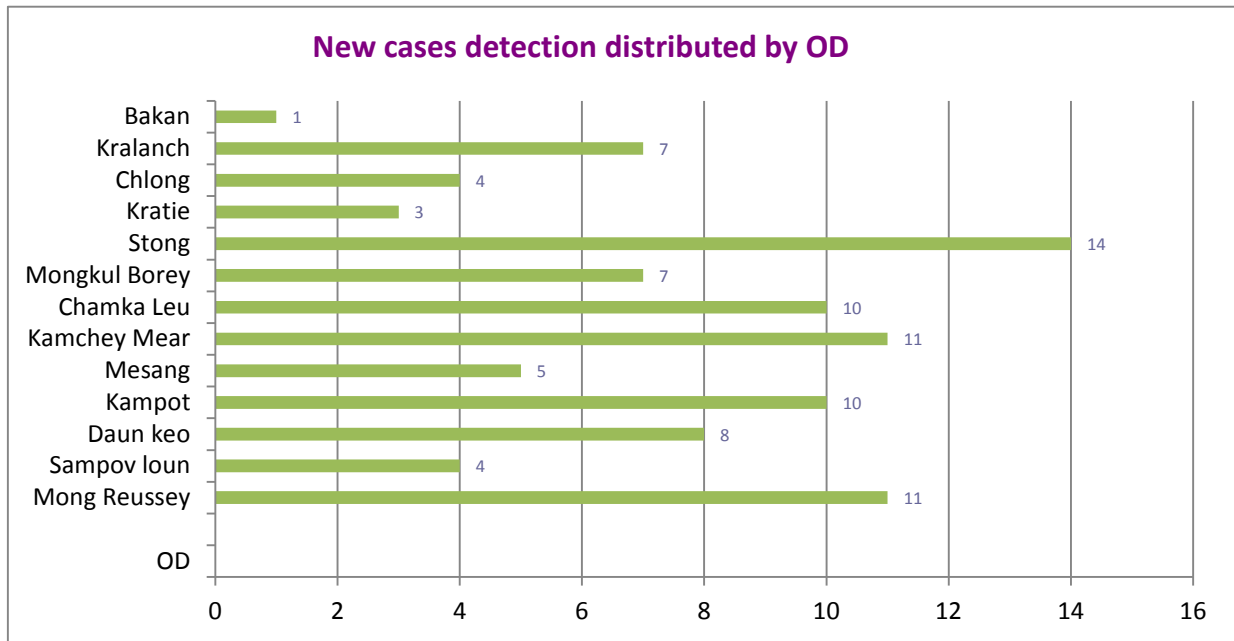
Province	OD	Examined neighbors of Listed LAPs			Examined neighbors of Unlisted LAPs			Total
		M	F	Total	M	F	Total	
Battambang	Mong Reussey	189	178	367	38	45	83	450
	Sampov Ioun	81	94	175	11	10	21	196
Takeo	Daun keo	828	894	1722	183	208	391	2113
Kampot	Kampot	614	643	1257	120	86	206	1463
Prey Veng	Mesang	153	293	446	109	159	268	714
	Kamchey Mear	132	149	281	183	254	437	718
Kampong Cham	Chamka Leu	205	221	426	12	25	37	463
Banteay Meanchey	Mongkul Borey	1225	1384	2609	265	280	545	3154
Kampong Thom	Stong	260	458	718	43	63	106	824
Kratie	Kratie	156	200	356	14	54	68	424
	Chlong	84	159	243	0	0	0	243
Siem Reap	Kralanch	294	336	630	122	113	235	865
Pursat	Bakan	74	97	171	0	0	0	171
		4295	5106	9401	1100	1297	2397	11,798

Table 5: New leprosy cases diagnosed in the 13 Operational Districts

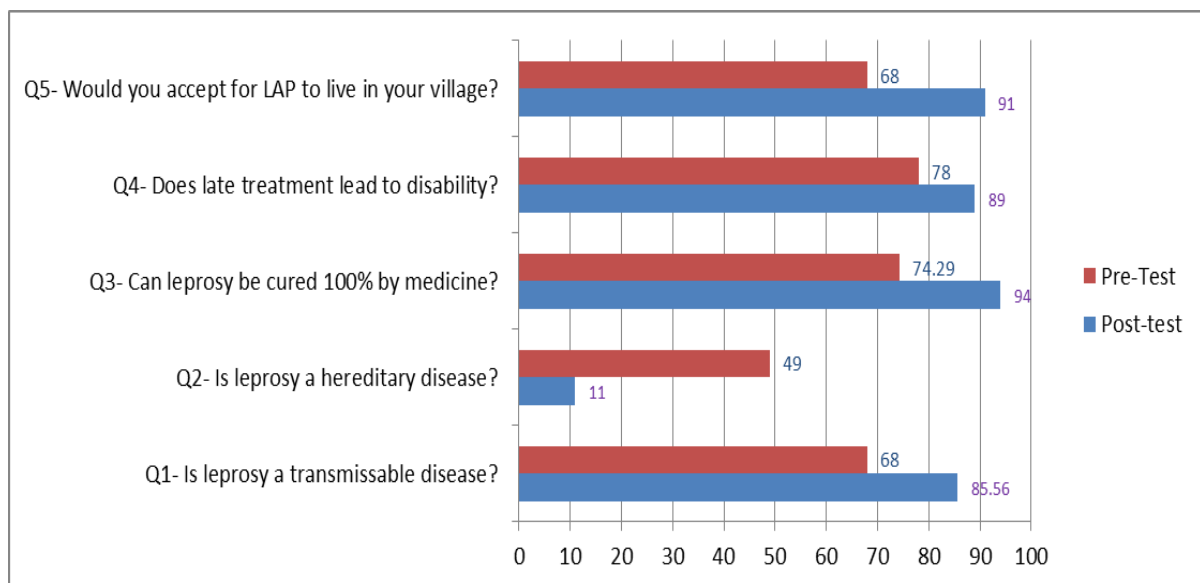
	Adult			Child < 15ys			PB1	PB	MB	Total	Grade II	
	M	F	Total	M	F	Total						Total
NEW Cases Detected among LAPS-HHs' members	17	15	32	6	4	10	5	25	12	42	44.21	4
NEW Cases Detected among Neighbors	28	19	47	4	2	6	7	24	22	53	55.79	2
Total NEW Cases Detected	45	34	79	10	6	16	12	49	34	95		6
%	83.16			16.84			35.79			6.32		

- 55.79% (53) of the total new cases were neighbors.
- 44.21% (42) of the total new cases were household members (37 listed and 5 unlisted)
- 16.84% (16 new cases) of the total new cases were children below 15 years.
- 6.32% (6 new cases) were diagnosed with DGII disability.
- 58% of new cases diagnosed were male, whereas female cases stood at 42%.
- 64.21% were diagnosed as PB and 35.79% as MB.
- 502 former LAPs could be located by ODs among the 602 registered cases. However, during the survey, 603 LAPs (520 listed and 83 unlisted) were examined by the survey teams.

Graph2



Graph 3: Results of the evaluation performed after the theatre performances



VII. Opportunities and constraints:

Opportunities:

- 603 former LAPs have been checked for leprosy diagnosis.
- 2046 HHs' members have been checked for leprosy diagnosis.
- 11, 798 neighbors of listed and unlisted former LAPs were examined.
- 156 health centre staffs were trained in leprosy diagnosis and contact survey process.
- The average attendance to theatre performances was over 500 participants.
- Awareness on leprosy's diagnosis and treatment has increased.
- Many IEC materials including T-shirts, posters, leaflets and banners were distributed both by the survey teams, as well as during theatre shows.

Constraints/weaknesses:

- Some remote target villages were difficult to access by car, resulting in prolonged travel and delaying activities
- Some household contacts and neighbors have migrated to other provinces or abroad (12%) looking for a job or for other reasons.
- Some household contacts and neighbors were absent during the date of survey (13%)
- A tight schedule enabled us to visit only a limited number of neighbors which were in principle living in a radius of 300 meters from the LAPs' houses. In future surveys, we should, time permitting, visit as many neighbors as possible.
- The survey teams face difficulty in making thorough examination of some females, thereby perhaps missing potential cases; this happened inspite of the presence of a female NLEP doctor.

VIII. Conclusions

- The contact survey reveals a limited information flow between OD, HC and village health support groups, as well as the irregular supervision activities/visits to former LAPs and their household.
- Even though the leprosy epidemic level in Cambodia has reached the elimination goal, according to WHO standards, the results of this survey indicates that some parts of the country with a very low prevalence rate still have many new cases.
- Even though, we could check many household members, we still missed 13% of them who were absent on the day of the visit.
- 12% of the household members moved abroad or to other provinces.
- 94% of all new cases were detected at an early stage, with no disability; only 6% suffered from disability grade II.
- The fact that 16% of the new cases were children below 15 indicates that transmission of leprosy is ongoing.
- The results also indicate that case detection among household members and neighbors of LAPs should be the priority of NLEP.
- Health seeking behavior of LAP and their families and neighbors towards health services related to leprosy diagnosis and treatment still represents a huge challenge. Resolving this obstacle, mainly due to ignorance, lack of education and leprosy discrimination, requires more leprosy awareness raising, particularly through IEC activities.
- Mass media campaigns and community theatre shows are very important factors to raise general knowledge on leprosy and reduce discrimination towards LAPs.
- There were 53 new cases (0.45%) among the neighbors examined (11,798).

IX. Key Recommendations

With regard to the overall identified findings, constraints and weaknesses and after consultation with key staff of the NLEP and with partners, the following recommendations are suggested:

- 1). It is suggested to continue "Contact Surveys" in all Cambodian operational districts and repeat them in identified hot-spots. As of May 2013, 45 operational districts have been surveyed out of 77 ODs.
- 2). In the event of new "Contact Surveys", make through administrative preparations and field arrangements that include better communication between organizers and local health authorities.

3). It is suggested to continue a leprosy information campaign at national and community level. One popular and attractive mean in Cambodia is the Mobile Theatre, whereby a scenario on leprosy would be written and include music and dance; these theater representations should also be used to display banners and distribute Information, Education and Communication leprosy-related information (leaflets and posters).

4). Health Centre staff participating in the pre-survey trainings should receive the per diem only at the end of the survey.

Picture during the survey activities:



