



Tuberculosis Today

Official Paper of the 2007 National Tuberculosis Prevalence Survey
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DOH partners with TDF to implement 2007 National TB Prevalence Survey in 50 clusters

The Department of Health (DOH), in partnership with the Tropical Disease Foundation, Inc. (TDFI), is currently undertaking the 2007 National Tuberculosis Prevalence Survey (NTPS). The 2007 NTPS is the third prevalence survey in the Philippines, with the first survey conducted in 1981 – 1983 by the National Tuberculosis Institute of the Philippine Tuberculosis Society, Inc. (PTSI) and the second survey conducted in 1997 by TDFI.

The 2007 NTPS has the goals of (1) determining the impact of the National Tuberculosis Program (NTP) by DOH at the central and regional levels in terms of technical assistance, supervision and monitoring; and (2) determining the impact of the implementation of the NTP by the health units of the local governments in their respective areas of responsibility implementing the DOTS strategy. It also aims to: (1) measure the national prevalence of TB disease among those 10 years old and above; (2) assess trends of TB disease prevalence; (3) determine the drug resistance patterns of isolated

TB bacilli; (4) assess trends of annual risk of TB infection (ARI); (5) determine the health seeking behavior of TB symptomatics and patients; and (6) assess the risk factors of TB, including the demographic and socioeconomic determinants.

Covered in the 2007 NTPS are 50 barangays (clusters) pre-selected based on a sampling called *probability proportionate to size* (PPS). These 50 clusters are spread across the 16 regions nationwide.

Cluster activities being conducted during the field survey include: (1) social preparation where survey teams meet with city and local officials to explain what the survey is all about; (2) household registration and individual interviews, which also include a socioeconomic survey; (3) BCG scar verification; (4) tuberculin skin testing (TST) and reading; (5) measurement of height and weight; (6) chest x-ray examinations; and (7) sputum collection among those found to have abnormal chest x-ray results.



2007 NTPS covers Asipulo, Ifugao. The 2007 NTPS Team 2 takes a break with the local leader of Amduntog, Brgy. Capt. Clarence D. Dupingay (extreme left) and Ms. Marcelyn M. Dulnuan (center), Asst. Project Manager of JICA's Maternal and Child Health Project – Lagawe Office in the Cordillera Administrative Region.

2007 NTPS field staff undergo training

Training for the 2007 National Tuberculosis Prevalence Survey (NTPS) field staff was held last June 18 to 26, 2007 at the Wyeth Learning Center in Makati City. The activity was attended by more than 85 field staff, composed of physicians, nurses, sputum collectors, field editors and monitors.

The faculty was headed by Dr. Thelma E. Tupasi as Course Director and Principal Investigator, who was also the principal investigator of the 1997 NTPS. She was joined by a faculty of specialists and experienced public health professionals: Dr. Jennifer Chua, 2007 NTPS Program Manager; Ms. Nellie V. Mangubat, Data Manager; Dr. Ma. Imelda D. Quelapio, 2007 NTPS Co-Investigator; Ms. Nona Rachel Mira; Mr. Virgil Belen; Ms. Amelia Sarmiento; Dr. Vivian Lofranco; Ms. Ma. Paz Rostrata; Dr. Lena Ablis – Sun; Dr. Gerardo Beltran; Dr. Joselito

Legaspi; Ms. Grace Egos and Mr. Henry Evasco. Dr. Grace Cruz and Prof. Maria Paz Marquez of the University of the Philippines Population Institute (UPPI) were also part of the faculty.

The training consisted of lectures, demonstration and return demonstration of procedures like BCG scar verification, tuberculin skin testing (TST) and reading, height and weight measurements, chest x-ray reading (for Team Doctors), household and individual interviews, sputum collection and coding of data collected through the use of survey questionnaires.

During the training, Dr. Tupasi gave an overview of the magnitude of TB in the Philippines and explained the contribution that the 2007 NTPS will give to the whole country.

(Continued in page 4, column 3)



2007 NTPS TRAINING. Tropical Disease Foundation, Inc., in collaboration with the Department of Health, University of the Philippines Population Institute and Wyeth Learning Center, conducted didactic and practical exercises for field staff, editors and monitors.

2007 NTPS kicks off in NCR; covers 6 cities

The 2007 National Tuberculosis Prevalence Survey (2007 NTPS), after a month-long training of its survey teams by the Tropical Disease Foundation, Inc. (TDFI), University of the Philippines Population Institute (UPPI) and the Department of Health (DOH) 2007 NTPS Steering Committee, kicked off in six cities in Metro Manila – Brgy. 107, Caloocan City; Brgy. Potrero,

Malabon; Brgy. 30, Tondo, Manila; Marikina Heights, Marikina City; Tandang Sora, Quezon City; and Tuktukan, Taguig – last July 3 – 11, 2007. Six survey teams were fielded in the six cities to implement the following major activities: 1) social preparation by meeting the city and local officials, 2) registration of 100 to 120 households comprising more or less a sample of 600 individuals

selected randomly, 3) interview of household heads and individuals who were 20 years old and older, and 4) cluster assemblies. The cluster assemblies comprise of the following activities: a) BCG scar verification among children aged two months to nine years old, b) PPD testing and reading among children aged five to nine years old, including adults aged 40 to 59 years old and those found to have

positive chest x-rays to serve as controls, c) chest x-ray examinations of all individuals aged 10 years and older, d) collection of three sputum specimens from all subjects with abnormal chest x-ray findings. Prior to the start of the prevalence survey, the survey teams underwent a month-long training and fieldwork with the technical assistance of TDFI, UPPI and DOH and support from Wyeth Philippines.

From eye to lens . . .



HOUSEHOLD AND INDIVIDUAL INTERVIEWS. Survey teams conducted interviews among household heads and eligible individuals.



TSTs. Tuberculin skin tests were performed to children aged 5 to 9 years old.



TST READING. Tuberculin skin tests were read by a standard reader after 48 to 72 hours.



SPUTUM COLLECTION. A laboratory technician sealed and labeled the sputum specimens submitted by residents of Maguing, Lanao Del Sur who had abnormal chest x-ray findings.



SPUTUM COLLECTION ON FIELD. A laboratory technician provided sputum cups to a resident of Asipulo, Ifugao whose relative had abnormal chest x-ray findings.

Stories from the field . . .



Super Kagawad in Baguio City

In Brgy. New Lucban, Baguio City, the Barangay Council was very supportive to Team 4, but one Kagawad stood out in the name of Kag. Jojo Boholst. He went to the Barangay Hall at 6:00 in the morning everyday, spent the whole day with the team and accompanied them during the house – to – house visits. In spite of these, he was able to attend to his official functions such as hearing complaints from his constituency. *Nag-igib pa siya ng tubig para sa banyo ng Barangay!*. He was also in-charge of securing the Barangay Hall at 7:00 in the evening. (Timothy Ting, Team Leader, Team 4)

From Banilad, Dumaguete City to Alegria, Cebu... with love

The Barangay Council members of Brgy. Banilad, Dumaguete City was very supportive that they volunteered the service vehicle used by the survey team to transport the Back-up Team to the next cluster site... in Alegria, Cebu! They even stayed there for two more days and assisted the team in its activities. This team was so lucky because the service vehicle of Alegria, Cebu was sent to the machine shop for repairs. Brgy. Banilad was there to save the day! The representatives of CHD – Central Visayas saw the service vehicle of Brgy. Banilad and were amazed of the support; this news reached the Mayor of Alegria and the following day a Nissan Frontier was provided to help the survey team and they managed to reach the community people despite the rough, mountainous terrain! (Timothy Ting, Team Leader, Team 4)

Holiday surprises in Negros Occidental!

The survey team arrived during holidays in Brgy. XII, City of Victorias and Mansablay, Isabela, both in Negros Occidental. *Alas!* The team was very surprised to see two Councilors from City of Victorias, all the officials of Brgy. XII, community leaders, health center staff, the City NTP Coordinators and community people welcome the team. A short program was even conducted to warmly receive the team. With their support, cluster activities were conducted smoothly and key people in the hacienda, like the administrators, were also involved. In Mansablay, Isabela, the heavy downpour did not dampen the interest and support of the Municipal NTP Coordinators, barangay officials, barangay tanods, health workers and police officials to the survey. In both barangays, key people in the communities became our allies and advocates. After counting families and households, we talked about blocks and implemented survey activities. We certainly ended up with high coverages! (Nona Rachel Mira, Team Leader, Team 2)

A fruitful Sarangani experience

September 24, 2007 was the start of a very fruitful week for Team 3 in Brgy. Kiblat, Malungon, Sarangani Province. They arrived in Gen. Santos City and met with Dr. Antonio Yarana, Provincial Health Officer and Dr. Rafaida Hernandez, Municipal Health Officer, with their staff; they accompanied the team to make a courtesy visit to Mayor Reynaldo Constantino, who expressed his 100% support to the project and appreciation that one of his barangays was selected to be part of 2007 NTPS. The team arrived in the Barangay Health Center at 3:00 in the afternoon and was met by Brgy. Capt. Aurelia Yanzon, the barangay health workers, barangay nutrition scholar and the community. The team was really astonished to see so many fruits prepared just for the team! They allowed the survey team to eat at their hearts' delight! There was no problem in the selected population; the team enjoyed every moment of the interviews, especially with the natives, the Bilaan. In such a short span of time, the team learned something about their culture. They were a bit surprised to learn that our "*kababayans*" from the north (Ilocano) have quite a number living in this part of Mindanao. This somehow made the team felt at home. (Mary Rose Taguinod, Team Leader, Team 3)

An early morning mop-up in Tagudin, Ilocos Sur

The Back-up Team went back to Brgy. Becques, Tagudin, Ilocos Sur, to collect additional sputum specimens for the respondents found to have positive chest x-ray findings, as read by the central team in Makati. The team members were surprised to see these respondents present at the cluster assembly site as early as 7:00 AM ready for sputum collection! This made the work a lot easier for the team. The Barangay Council, barangay health workers, city health officials and community people supported the team tremendously in this. The Barangay Captain would always pass by and ask how the team was and posted some *tanods* to provide security for the team. (Timothy Ting, Team Leader, Team 4)

Ang sinasabi ng mga tao tungkol sa survey . . .

“Ang mga nagsa-survey ay kailangang makibagay sa mga tao sa komunidad; ang mga tao sa komunidad ay dapat na maintindihang mabuti ang layunin ng 2007 NTPS at huwag makinig sa pamumulitika ng iba.” – **Municipal Health Officer**

“Maraming salamat sa inyong mga tulong sa amin; sana ay magpatuloy ang inyong pagtulong sa amin at sa iba pa nating mga kababayan.” – **Dr. Beltran**

“Meron tayong campaign kontra polio... Meron tayong ligtas tigdas campaign... Sa tulong ninyo wala ng kaso ng polio at wala na ring kaso ng tigdas dito sa ating barangay. Sana dito rin sa isinasagawang TB survey ay makikipagtulungan tayo para magiging maganda ang kahihinatnan ng survey na ito, upang sa darating na mga taon ay magiging TB-free ang ating komunidad.” – **Dr. Elizabeth Valmadrid, Brgy. Potrero, Malabon**

“Bigyan natin ng suporta ang TB survey. Ang malusog na pamilya ay kinakailangan para sa isang maunlad na pamayanan.” – **Brgy. Capt. Sheryl Nolasco, Brgy. Potrero, Malabon**

“Gisultihan mi nga nay libreng check-up ug x-ray diri; sakit man gud ang akong ulo. Wala diay nasabtan sa uban ug kinsa lang ang naapil sa survey; sigi lang... ok ra man gihapon bisan di mi naapil.” – **Housewife and mother, Zone 5, Brgy. Kalasungay, Malaybalay City**

“The barangay health workers and barangay nutrition scholars are the shoulders upon which the 2007 NTPS team leans on. These hardworking, poorly paid HEROES of our nation always join the team going from house – to – house, rain or shine, flood or mud. Their happiness is in helping their communities achieve health and at the same time gain some prestige, knowledge and respect from the communities they serve. To help them, the team gives them separate lectures on certain public health challenges, especially on TB, to increase their knowledge and enable them to help more people. – **Timothy Ting, Team Leader, Team 4**

“During our mop-up operations in Brgy. Kiblat, Malungon, Sarangani Province, the Back-up Team, together with the Brgy. Capt. Yanzon, coordinated with Dole Philippines, the pineapple giant, to allow their employees who were part of the survey to be excused from their work. Its Human Resource Department gladly accepted our request and we were very, very grateful for that.” – **Mary Rose Taguinod, Team Leader, Team 3**

“It is very timely that the 2007 NTPS was conducted. We can look back and see what happened in the last 10 years in terms of detection, success rate and awareness of the people about the TB program of the government.” – **Provincial Health Officer**

“Maayo kaayo ni sila Sir (referring to the survey team) kay nagatrabaho sila hangtud gabii para lang macheck-up ang mga taga-diri. Buotan kaayo sila. Nalipay gyud mi kay naa mo diri sa among barangay.” – **Barangay Health Work, Brgy. Kalasungay, Malaybalay City**

“Kami ay mapalad na napiling barangay out of the many dito sa probinsiya. Siguradong makikinabang ang aking mga kababayan.” – **Barangay Official, Tuguegarao City**

“Pinaghandaan na namin ang pagdating ng 2007 NTPS Team. Alam na ng buong Barangay Council, health workers at mga tagarito ang aming magiging partisipasyon sa darating na survey.” – **Barangay Midwife, Tuguegarao City**

“Ipapatawag ko ang buong Barangay Council at mga BHW upang pag-usapan ang gagawing preparasyon sa nalalapit na survey. Magtatalaga kami ng mga tao na tutulong sa team habang isinasagawa ang survey. Magtatalaga rin kami ng mga tao na magsisiguro ng kaligtasan ng buong team.” – **Brgy. Capt. Fernando Benliro, Brgy. Becques, Tagudin, Ilocos Sur**

A grand reception in Maguing, Lanao Del Sur

After criss-crossing the country from four previous cluster areas, Team 1 has never had as grand a reception as that in Maguing, Lanao Del Sur. A big purple banner in the main road greeted the team with a “BIG WELCOME” from the Datus, Bais and officials of this inconspicuous barangay of Bato-Bato upon the team’s arrival. To top it all, all of the “bigwigs” from the local government, Municipal Health Office and Philippine National Police were with the team on the first day of the survey, with the residents participating in what was held as the “NTPS Forum Day.” Neat! The team never felt so important until Maguing came along. Notwithstanding the foreboding news of military clashes with the local insurgents, the team was provided with police escorts 24/7 during their entire stay. For sure, it was for the team’s safety. The team thought it had VIP written all over it. To sum up this experience, in one word, the team found it AWESOME! (Christian Villacorte, Team Leader, Team 1)

From eye to lens . . .



Women and children of Sta. Barbara, Zamboanga City patiently waited to have their free chest x-ray examinations done despite frequent power interruptions.



Partners from the Center for Health Development – Cordillera Administrative Region (CHD – CAR) and Japan International Cooperation Agency (JICA) assisted the residents of Asipulo, Ifugao reach the cluster assembly site.



Residents of Brgy. Bato-Bato, Maguing, Lanao Del Sur were assisted by the barangay leaders, police escorts and survey team by providing free transportation from their homes to the cluster assembly site and vice versa.



Men, women and children of Brgy. Bato-Bato, Maguing, Lanao Del Sur participated in the cluster assembly activities; free chest x-rays were offered to individuals aged 10 years old and above. An x-ray mobile can be seen at the background.

Cluster coverages . . .



Pilipinas na walang TB!

| METRO MANILA CLUSTERS | Interviews | | PPD (5 to 9 years old) | X-ray | Sputum |
|------------------------------------|-------------|-------------|------------------------|-------------|-------------|
| | Household | Individual | | | |
| | Percentages | | | | |
| 1. Tondo, Manila | 100 | 96 | 71 | 87 | 83 |
| 2. Marikina Heights, Marikina City | 99 | 36 | 43 | 50 | 97 |
| 3. Tandang Sora, Quezon City | 100 | 79 | 80 | 77 | 76 |
| 4. Potrero, Malabon | 100 | 90 | 83 | 87 | 84 |
| 5. Brgy. 107, Caloocan City | 99 | 73 | 50 | 56 | 94 |
| 6. Tuktukan, Taguig City | 100 | 73 | 78 | 60 | 86 |
| Average | 99.7 | 74.5 | 67.5 | 69.5 | 86.7 |

| OTHER URBAN CLUSTERS | Interviews | | PPD (5 to 9 years old) | X-ray | Sputum |
|------------------------------------|-------------|-------------|------------------------|-------------|-------------|
| | Household | Individual | | | |
| | Percentages | | | | |
| 1. Iloilo City | 100 | 99 | 100 | 97 | 100 |
| 2. Bacolod City | 100 | 91 | 71 | 82 | 96 |
| 3. Cotabato City | 100 | 96 | 86 | 81 | 86 |
| 4. Baguio City | 100 | 96 | 94 | 90 | 100 |
| 5. Calasiao, Pangasinan | 100 | 98 | 98 | 95 | 100 |
| 6. Dumaguete City, Negros Oriental | 100 | 96 | 94 | 95 | 100 |
| 7. Panabo City, Davao Del Norte | 100 | 98 | 90 | 94 | 100 |
| 8. San Isidro, Davao Oriental | 100 | 100 | 100 | 97 | 100 |
| 9. Cebu City | 100 | 88 | 97 | 84 | 100 |
| 10. Dasmariñas, Cavite | 100 | 94 | 100 | 96 | 100 |
| Average | 100 | 95.6 | 93 | 91.1 | 98.2 |

| RURAL CLUSTERS | Interviews | | PPD (5 to 9 years old) | X-ray | Sputum |
|---|-------------|-------------|------------------------|-------------|-------------|
| | Household | Individual | | | |
| | Percentages | | | | |
| 1. Jala-Jala, Rizal | 100 | 97 | 93 | 89 | 99 |
| 2. Makato, Aklan | 100 | 98 | 91 | 96 | 97 |
| 3. Sibunag, Guimaras | 100 | 100 | 99 | 99 | 96 |
| 4. Tuguegarao City, Cagayan | 100 | 100 | 91 | 96 | 99 |
| 5. Zamboanga City | 100 | 94 | 93 | 91 | 100 |
| 6. Mabuhay, Zamboanga Sibugay | 100 | 96 | 91 | 91 | 99 |
| 7. Asipulo, Ifugao | 100 | 99 | 88 | 95 | 99 |
| 8. Maguing, Lanao Del Sur | 100 | 99.6 | 96 | 90 | 95 |
| 9. City of Victorias, Negros Occidental | 100 | 99.6 | 100 | 98 | 100 |
| 10. Isabela, Negros Occidental | 100 | 99 | 95 | 98.8 | 96 |
| 11. Tagudin, Ilocos Sur | 99 | 98 | 97 | 98 | 100 |
| 12. Davao City | 100 | 90 | 98 | 92 | 100 |
| 13. Malita, Davao Del Sur | 100 | 96 | 98 | 95 | 100 |
| 14. Bayambang, Pangasinan | 100 | 100 | 97 | 95 | 100 |
| 15. Alegria, Cebu | 100 | 98 | 92 | 99.6 | 100 |
| 16. Iligan City | 100 | 99 | 99 | 98 | 100 |
| 17. Malungon, Sarangani | 100 | 97 | 95 | 97 | 96 |
| 18. Malaybalay, Bukidnon | 100 | 100 | 100 | 99 | 100 |
| 19. Gumaca, Quezon | 100 | 100 | 100 | 100 | 100 |
| Average | 99.9 | 97.9 | 95.4 | 95.7 | 98.7 |

Kinakailangang masugpo ang TB sa ating bansa para sa ikauunlad ng ating bayan. Mahalagang malaman ng Kagawaran ng Kalusugan o Department of Health (DOH) at mga lokal na pamahalaan kung ang isinasagawang programa laban sa TB ay tumatalab at nakakasugpo ng TB.

Ang inyo pong komunidad ay isa sa limampung bayan na napili para sa pagsisiyasat na ito. Málaga po ang inyong pagsali sa mga gagawing eksaminasyon, tulad ng interview, tuberculin skin test (TST), chest x-ray at eksaminasyon sa plema.

Kami po ay nakikiusap na kayo ay sumali at tumulong sa pagsisiyasat na ito at nang ang mga resulta ay maging tutuong kalagayan ninyo at ng mga mamamayan. Ang resulta ng inyong mga eksaminasyon ay napakahalaga:

- Para sa inyo, dahil kung kailangan po ninyo ng lunas sa TB, ito po ay ibibigay na walang bayad ng inyong health center upang kayo ay gumaling
 - Para sa mga nangangasiwa ng inyong kalusugan, dahil kung ang resulta ay nagpapakitang laganap pa ang TB sa inyong bayan, kinakailangang mapabuti pa ang programa at nang ito ay maging mabisa
 - Para sa ating bayan, kung ang resulta ay nakikitang maganda at walang problema, mabuti ang inyong kalagayan at ng ating mga kababayan, ang programa ay mabisa at dapat na ipagpatuloy
- Marami pong salamat sa inyong pagsali at pagtulong sa pagsisiyasat na ito!



RETURN DEMONSTRATION ON TST. Prospective field staff for the 2007 NTPS underwent a series of procedure demonstration and return demonstration to prepare them for fieldwork.

2007 NTPS field staff undergo training

She set a 100% target coverage for the survey procedures, particularly on chest x-ray, sputum collection, TST and reading and the interviews. Dr. Chua gave the participants a general idea on the survey team composition, roles and expectations. Ms. Sarmiento, a veteran and expert on conducting national TB prevalence surveys, gave a lecture on social preparation, cluster sampling and selection and spot mapping.

Dr. Quelapio gave lectures on household registration and cluster assembly activities. Dr. Lofranco and Ms. Rostrata were responsible for the training on BCG scar verification, TST and reading. To ensure proficiency in the conduct of the survey procedures, actual TST and reading were done among training participants, course faculty and TDFI employees. Ms. Mira and Mr. Belen taught the participants on height and weight measurements and the survey forms. Dr. Beltran, Dr. Legaspi and Dr.

Ablis – Sun of the Makati Medical Center Department of Radiology conducted several sessions with the Team Leaders and Team Doctors on how to read chest x-ray films. Ms. Egos and Mr. Evasco provided demonstrations on proper sputum collection, labeling and specimen transport to the TDFI laboratory. Dr. Grace Cruz and Prof. Maria Paz Marquez of UPPI oriented the field staff on the techniques on how to conduct household and individual interviews. They were assisted by a team of seasoned interviewers led by Mr. Philip Ramos. They facilitated several sessions, role plays and mock interviews in a classroom setting as well as actual field interviews in Krus Na Ligas and Brgy. Dagohoy in Diliman, Quezon City. Ms. Nellie Mangubat taught data coding and field editing. A training manual for the 2007 NTPS was developed by the faculty and was used during the training. In addition, a Manual for Field Editors and Team Coordinators was used.

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