

**ANNUAL REPORT**  
April 2007 – March 2008



***Central Asian Republics TB Control Partnership***

***Cooperative Agreement No.: 176-A-00-04-00006-00***

***Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan***

## ANNUAL PROGRESS REPORT

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PROGRAM TITLE USAID Tuberculosis Control Program for the Central Asian Region

COOPERATIVE AGREEMENT NO: 176-A-00-04-00006-00

PROGRAM SITES: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan

REPORT PERIOD: April–March 31, 2008

SUBMITTED TO: Sofia An  
CTO  
Office of Health and Education  
Regional Mission to Central Asia  
U.S. Agency for International Development, Central Asia

Karen Welch  
Director  
Office of Health and Education  
Regional Mission to Central Asia  
U.S. Agency for International Development, Central Asia

SUBMITTED BY Tom Mohr  
Chief of Party, Russia/Eurasia  
Project HOPE

DATE: April 30, 2008

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## LIST OF ACRONYMS

AFEW	AIDS Foundation East West
BCC	Behavioral Change Communication
CA	Central Asia
CAR	Central Asian Republics
CAPACITY	USAID-funded Project
CARITAS	Foundation in Luxemburg
CCM	Country Coordinating Mechanism
CDC	Centers for Disease Control and Prevention
DOTS	Directly Observed Therapy Short Course
DM	Drug Management
DRS	Drug Resistance Survey
DST	Drug Susceptibility Testing
EPOS	International health consultancy organization
ESCM	Electronic Surveillance Case Management
EQA	External Quality Assurance
FGP	Family Group Practitioners
FMC	Family Medical Center
GDF	Global Drug Facility
GFATM or Global Fund	Global Fund for AIDS, Tuberculosis and Malaria
GLC	Green Light Committee
GUIN	Kyrgyzstan Penitentiary System
HLWG	High Level Working Group
IC	Information and Communication
IEC	Information, Education and Communication
INH	Chemoprophylaxis
IPC	Interpersonal Communication
IUATLD	International Union Against Tuberculosis and Lung Disease
JHU-CCP	Johns Hopkins University Center for Communications Programs
JSI	John Snow Incorporated
KfW	German Development Bank
KR	Kyrgyzstan Republic
LMIS	Logistics Management Information System
LSD	List of Essential Drugs
M & E	Monitoring and Evaluation
MDR-TB	Multi-drug Resistant Tuberculosis
MIA	Ministry of Internal Affairs (Kazakhstan)
MLSP	Ministry of Labor and Social Protection
MOHMIT	Ministry of Health and Medical Industry (Turkmenistan)
MOH	Ministry of Health
MOH RK	Ministry of Health for the Republic of Kazakhstan
MOJ	Ministry of Justice
MSF	Medecins Sans Frontiers
MSH	Management Sciences for Health
NCHLS	National Center for Healthy Life Styles
NCPH	National Center of Phthisiology (Kyrgyzstan)

NJMS	New Jersey Medical School – Tuberculosis Center
NRCS	National Red Crescent Society
NTBC	National Tuberculosis Center of the Republic of Kazakhstan
NTP	National Tuberculosis Program
OTBD	Oblast Tuberculosis Dispensary
PHC	Primary Health Care
PRA	Participation Rapid Appraisal
PR	Principal Recipient
QA	Quality Assurance
RDU	Rational Drug Use
RK	Republic of Kazakhstan
RSMS	Regional Social Mobilization Specialist
SS- or S-	Sputum Smear Negative
SS+ or S+	Sputum Smear Positive
TB	Tuberculosis
TB/HIV	Tuberculosis/HIV-AIDS
TBPC	Tuberculosis Prevention Center
THR	Take Home Food Ration
TOT	Training of Trainers
TS	Thematic Subgroup
TSMI	Turkmen State Medical Institute
TWG	Thematic Working Group
UNDP	United National Development Program
USAID	United States Agency for International Development
WFP	World Food Program
WHO	World Health Organization

**QUARTERLY/ ANNUAL REPORT**

April 1, 2007 –March 31, 2008

Prepared By:  
Project HOPE  
On behalf of the CAR TB Control Partnership  
John Snow, Inc.  
Johns Hopkins University/Center for Communications Programs  
New Jersey Medical School National Tuberculosis Center

In Response To:  
Cooperative Agreement No: 176-A-00-04-00006-00

**Regional Summary**

**General Overview**

**Introduction**

1. On April 1, 2008, the Project HOPE Consortium finished Year 4 of the project under its Cooperative Agreement with USAID. The award of the project grant in May 2004 was followed by the launching project activities in July 2005. A mid term evaluation was conducted in January-February, 2007. Overall the project is on course, only in the first objective 'Building Political Support for Sustainable TB control', it has not been possible to implement all activities planned at the start.
2. Main recommendations from the mid term review were following:
  - (a) Strengthen national TB control program management in all countries by strongly advocating the consolidation of national TB management teams, with staff based in the TB Center but responding functionally to the TB authority in the Ministry of Health and clear lines of authority, responsibility and supervision.
  - (b) Give priority to strategic planning aimed to increase the national capacity to manage TB control, by:
    - Gradually transferring routine managerial activities now carried out by Project HOPE staff to trained, mentored and qualified national staff, particularly in areas of training, supervision and quality assurance of microscopy. Project HOPE staff could complement the national unit in the planning, implementation and monitoring of managerial activities to provide on-the job training in appropriate methodologies.
    - In collaboration with other partners concentrate on appropriate national policies, joint planning of support, compatible training and information materials and monitoring indicators.
  - (c) Advocate for a TB budget line in national health budgets, with at least minimum funding for the managerial activities of the NTP.
  - (d) In Kazakhstan, promote a sustainable, good quality TB drug supply by advocating that the national authorities maintain national funding and centralized procurement of TB drugs.
  - (e) In Turkmenistan, use the opportunity of the current government commitment to expand DOTS rapidly to guide and support a rational plan of expansion, in close collaboration with WHO.
  - (f) Develop a Project HOPE strategy and medium term plan to gradually prepare countries for full NTP implementation and management of TB control;

- Update Project HOPE staff on the final structure desired (including health sector reforms such as changes in the funding and use of TB hospitals and specialists) and
  - Strengthen their capacity to monitor progress.
3. The recommendations have been followed up in all 5 countries. Recommendations -b, -d and -e have by and large been realized during the 4<sup>th</sup> project year. Recommendation -a has been advocated but to date has been achieved only in Uzbekistan where such a structure already existed. Recommendation – c is still being advocated and a study has been initiated in Kyrgyzstan to increase support. Realization of recommendation –f is in progress and forms part of the year 5 workplan.

### Epidemiology

4. In project areas, 9,030 TB cases of all types were notified during the period of April 1 – December 31, 2004. In 2005, another 15,286 cases, in 2006 another 16,162 cases and in 2007 another 17,662 brought the total of cases detected in Project HOPE project sites to 58,140. Of these, a total of 18,139 cases (31%) were the new smear positive cases that are the primary focus of the DOTS strategy.
5. Case finding targets are close to being achieved in Kyrgyzstan with 66% of the estimated number of new smear positive cases being detected during 2007. In Kazakhstan 59% case detection has been achieved but case detection rates have been on the decline since 2002 and continue to decline. This may be a reflection of a decreasing incidence. In Uzbekistan and Tajikistan case detection rates are low, 38% and 36% respectively. In Turkmenistan the case detection rate is currently 127%, which reflects the fact that figures presented are only from a limited number of pilot sites but also the uncertainty about the denominator of this rate, the WHO estimated incidence.
6. After an initial increase from 80% in 2004 to 87% in 2006, smear conversion rates among the cases identified and reported on have slightly declined to 84% over the 1<sup>st</sup> half of 2007.
7. The overall treatment success rate for new smear positive cases further increased from 81% among 3,874 cases evaluated for 2004 and 83% of 4,712 evaluated for 2005, to 87% of 5033 cases evaluated for 2006. With 74% for those registered in 2006, Uzbekistan still has the lowest success rate, but it has further increased from 68% over 2004 and 72% in 2005.

### BUILDING POLITICAL SUPPORT FOR SUSTAINABLE TB CONTROL

#### Structural Support

8. In both Turkmenistan and Tajikistan, 100% DOTS coverage has been achieved during the 4<sup>th</sup> quarter of 2007. Currently all 5 CAR countries are implementing the DOTS strategy nationwide.
9. In Kazakhstan, a policy assessment report was finalized and presented to stake holders. The report contains concrete recommendations on how to improve various aspects of TB control and was well received. One of the recommendations of the report was to resume centralized procedures for procurement of anti-TB drugs; this recommendation has already been put into practice.
10. A need for a TB Prikaz change had been identified and advised. Project HOPE KZ team assisted the national counterparts in developing a new Prikaz, which was approved by MOH.
11. In all five countries, Thematic Working Groups continued to function and meet whenever there is a need. Project HOPE continued to play an active role but ownership is with the local counterparts.
12. In Kyrgyzstan a TB sub-account study has been initiated. The study foresees an empirical analysis of financing and flow of funds in the health system for tuberculosis care in Kyrgyzstan, followed by a theoretical analysis based on which recommendations will be drafted and presented.

**Funding for TB Control**

13. In Tajikistan, Project HOPE has been invited to submit an application for the Rolling Continuation Channel (RCC) of the GFATM, in recognition of excellent results achieved during implementation of the round 3 GFATM grant of which Project HOPE was the principal recipient. In close consultation with local counterparts and WHO, a proposal for a six year extension of the round 3 grant was drafted, approved by the CCM and submitted to the GFATM on March 28, 2008.

**BUILDING HUMAN AND SYSTEMS CAPACITY FOR SUSTAINABLE TB CONTROL****Integration into the Primary Health Care structure**

14. In Tajikistan Project HOPE and ZdravPlus, together with NTP counterparts, conducted sessions on 'Strengthening the role of the PHC system in TB control' for PHC doctors. A total of 175 PHC doctors attended the sessions in Sugd Oblast and Dushanbe.
15. Also in Tajikistan, Project HOPE signed an agreement with the Healthy Life Style Center (HLSC) concerning training for community leaders and volunteers. According to this agreement, Project HOPE trained trainers of HLSC who in turn train volunteers and community leaders. These trainings are currently underway.
16. In South Chui Oblast, Kyrgyzstan, Project HOPE continued its support to a joint pilot with ZdravPlus of integrated TB control involving family medical centers and PHC outposts. Results are encouraging. Rayon TB coordinators are regularly visiting all PHC facilities, 50% of new TB cases identified are identified through the PHC services.

**Strengthening the Laboratory Network**

17. A training package for Basic Sputum Smear Microscopy developed by Project HOPE during the 3<sup>rd</sup> project year and field-tested in Tajikistan, has been put into practice in Uzbekistan, Kazakhstan and Kyrgyzstan. After the materials were adapted to the local circumstances in each of the countries, trainers from the national TB programs have been trained, who in their turn will train local laboratory staff.
18. External quality assurance (EQA) based on lot quality assessment sampling (LQAS) has been introduced in pilot sites in Tajikistan and Kazakhstan. In both countries, implementation was preceded by a feasibility assessment and training. Implementation is being monitored by Project HOPE laboratory specialists.
19. Training in culture/ drug susceptibility testing (DST) based on a training package developed by Project HOPE has been conducted by the Project HOPE regional laboratory specialist in Kyrgyzstan. The training was part of the preparation for a drug resistance survey (DRS). Also in preparation for the DRS a seminar was conducted by the ICRC, with support of Project HOPE. Project HOPE now supports the data entry and maintenance of the DRS data base.
20. In Kazakhstan a DRS protocol has been developed for Almaty Oblast and approved by the NTP. Implementation is ongoing.
21. In Turkmenistan a strategic plan for upgrading the TB laboratory services has been developed by the Project HOPE regional TB expert in close consultation with her NTP counterpart. The plan has since been approved by the NTP.

**Strengthening Human Resource Capacity**

22. During the 4<sup>th</sup> project year, in all 5 countries emphasis has been on enabling local NTP counterparts to manage the training needs. In Tajikistan a group of NTP staff were trained as trainers and can now independently conduct DOTS trainings, in other countries this was already happening. Project HOPE now limits itself to supporting NTP counterparts in implementing DOTS training, whereas Project HOPE trainers are only engaged in more specialist trainings such as drug management cycle trainings, trainings in counseling skills, advanced DOTS trainings, supportive supervision and trainings in epidemiology. Laboratory trainings were already mentioned in the section above on laboratory.

### **Creating Rational Drug Management Systems**

23. The lead in the creation of rational drug management is with Project HOPE's Partner John Snow International (JSI). JSI is assisted by Project HOPE's Regional Drug Specialist, who is based in Tajikistan.
24. After most countries have been working for up to 2 years on LMIS system design, manual and training materials preparation and pilot testing, a 5-day workshop on LMIS training preparedness was conducted for country drug management teams of all 5 CAR countries. The workshop was based on materials covering adult learning methods, drug management principals and training preparedness assessments, developed jointly by JSI and Project HOPE.
25. During the workshop, LMIS roll out plans were drafted and discussed for each of the 5 countries. Nationwide roll out is currently ongoing in Kyrgyzstan and Uzbekistan, in Tajikistan the system is already fully being used. In Kazakhstan the system for the time being is implemented only in Project HOPE pilot sites in Almaty Oblast. The National Team in Kazakhstan is planning to roll out the LMIS to cover the entire country. In Turkmenistan, the LMIS has been officially endorsed but some resistance still needs to be overcome to make a smooth nationwide roll out possible.
26. A rational drug use study has been conducted in Uzbekistan and Tajikistan. In both countries, regimens prescribed for new TB patients were adequate both in terms of drugs prescribed and in terms of the dosages prescribed. In both countries substantial numbers of non-TB drugs are added to the treatment regimens, patients incur substantial costs as a result of having to buy these additional drugs. During the continuation phase DOT is poorly adhered to in both countries.

### **Improved Program Management**

27. In Uzbekistan, trainings on supportive supervision at the rayon level had been developed and conducted during the 3<sup>rd</sup> project year. During the 4<sup>th</sup> project year, the curriculum was adapted to address supportive supervision at oblast level. A series of such trainings for oblast TB coordinators has been completed during the year. Participants discussed the goals and objectives of supervision at the rayon and oblast levels, gained interpersonal communication skills, gained knowledge on management styles as well as skills in defining and solving problems. All skills taught were strengthened during field visits to TB dispensaries and primary health care facilities.
28. A similar supportive supervision training was conducted in Turkmenistan, jointly by WHO and Project HOPE. After the initial training for velayat level staff, Project HOPE conducted an adapted training for etrap TB coordinators.
29. In all five countries, Project HOPE continues to be involved in monitoring visits. Such visits are always conducted together with NTP counterparts and gradually the focus has shifted from monitoring to on-the-job training.

### **MDR TB Management**

30. In Uzbekistan, Project HOPE supported the Republican DOTS Center in developing a draft of a manual for MDR TB. The process is still ongoing at the end of the 4<sup>th</sup> year.

31. In Kazakhstan, Project HOPE has contributed to finalizing the draft of Prikaz on MDR TB that is now awaiting approval of the MoH.
32. In 4 CAR countries, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, Project HOPE has continued to provide support for design and implementation of drug resistance surveys.

**TB/HIV Management**

33. In Uzbekistan, Project HOPE continued to support a pilot on TB-HIV initiated by CAPACITY. Project HOPE advocated for inclusion of ARV treatment of TB-HIV patients who need such treatment. Whereas previously ARV treatment in TB-HIV patients would be deferred until the patient was cured from tuberculosis, the latest guidelines use CD4 cell counts as the criteria to start such treatment. In a patient with a CD4 cell count of less than 200, ARV treatment is to be started within 2-4 weeks from the start of TB treatment.
34. As a result of the TB-HIV pilot, there has been a major improvement in communication between TB specialists and HIV specialists in Tashkent. Whereas previously the two services were often competing with one another, they have now started to cooperate.
35. In Kazakhstan a similar pilot on TB-HIV started during the first quarter on 2008. Project HOPE is again providing technical and financial support.

**TB in Prisons**

36. During the 3rd project year, Project HOPE, together with ZdravPlus and local partners, has developed a strategy for the involvement of the PHC to guarantee continuation of treatment after release from prison. This program called "Before Release from Prisons" has now become the basis for an inter-sectoral prikaz, to be included in the State program "Preparation of inmates for release and their social adaptation in the community".
37. In Kazakhstan, monitoring visits to the Karaganda prison system are ongoing. A research protocol has been drafted and agreed upon with local counterparts to investigate the levels of transmission within the Karaganda prisons and outside these prisons. The reason to start this investigation is the observation that 97% of all TB cases detected in Karaganda are already suffering from tuberculosis upon their arrival. Apparently there is not that much transmission within the Karaganda prison system itself. These data need to be objectively verified and a case control approach will be used to identify risk factors associated with TB among Karaganda inmates and new arrivals.
38. In Uzbekistan there has not been much progress in prisons so far. Still, discussions about starting up a thematic working group on prisons are ongoing and Project HOPE has been requested to take part in this group once established. But to date this has not yet materialized. Still there is some room for optimism as the ICRC has, after a gap of 3 years, been able to resume their visits to prisons in Uzbekistan.

**Community, Advocacy and Mobilization**

39. The National Communication Strategies developed with the help of JHU/CCP are being implemented in all five countries. During the 4<sup>th</sup> project year, the emphasis has shifted from providers and patients to the general population.
40. A regional workshop was conducted in Tashkent with support of JHU/CCP at the start of the 4<sup>th</sup> project year. During the workshop, creative briefs were developed for the production of video Public Service Announcements (PSA). Such PSAs have since been developed in Turkmenistan, Tajikistan, Uzbekistan and jointly in Kyrgyzstan and Kazakhstan. In Uzbekistan, Tajikistan and Kazakhstan the PSAs have already been approved by the local MoH and are now ready for being broadcasted.

41. Locally workshops for journalists were organized in Tajikistan, Turkmenistan, Uzbekistan and Kyrgyzstan. During these workshops journalists were received some basic information on tuberculosis and were provided with the key messages about tuberculosis to be communicated to the public.
42. A program targeting TB in-patients was developed in Uzbekistan in response to the results of studies among defaulters. These studies identified lack of information among patients as the main reason for default; also it was observed that most defaulters do spend at least 1-2 months in hospital so there had been ample time to inform them. A counseling program was drafted, to be implemented by nurses in TB hospitals. Informational materials have been developed and nurses have been trained in counseling skills, technical TB issues and use of the informational materials. This training is now spread out all over Uzbekistan, with additional support of the GFATM. Similar trainings will be conducted in the other countries during the final project year.
43. In Tajikistan and Turkmenistan, community mobilizers have been trained, whose task it will be to inform the population on the signs and symptoms of tuberculosis and what to do if a person has these signs and symptoms. The system is currently being evaluated.
44. Project HOPE contributed to activities for World TB Day in all 5 countries. In all countries there was ample coverage by mass media of events conducted.
45. Small grant programs have been implemented in Kyrgyzstan, Kazakhstan and Tajikistan. The aim of the programs is to support proposals of local non-governmental organizations aimed at increasing population awareness on TB and decreasing stigma. During 2 rounds in Tajikistan and Kyrgyzstan and one round in Kazakhstan, 115 applications were received and 19 grants awarded. A broad range of different projects was supported including projects in communities through community leaders, projects with migrants through railway workers and projects addressing the general population through mass-media, theater performances and puppet shows. Project HOPE supported (potential) grantees through a pre-application workshop, provision of information materials and technical support during implementation.
46. In Tajikistan a successful small grant program was a theatre performance on TB, to which a professional team of actors voluntarily contributed. Key messages on TB were inserted in the script. The performance was recorded and distributed among NGOs, a radio broadcast version is being prepared.
47. Overall, the small grants approach has been successful. It has been shown to address the immediate needs of specific communities and target groups at relatively low costs. It has also strengthened involvement of NGOs in tuberculosis control.

### **Incentives and Enablers**

48. During the 4<sup>th</sup> project year, a new agreement was signed between Project HOPE and the World Food Program (WFP) for the provision of food incentives to TB patients. In the 1<sup>st</sup> quarter of 2008, Project HOPE and WFP started an operational research study to research the impact of food incentives on treatment outcomes of TB patients in Tajikistan. The study is designed to compare treatment results in 5 rayons before and after implementation of the food incentives program, while controlling for potential confounders. Results are expected during the final (5<sup>th</sup>) project year.

### **Operational Research**

49. During the 3<sup>rd</sup> project year, a 4-day training on basic epidemiology and use of the EPI Info software package was developed by Project HOPE in Uzbekistan. The training was conducted first in Kazakhstan and Uzbekistan. During the 4<sup>th</sup> project year, the training was conducted in Kyrgyzstan, Tajikistan and Turkmenistan and a second group was trained in Uzbekistan. The aim of the training is to develop local capacity for operational research in each of the countries.

50. Several studies have since been implemented. In Uzbekistan and Tajikistan, studies on rational use for TB have been completed. Preliminary results were mentioned in the section ‘Creating rational drug management systems’ above.
51. Protocols for new studies were drafted in Kazakhstan, Tajikistan, Kyrgyzstan and Uzbekistan. These studies address various issues such as: the long term outcomes of tuberculosis treatment and the influence of initial drug resistance on these outcomes; the impact of food incentives on treatment outcomes (see section above); transmission of tuberculosis inside and outside of the prison system (see section on TB in prisons), TB case finding in general hospitals; and health care seeking behavior for TB related symptoms among migrants.
52. In Uzbekistan, a qualitative follow-up to a quantitative study on defaulters was completed. As was mentioned in the section on ‘Community, Advocacy and Mobilization’ above, the study showed that lack of information on TB and TB treatment was the most important reason for patients to default. The results were used to develop an intervention aimed at reducing default by providing adequate information to TB in-patients. The results of the quantitative study were presented at the IUATLD conference for the European region in Riga in May, 2007.
53. An earlier study on case finding conducted in Uzbekistan during the 2<sup>nd</sup> and 3<sup>rd</sup> project year has recently been published in ‘Tropical Doctor’, a peer reviewed journal.

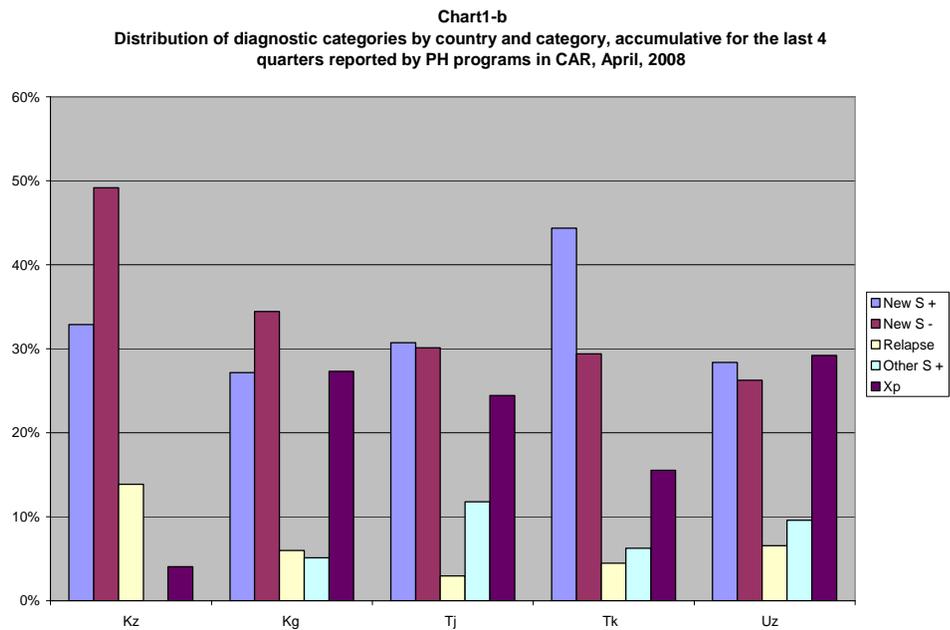
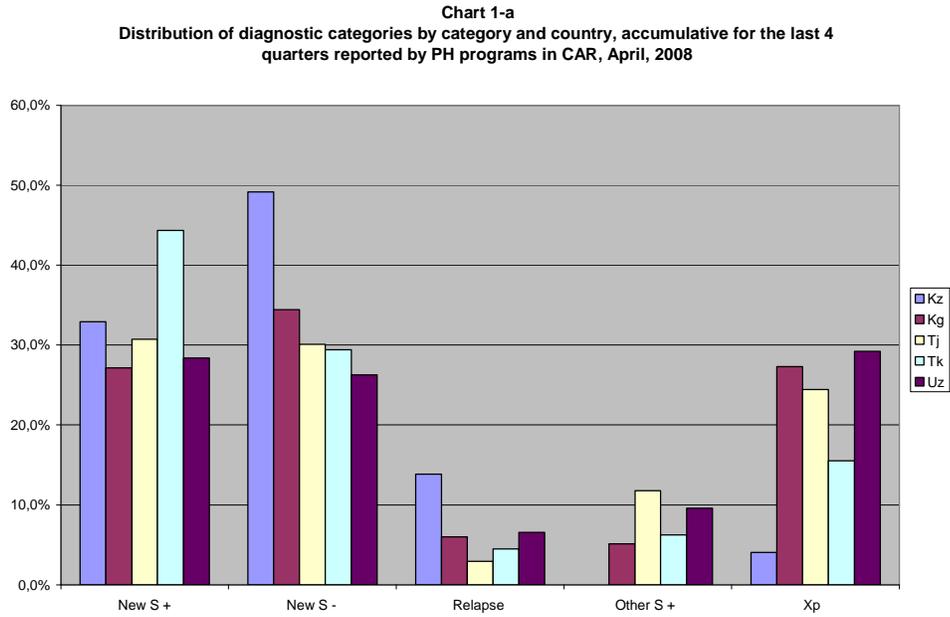
#### **Administrative Issues**

54. The COP (Tom Mohr) of the Central Asian TB Control Partnership has completed the role of interim Acting Regional Director. The new Regional Director, Dr. Mariam Sianozova, has been assigned and is now based in the Almaty Regional Office.
55. Dr. Jaap Veen completed his role as the TB Technical Director, and was replaced by Dr. Epcó Hasker in this position. Dr. Veen moved to the position of TB Technical Advisor and continues to support the program. Artur Niyazov replaced Dr. Hasker as the TB Program Manager in Uzbekistan.
56. The TB Program Manager in Tajikistan, Dr. Tatyana Vinichenko completed her most recent contract extension on November 21st. The recruiting of her replacement has been completed. Her replacement, Dr. Alexei Korobitsyn will be available from April 21<sup>st</sup>.
57. The contract for the Kazakhstan TB Program Manager was not extended. The contract ended on March 21<sup>st</sup>. A replacement was identified, Dr. Bakhtiyor Babamuradov. Dr. Babamuradov is a TB Specialist and former Project HOPE employee, who is leaving the WHO in Uzbekistan to rejoin Project HOPE on May 11th.
58. The Director of the TB Institute in Uzbekistan did not endorse the proposed studies planned to be conducted with the Imperial College of London. These studies were planned to research “Costing” and “Financing” mechanisms. Although these studies had strong support from other partners, the support of the Director of the TB Institute was essential. Project HOPE is preparing a justification and plans for utilizing the funds that had been allocated for these activities in another manner.
59. All project teams prepared year 5 work plans during the first quarter of 2008 and the work plan was submitted to USAID on March 2<sup>nd</sup>.
60. During the project year, the late disbursement of funds in Kazakhstan resulted in the delaying of activities. This situation was subsequently exacerbated by turnover in project staff. Despite these events the project activities remain on schedule.
61. Administrative issues have arisen in Uzbekistan whereby Project HOPE had to change banks from the ABN/AMRO bank to a bank more closely affiliated with the National banking system. These changes have created problem for Project HOPE to access funds for the project. Project HOPE, USAID and the

US Embassy are making efforts to solve this issue which has resulted in the delaying of project activities.

Epidemiological Analysis

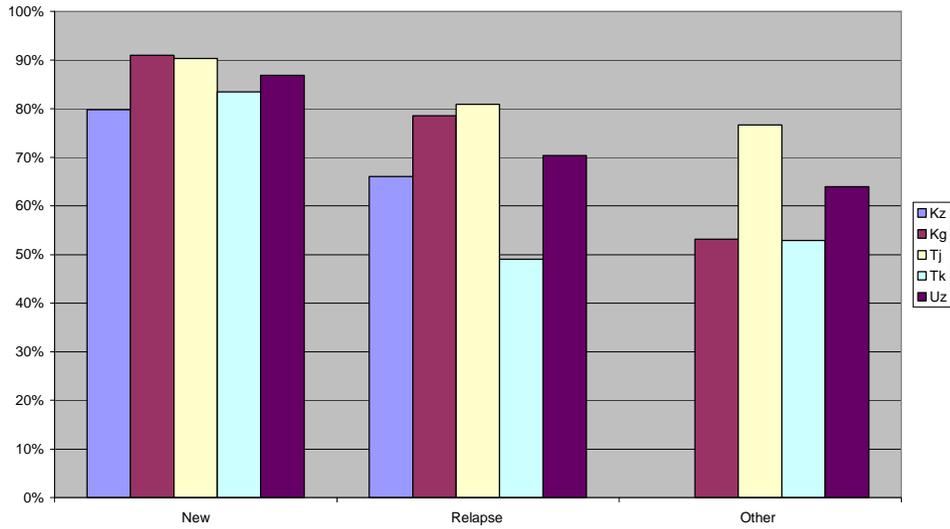
In the charts below, countries are compared for several indicators.



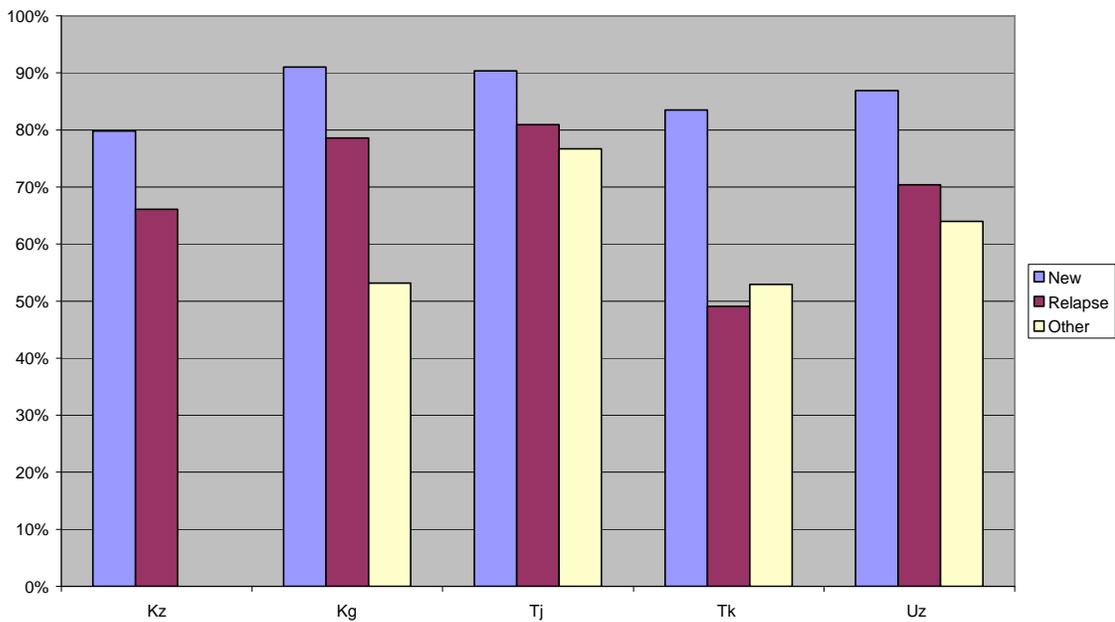
Diagnostic categories (charts 1-a and 1-b)

Only in Turkmenistan and Tajikistan are new smear positives the most common cases. Over-diagnosis of TB as a result of over reliance on radiographic methods may be the reason why this is not the case in the other countries. All pulmonary cases do undergo sputum smear examination, making it less likely that many smear positives are classified as smear negatives. Problems with the quality of sputum smear microscopy may also contribute.

**Chart 2a**  
 Proportion of sputum smear conversion at the end of the intensive phase by category and country, accumulative for the last 4 quarters reported by PH programs in CAR, April, 2008



**Chart 2b**  
 Proportion of sputum smear conversion at the end of the intensive phase by country and category for previous 4 quarters CAR, April, 2008 Project HOPE areas



**Sputum Conversion (charts 2-a and 2-b)**

Smear conversion rates are generally good, 80% and above. In Kazakhstan conversion is often late, which results in a lower conversion rate at 3 months. However this does not affect the cure rate.

**Chart 3**  
**Proportion of notified cases evaluated and cases cured by country and category, 12-15 months previously and accumulative for the last four quarters reported by PH programs in CAR, April, 2008**

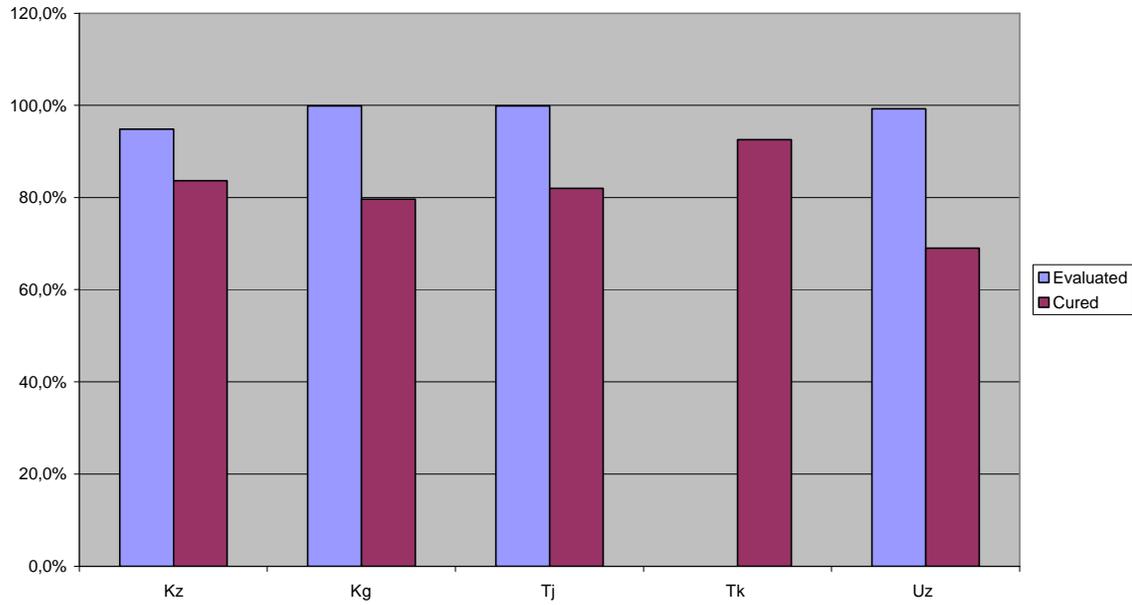
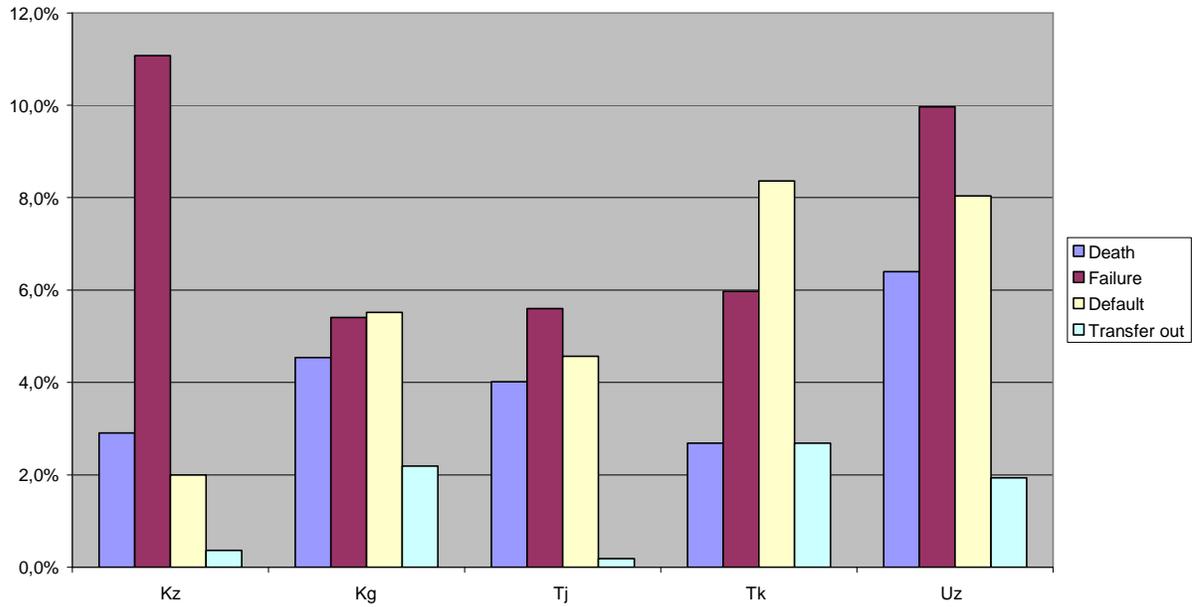
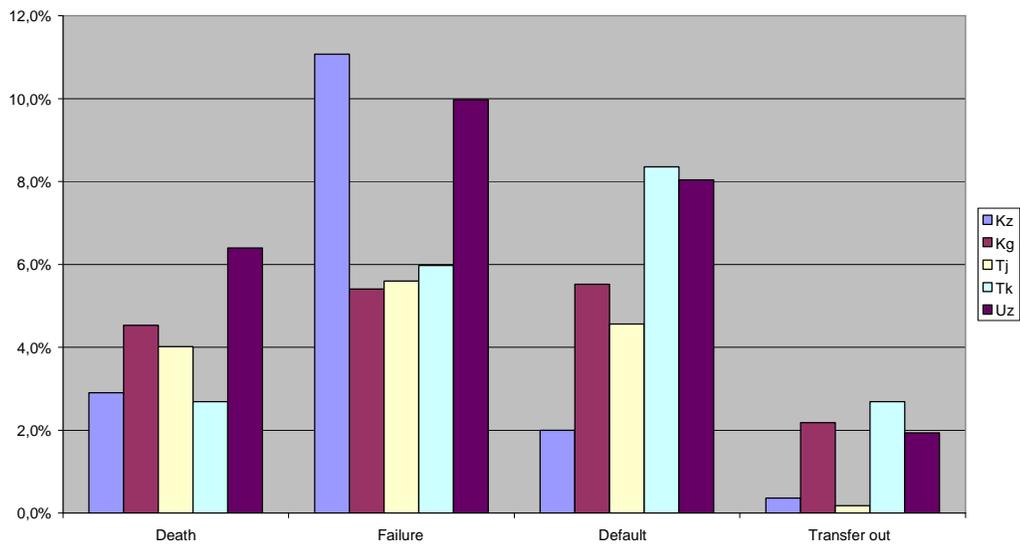


Chart 3 With the exception of Uzbekistan, cure rates are close to the WHO target of 85%. In Uzbekistan, various steps have been taken to reduce default rates. It will take some time before this leads to demonstrable results, conversion rates are reasonably good already (chart 2b).

**Chart 4a**  
**Proportion of death and unfavourable outcomes among notified new smear positive cases 12-15 months previously by country and category and accumulative for the preceding last 4 quarters reported by PH programs in CAR, April, 2008**



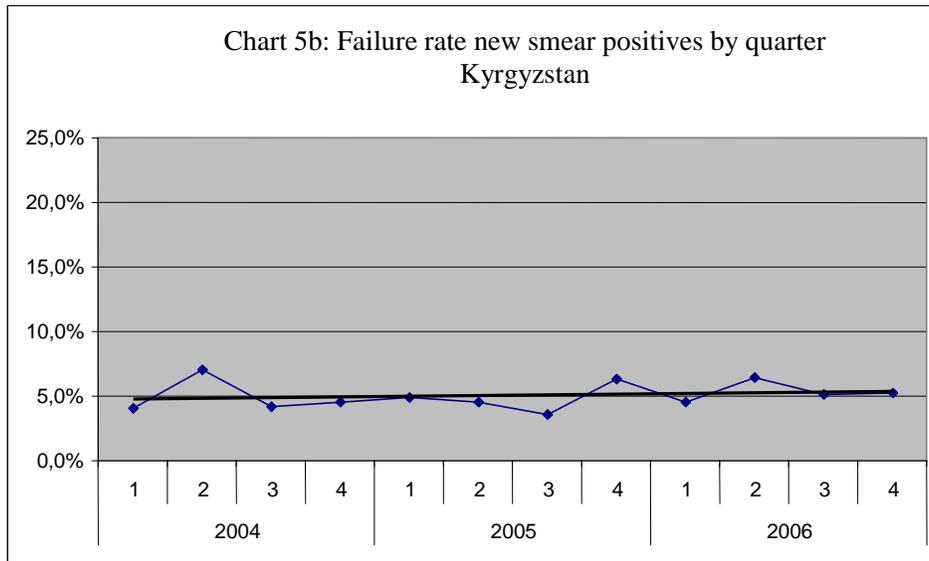
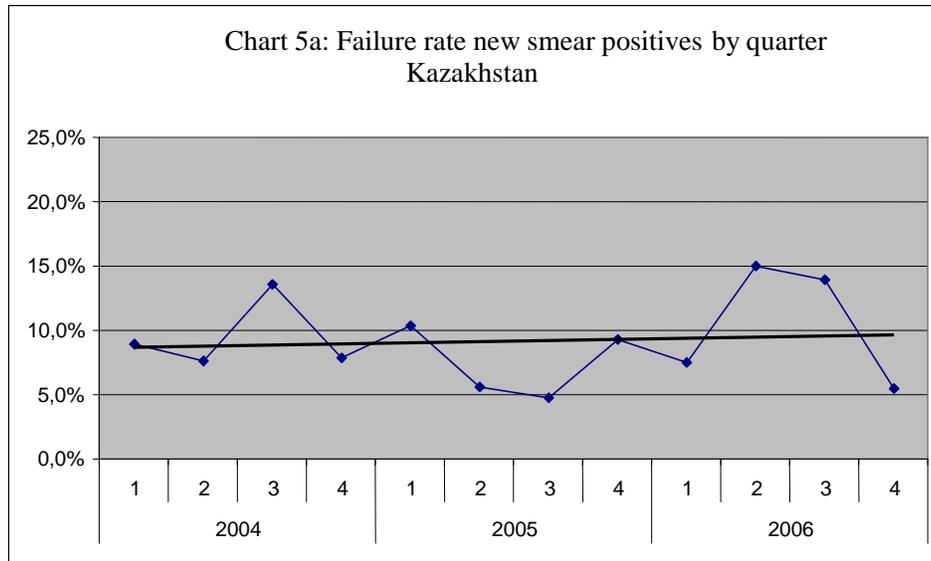
**Chart 4b**  
**Proportion of death and unfavourable outcome among notified new smear positive cases by category and country for 12-15 months previously and accumulative for the preceding last 4 quarters reported by PH programs in CAR, April, 2008**

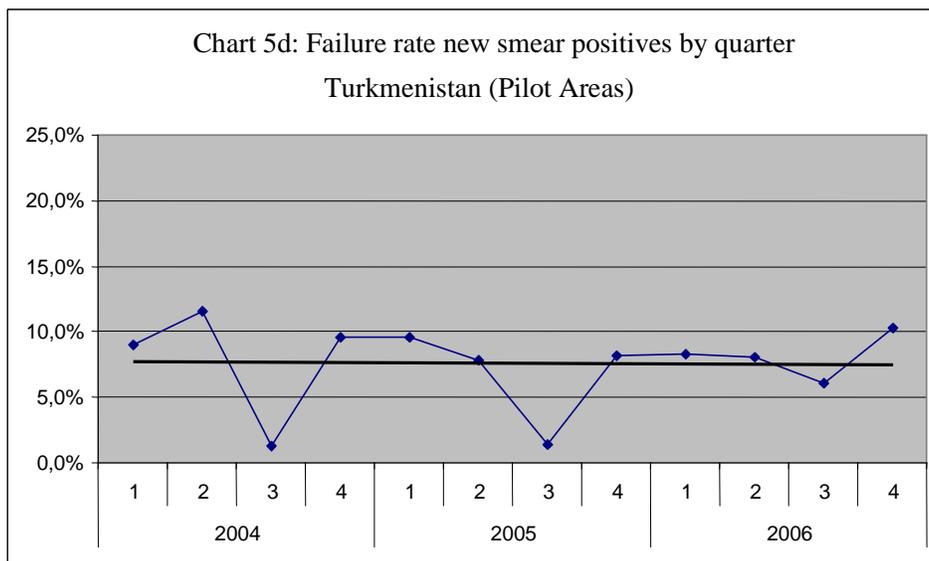
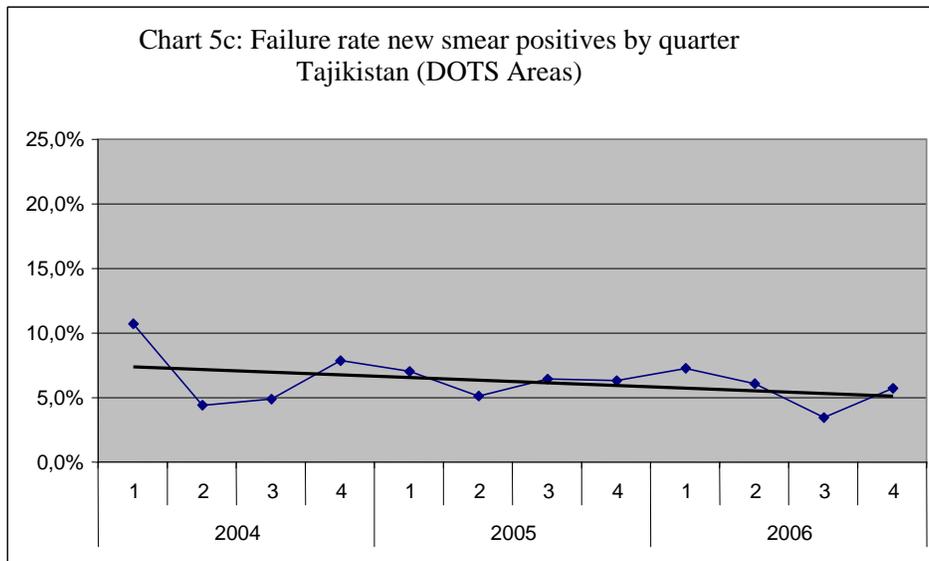


Unfavorable outcome (chart 4-a and 4-b)

Both in Uzbekistan and Kazakhstan high failure rates are reported. To further investigate this phenomenon, we

plotted the failure rates by quarter for all 5 countries over the last 3 available years. Results are shown in charts 5a-e below.





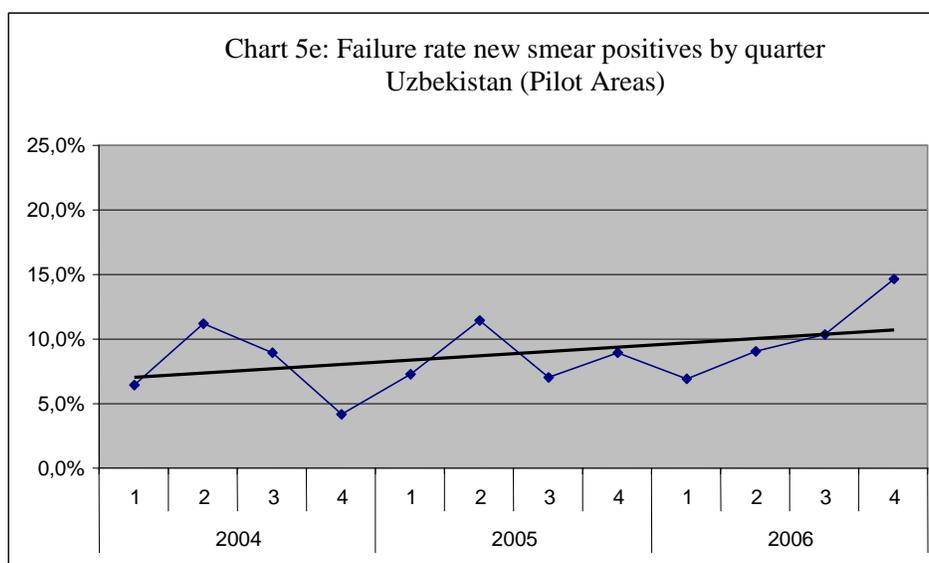


Table 1: Statistics Charts 5a-e

Country	Slope by quarter	p-value (Chi Square for trend)
Kazakhstan	0.0012	<0.00005
Kyrgyzstan	0.00054	0.34
Tajikistan	-0.0017	0.27
Turkmenistan	0.00025	0.35
Uzbekistan	0.0029	0.16

When assessing the failure rates per quarter over the last 3 years for which data are available, there is a fairly small but statistically significant increase in failure rates in Kazakhstan, equivalent to 0.5 percentage points per year. In Uzbekistan the increase is more marked, 1.2 percentage points per year, but not statistically significant because only data from pilot sites are available. In Kyrgyzstan and Turkmenistan the trend is close to zero and not statistically significant. In Tajikistan the failure rate has decreased with 0.7 percentage points per year but this too may just be a chance variation ( $p=0.27$ ).

From the available data we can see that both in Kazakhstan and Uzbekistan, failure rates appear to be on the increase. In Uzbekistan this may be just a chance variation; in Kazakhstan, where figures for the whole country could be analyzed, the increase is small but statistically significant. These are also the countries that currently report the highest failure rates. Amplification of existing drug resistance could be a causative factor in this apparent increase in failure rates. To test this hypothesis, Project HOPE has started an operational research in Uzbekistan in which treatment outcomes will be linked to drug resistance patterns at the start of treatment while controlling for potential confounders such as extent of disease and regularity of treatment intake.

**Kazakhstan—Q1 2008****QUARTERLY PROGRESS SUMMARY**

1. Project HOPE/KZ TB Program Manager and TB specialist participated in an Annual Work Plan Meeting in Bishkek to present, discuss, finalize and submit the Y5 USAID work plan.
2. Technical staff took part in a working group meeting, organized by AFEW, which was aimed at addressing issues of joint efforts in the areas of HIV/AIDS and TB/HIV in CAR. The ACCESS project aiming at improving HIV/AIDS services diffusion and strengthening of coordination in the field of TB/HIV was presented as a result of this meeting.
3. Technical staff participated in an “experts” group meeting and an introductory meeting on the implementation of a pilot project on strengthening cooperation between TB and HIV/AIDS services. These had been initiated and organized by the CAPACITY Project. The project pilot area is Almaty city and is implemented with technical assistance of Project HOPE, CAPACITY Project and the financial support of USAID .
4. An Oblast Round Table was organized, with technical and financial support of Project HOPE to review and discuss the results of TB program performance in Almaty oblast for 2007. Representatives of the Oblast Health Department, oblast and rayon TB coordinators, were present at this meeting. The meeting resulted in the development of recommendations on how to improve TB services delivery in 2008.
5. On the job training on monitoring and evaluation was conducted for six regional coordinators from the south region of Almaty oblast. Monitoring activities in three rayons had been observed and recommendations to address existing problems were given.
6. A DOTS basic training was organized and delivered to 30 PHC specialists from the south region of Almaty oblast. It took place in Issyk city and Shelek village.
7. The blinded rechecking method of sputum smears (External Quality Control) has been successfully implemented in three laboratories of Taldykorgan city, resulting in improved quality of sputum smear preparation and increased detection of new smear positive cases.
8. An operational research protocol on drug resistance has been developed (Drug Resistance Survey). The research is being conducted in the north region of Almaty oblast.
9. Operational research data on low smear conversion in new TB cases in the north region of Almaty oblast had been collected, data entry completed and analysis has been started.
10. Two abstracts were submitted to the 39th IUATLD conference. Confirmations were received from the Conference Secretariat saying that these articles would be included in the conference publications journal.
11. Project HOPE Kazakhstan took an active part in organizing regional conferences dedicated to World TB Day which took place in Taldykorgan city on March 25, 2008 and in Talgar city on March 27, 2008. Senior managers from the Akimat and Almaty oblast Health Departments participated in the conferences.
12. Arzum Ciloglu, Consultant from the Johns Hopkins University/Center of Communication Programs (JHU/CCP), together with the Regional IEC/BCC specialist visited the country to develop Y5 work plans and review the work of NGOs working under the Small Grants Program.
13. A Public Service Announcement (PSA) on TB symptoms in Kazakh and Russian languages had been developed, tested and approved. The PSA started airing on the oblast TV channels on March 17, 2008. Negotiations on broadcasting the spot on the republican channels are in the progress.

## I. BUILDING POLITICAL SUPPORT FOR TB CONTROL

14. The Chief of Party of the Central Asia TB Control Partnership attended the High Level Working Group (Thematic Working Group) meeting in Astana. Results of the TB control program were discussed, problems were identified and ways to address them were devised. The meeting was generally viewed as not productive by the Project HOPE participants.
15. An Oblast Round Table was conducted in Almaty oblast to review results of the TB control program implementation in 2007. Representatives of the Oblast Health Department, Oblast and Rayon TB Coordinators, Heads of PHC Institutions, and the national coordinator for Almaty oblast participated in this round table.
16. The Regional Health Policy Specialist for the Central Asia TB Control Partnership presented results and recommendations of the Initial Policy Assessment. It was agreed to discuss the results and recommendations in more detail and devise an implementation plan.

## II. BUILDING HUMAN AND SYSTEMS CAPACITY FOR TB CONTROL

### Integration of TB control within a Reformed Health System

17. The adapted TB#15 «Registration journal of patients with suspicion of having TB» form was introduced into the PHC level, beginning on January 1, 2008.
18. A national manual on monitoring & evaluation of TB program implementation, based on the Project HOPE M&E manual, has been submitted for approval to the Ministry of Health of the Republic of Kazakhstan. As soon as the manual is approved it will be used by oblast monitoring and evaluation teams, according to Prikaz № 466 of MoH RK,.
19. Project HOPE provided the PHC facilities of Almaty oblast and the penitentiary system of Karaganda oblast with IEC materials for general public and imprisoned persons. In addition, a PSA developed by Project HOPE to encourage people to identify symptoms and seek health care was broadcast. These activities will strengthen the knowledge on TB and should encourage the public to change their health seeking behavior and encourage them to refer to doctors earlier.

### Strengthening the TB Laboratory Network

20. Results of the blinded rechecking method of EQA implementation in three laboratories of Taldykorgan city have been reviewed with the Regional CAR TB program Laboratory Specialist, and no significant errors were identified. As a result of this pilot, the quality of smear preparation improved. Detection of TB smear positive cases by the microscopy method improved in all labs, which is reflected by an increase in the proportion of smear positives among suspect cases from 18% to 23.1% at OTBD, from 3.7% to 7.4% at city polyclinic, and from 2.9% to 4.4% at the general hospital. Results were reported at the Oblast Round Table in Taldykorgan, which took place in February 2008.



21. Technical support of Project HOPE in introducing the blinded rechecking method and its successful pilot influenced the decision for expanding the experience to all laboratories of the north region of Almaty oblast beginning January 2008. The blinded rechecking method of EQA will further be introduced in all labs of the south region of Almaty oblast from July 2008.
22. The operational research protocol, including methodology and instruments on drug resistance, have been developed and data collection is being carried out in the north region of Almaty oblast. Data entry analysis will soon be completed and the results will be available in the fifth year of the project.

#### **Strengthening Human Resources Capacity**

23. On-the-job training for six regional TB coordinators from the south region of Almaty oblast was conducted. Oblast coordinators from the Almaty oblast Tuberculosis Dispensary, together with the Project HOPE team, observed M&E activities in three rayons and provided recommendations for improved work.
24. Basic training on DOTS for fifteen PHC specialists was organized in Issyk city of Enbekshikazakh rayon of Almaty oblast. Significant increases in knowledge were seen in the differences between pre- and post-test scores, with an average score increase from 52.2% to 76.3% at the end of the course. The head of Enbekshikazakh rayon has asked Project HOPE to conduct more trainings because this rayon is the biggest in Almaty oblast and many PHC specialists have not received training on DOTS.
25. Project HOPE also delivered the basic training on DOTS for another fifteen PHC specialists of Enbekshikazakh rayon of Almaty oblast in Shelek village. The score increases from the pre- and post-tests revealed considerable improvement in knowledge, as the average score increased from 51.4% to 83.8% respectively.

#### **Creating Rational Drug Management Systems**

26. Project HOPE's technical assistance contributed to a revision of the recording and reporting system resulting in adaptation of the drug management forms. Adapted TB#12 "Register of TB drugs", TB#13 "Report on TB drugs use the oblast level (Rayon, PHC Institutions)", "Invoice for TB drugs" for receiving of TB drug and "TB Storage Map" were introduced beginning January 1, 2008.
27. A Draft Prikaz on TB drug needs calculation has been developed, based on registered cases, together with the NTP and was submitted for approval to the MOH.
28. The JSI consultant and Project HOPE Regional Drug Management Specialist will observe LMIS training delivery to the Almaty oblast specialists.

#### **Improve Program Management**

29. Operational research data on low smear conversion among new cases in the north region of Almaty Oblast have been collected and entered, and data analysis has begun. Results will be published in recognized journals.

#### **MDR TB and TB/HIV**

30. Joint technical work is in progress by the NTPC, CAPACITY and Project HOPE on the development of mechanisms for improved TB and HIV services collaboration aiming at the reduction of transmission and the burden of TB/HIV co-infection in Kazakhstan.
31. An experts group meeting to address operational issues of the project was organized on January 29-30, 2008. An introductory meeting for TB and HIV/AIDS services officials was conducted on March 28, 2008. These activities are the products of the CAPACITY and Project HOPE joint project on strengthening TB and HIV/AIDS services cooperation.
32. Project HOPE participated in a meeting dedicated to joining efforts in fighting HIV/AIDS and TB/HIV in Central Asia. Project HOPE provided technical support in the development of protocols on EQA of smear preparation.

33. Project HOPE staff participated in the Virtual Leader Development Program on TB/HIV.

#### **TB in prisons**

34. A local team of TB coordinators conducted monitoring visits to penitentiary TB facilities in the Karaganda oblast according to CCES of the Karaganda oblast plan.

35. Three TB coordinators of CCES of Karaganda oblast have been invited to participate in data entry and analysis using Epi Info training planned for next quarter.

### **III. COMMUNITY MOBILIZATION AND ADVOCACY**

36. In January 2008, Arzum Ciloglu, JHU/CCP Consultant, accompanied by Jamilya Ismoilova, Project HOPE Regional Specialist for Social Mobilization/Small Grants, visited the Kazakhstan program. They had meetings with Ismoilov S.S., Director of National Centre of TB Problem, Sarsembayev S.S, Chief Doctor of TB Dispensary of Almaty Oblast. During the meetings, problems of and barriers to health communication and social mobilization were identified, discussed and agreed on the WTBD work plan and Project HOPE's role in the plan.

37. The JHU consultant and the Regional Specialist for Social Mobilization/Small Grants visited Almaty oblast to meet with the Oblast Health Department management. They received positive feedback on the health communication strategy being implemented in the oblast.

38. The JHU consultant and the Regional Specialist for Social Mobilization/Small Grants met with grantee NGOs to review and discuss results of the first round of the Small Grants Program.

39. The second round of the Small Grants program was announced in January 2008, by placing a call for interest in oblast newspapers, "Enbekshikazakh" and "Talgar". Letters of interest were received from 14 NGOs and a meeting to give an overview of the grants program, anticipated grants and grant application process, was organized for them in Issyk city. As a result, seven applications were submitted to the Small Grants Program. It is anticipated that a grant panel will meet and select winners in April 2008.

40. A PSA on TB symptoms in Kazakh and Russian languages has been developed, tested and recorded with the assistance of Project HOPE/Kyrgyzstan. Three focus group discussions were organized in Almaty city and Almaty oblast, changes were introduced and approval from the TWG on IEC/BCC was obtained.

41. As soon as USAID and Project HOPE granted their approval, DVD copies of the PSA were shared with the NTP, Almaty oblast TBD and Karaganda oblast CCES for further dissemination throughout the country.

42. The NTP requested the Red Crescent Society of the Republic of Kazakhstan to produce 500 DVD copies of the PSA and disseminate them through their network to all oblast TBDs, Red Crescent Society Centers, and Healthy Life Style's Centers. Negotiations on broadcasting the PSA on the Republican channels led by the NTP and RCS with the officials are in progress.

43. The PSA was aired at no charge four times a day, for a total of forty times on two oblast TV channels "Aray" and "Zhetysu" during the period of March 17-31, 2008.

44. Project HOPE developed a one month plan of activities dedicated to the World TB Day, which was agreed upon by the NTP, OTBD and RTBD of Almaty oblast and oblast Healthy Life Styles Center.

45. The Project HOPE team designed, developed and produced a commemorative calendar with the WTBD-2008 logo and distributed it among the WTBD conference participants.

46. Karaganda Oblast CCES, jointly with the oblast Healthy Life Styles Center, organized broadcasting of the PSA on oblast channel "Karaganda TVK" and LED-displays in the center of the city near the Central shopping center. The PSA was broadcast ten times from March 24-27.

47. Project HOPE, together with the Oblast Department of Education, conducted a competition on the best lesson plan on TB prevention among valeology teachers from February 14 - March 14, 2008.

Lesson plans have been received from teachers of different parts of the oblast, the seven best plans were selected, and the teachers were awarded with prizes.

48. A contest for the best treatment success story was also announced among health care workers: TB specialists, nurses, lab technicians, TB chemizators and registrars. Fifteen winners were selected and prizes were awarded.
49. A drawing and poem contest “What I will do, when I am cured” among patients who are children of oblast and regional TBDS was announced in Almaty oblast and Shymbulak children’s sanatorium. More than thirty entries were submitted and the competition panel, comprised of oblast and regional TBDS, NHLSC and Project HOPE representatives, nominated six entries for awards.
50. Thirty one volunteers, who had been assisting NGOs in their work under the small grants program of Project HOPE, were awarded with incentives. The ceremony took place during WTBD conference in Taldykorgan city on March 25.
51. An Oblast conference dedicated to WTBD, organized jointly with the NTP, OTBD and NHLSC, was conducted on March 25, 2008 in Taldykorgan city. Mr. Bill Frey, Head of USAID/CAR mission; Karen Welch, Director of Health and Education office USAID/CAR; Mrs. Mariam Sianozova, Regional Director of Project HOPE Russia/Eurasia; Mr. Tom Mohr, Chief of Party Project HOPE/CAR TB Control Program and other representatives of USAID and Project HOPE participated in the conference. The conference was organized jointly with the National Center of TB Problems. Mr. Bill Frey gave a welcome speech and Mr. Tom Mohr also welcomed participants, followed by a presentation on the theme of WTBD, “I can stop TB”.
52. On March 27, 2008, another conference was organized. The Akimat of Talgar Rayon, Oblast Health Department, TB medical workers of Almaty Oblast and Heads of PHC clinics participated in the conference. Karen Welch, Mariam Sianozova, and other staff of USAID and Project HOPE took part in the conference. Karen Welch gave a welcome speech, Tom Mohr again presented on the theme of WTBD, and Mr. Daribek Assemgaliyev, TB Specialist Project HOPE/Kazakhstan presented on “Project HOPE’s work in Almaty Oblast”.

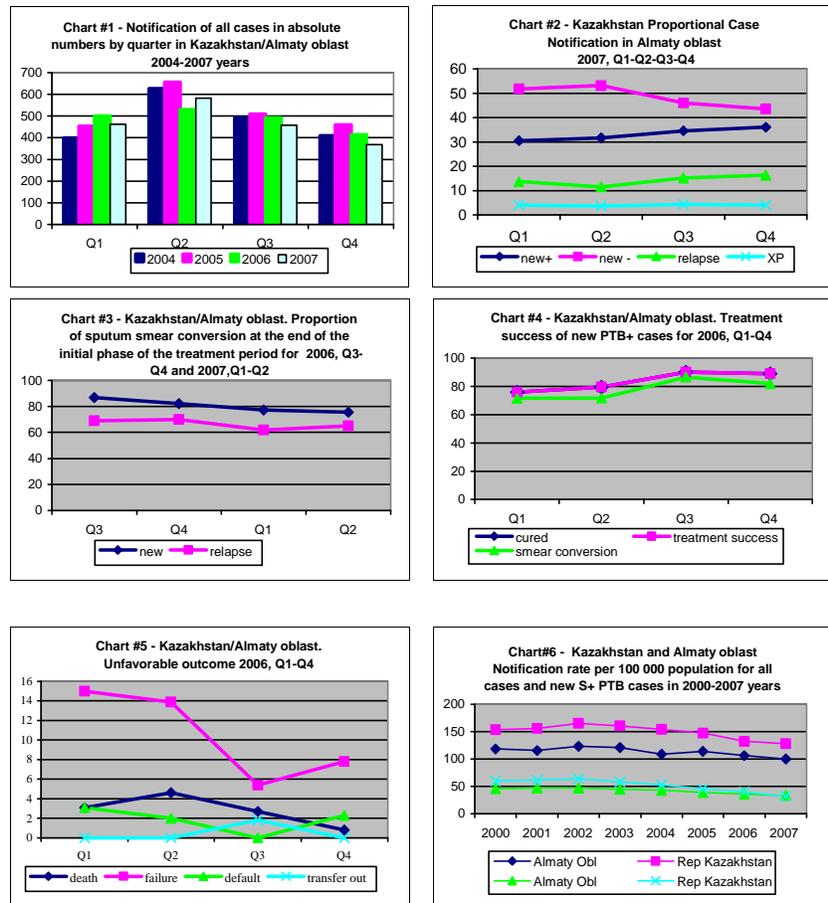


53. A Press-release on WTBD was compiled and widely disseminated by Project HOPE. The event was covered by the Republican News Agency “Kazinform”, Republican TV channels: “31 channel” and “Rakhat”. The conference was reported on the news, and the “31 channel” recorded a short program and aired it.
54. Project HOPE disseminated information widely on the Stop TB Partnership/Lilly MDR-TB Partnership Award for Excellence in Reporting on Tuberculosis among journalists and assisted them in the application process. Two journalists from “Zhardem” (“Help”), Almaty oblast’s medical newspaper have submitted their papers.

**DESCRIPTIVE ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS IN THE ALMATY OBLAST**

- 55. Chart #2. The proportion of new S+ cases among all new lung TB cases has been steadily increasing during the 4 quarters of 2007. The trend though is only borderline significant (p=0.051)
- 56. Chart #3. From the start of the 3<sup>rd</sup> quarter of 2006 till the end of the 2<sup>nd</sup> second quarter of 2007, a statistically significant decrease has been observed in the proportion of smear conversion by quarter among new smear positive cases (p=0.012).
- 57. Chart #4 and #5. The downward trend in conversion rates for new smear positive is not reflected in a downward trend in cure rates. Interestingly, cure rates are better than conversion rates. Late conversion appears to be common.

**ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS IN CHARTS AND TABLES – ALMATY OBLAST**



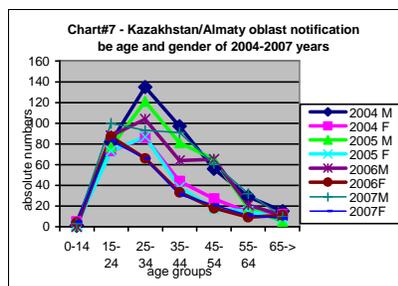


Table to Chart 2. Kazakhstan/Almaty oblast. Absolute and proportional case notifications for TB categories for 2007, Q1-Q4

types	Q1		Q2		Q3		Q4	
new S+	141	30.5%	184	31.6%	158	34.6%	132	36%
new S-	239	51.8%	310	53.2%	210	46%	160	43.6%
relapse	63	13.6%	67	11.5%	69	15.1%	60	16.3%
other S+	-	0%	0	0	0	0	0	0
XP	19	4.1%	22	3.7%	20	4.3%	15	4.1%
total	462	100%	583	100%	457	100%	367	100%

Table to Chart 3. Kazakhstan/Almaty oblast

Sputum smear conversion at the end of the initial treatment period in absolute and proportional figures for 2006, Q3-Q4 and 2007, Q1-Q2 among new SS+ and relapses.

	Q3			Q4			Q1			Q2		
	absolute numbers			absolute numbers			absolute numbers			absolute numbers		
	cohort	converted	%									
New	120	104	86.7	139	114	82.1	141	109	77.3	184	139	75.5
Relapse	55	38	69.1	43	30	69.8	63	39	61.9	66	43	65.1

**Table to Chart 4 and 5. Kazakhstan/Almaty oblast, Treatment outcomes 2006, Q1-Q4**

	Q1		Q2		Q3		Q4	
	N	%	N	%	N	%	N	%
notified	166*		156		120		139	
evaluated	160		151		111		129	
cured	126	78.8	120	79.5	100	90.1	115	89.1
completed	0	0	0	0	0	0	0	0
death	5	3.1	7	4.6	3	2.7	1	0.8
failure	24	15	21	13.9	6	5.4	10	7.8
default	5	3.1	3	2.0	0	0	3	2.3
transfer out	0	0	0	0	2	1.8	0	0
		100		100		100		100

**Table to Chart 6. Kazakhstan and Almaty oblast.****Notification rate per 100,000 population for all cases and new S+ PTB cases 2000-2007.**

	2001	2002	2003	2004	2005	2006	2007
Almaty Oblast	115.5	123.1	120.6	108.9	113.7	106.0	99.9
Republic Kazakhstan	155.7	165.1	160.4	154.3	147.3	132.1	127.5
Almaty Oblast	46.8	46.7	44.5	42.8	38.7	36.0	33.2
Republic Kazakhstan	61.2	63.7	58.1	52.8	45.6	40.2	31.7

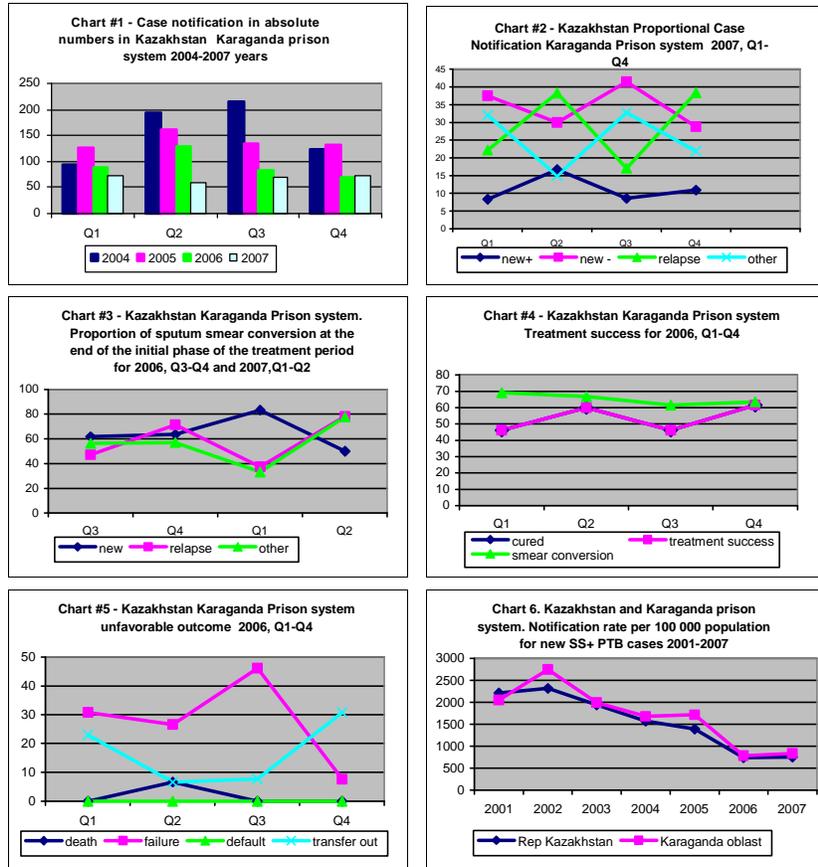
Table to Chart 7. Kazakhstan / Almaty oblast Case notification (Absolute numbers) by age and gender 2004-2007.

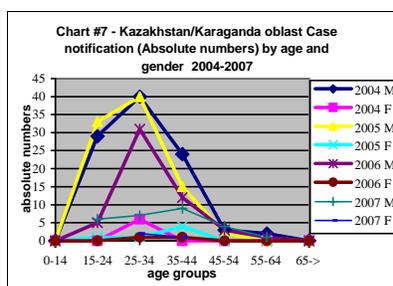
		0-14		15-24		25-34		35-44		45-54		55-64		65-	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
2004	Q1	1	1	17	18	26	14	24	11	10	8	8	4	2	2
	Q2	0	3	28	21	47	35	25	18	15	6	10	6	3	6
	Q3	0	1	13	16	35	18	29	5	16	7	5	3	6	2
	Q4	0	0	24	18	27	19	19	10	15	6	6	1	4	2
	total	1	5	82	73	135	86	97	44	56	27	29	14	15	12
2005	Q1	0	0	8	18	31	18	20	9	15	4	2	6	2	3
	Q2	0	1	35	20	42	27	21	11	18	3	3	6	2	7
	Q3	0	1	17	18	25	24	18	8	17	6	7	2	0	3
	Q4	1	0	17	17	23	18	22	10	15	4	6	1	1	5
	total	1	2	77	73	121	87	81	38	65	17	18	15	5	18
2006	Q1	0	2	24	20	32	17	18	12	21	2	8	2	7	1
	Q2	0	1	31	31	28	15	16	6	11	3	4	2	3	5
	Q3	0	0	19	17	24	13	12	10	13	5	3	2	0	2
	Q4	0	1	14	19	20	21	18	5	20	8	6	3	1	3
	total	0	4	88	87	104	66	64	33	65	18	21	9	11	11
2007	Q1	1	1	26	20	17	13	23	10	12	4	7	3	3	1
	Q2	1	1	27	26	26	24	26	5	20	9	13	1	3	2
	Q3	1	1	23	24	29	12	25	8	17	3	7	3	4	1
	Q4	0	2	24	13	21	17	17	8	12	5	5	4	0	4
	total	3	5	100	83	93	66	91	31	61	21	32	11	10	8

**DESCRIPTIVE ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS IN THE KARAGANDA PENITENTIARY SYSTEM**

- 58. Most of the indicators monitored show considerable fluctuation as a result of low absolute numbers of cases available for analysis. The overall failure rate in the Karaganda prison system for 2006, based on a cohort of 373 patients, is 28% (Chart 5). Obviously this is very high and can be explained by a high level of primary MDR.
- 59. Chart 6 shows case notification rates for the prison of Karaganda as well as for the prison system of Kazakhstan as a whole. After a steady decline since 2002, the trend now seems to have leveled off at a rate of around 800/100,000. This is still more than 5 times higher than the case notification rate in the civilian population. Since the same trend is seen both in the national prison figures and in the Karaganda figures, this is probably not a chance variation. Without addressing the treatment of MDR-TB inside and outside the prison system, it's highly unlikely that case notification rates will resume their downwards trend observed between 2002 and 2006.

**ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS IN CHARTS AND TABLES - KARAGANDA PRISONS**





### Karaganda prisons – Tables to Diagrams

Table to Chart 2. Kazakhstan, Karaganda Prison system. Absolute and proportional case notifications for 5 TB categories for 2007, Q1-Q4.

	Q1		Q2		Q3		Q4	
new S+	6	8.3%	10	16.7%	6	8.6%	8	10.9
new S-	27	37.5%	18	30.0%	29	41.5%	21	28.8
relapse	16	22.2%	23	38.3%	12	17.1%	28	38.4
other	23	32.0%	9	15.0%	23	32.8%	16	21.9
XP	0	0	0	0	0	0	0	0
total	72	100%	60	100%	70	100%	73	100%

Table to Chart 3. Kazakhstan, Karaganda Prison system. Sputum smear conversion at the end of the initial treatment period in absolute and proportional figures for 2006, Q3-Q4 and 2007, Q1-Q2 for different categories of smear positive TB cases.

	Q3			Q4			Q1			Q2		
	absolute numbers			absolute numbers			absolute numbers			absolute numbers		
	cohort	converted	%									
New	13	8	61.5	11	7	63.6	6	5	83.3	10	5	50
Relapse	17	8	47.1	21	15	71.4	16	6	37.5	23	18	78.2
Other	16	9	56.3	7	4	57.1	3	1	33.3	9	7	77.7

Table to Charts 4, 5. Kazakhstan, Karaganda Prison system. Treatment outcomes 2006, Q1-Q4.

	Q1		Q2		Q3		Q4	
	N	%	N	%	N	%	N	%
notified	13	100	15	100	13	100	13	
evaluated	13	100	15	100	13	100	13	100
cured	6	46.2	9	60	6	46.1	8	61.5
completed	0	0	0	0	0	0	0	0

death	0	0	1	6.7	0	0	0	0
failure	4	30.8	4	26.7	6	46.1	1	7.7
default	0	0	0	0	0	0	0	0
transfer out	3	23.0	1	6.6	1	7.8	4	30.8
	13	100	15	100	13	100	13	100

**Table to Chart 6. Kazakhstan and Karaganda prison system. Notification rate per 100,000 population for new SS+ PTB cases <2001-2007>**

	2002	2003	2004	2005	2006	2007
Rep Kazakhstan	2316.2	1936.7	1573	1391	771.3	750.5
Karaganda oblast	2743.9	1997.2	1679	1714	786	831

**Table to Chart 7. Kazakhstan\Karaganda oblast Case notification (Absolute numbers) by age and gender <2003-2007>**

		0-14		15-24		25-34		35-44		45-54		55-64		65-	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>2004</b>	Q1			2		6		4				1			
	Q2			10		15		9		1					
	Q3			10		7	3	8				1			
	Q4			7		12	3	3		2					
	total			29		40	6	24		3		2			
<b>2005</b>	Q1			9	1	8	1	4		1					
	Q2			12		12		3	3						
	Q3			3		12		4	1						
	Q4			9		8		4		1					
	total			33	1	40	1	15	4	2					
<b>2006</b>	Q1			2		7		4							
	Q2			1		10	1	2		1					
	Q3			1		9		2		1					
	Q4			1		5		4	1	1		1			
	total			5		31	1	12	1	3		1			
<b>2007</b>	Q1			4		1	1								
	Q2			1		3		3		3					
	Q3			1		3		2							
	Q4						1	4	1	1				1	
	total			6		7	2	9	1	4				1	

**Kyrgyzstan—Q1, 2008****ANNUAL PROGRESS SUMMARY**

1. The main emphasis in the activities of CAR TB Control Partnership in Kyrgyzstan in the 4<sup>th</sup> year of the project has been directed towards increasing the role of Thematic Working Groups (TWGs) and further integration between TB and PHC services in Bishkek city.
2. Two Health Reform Summits were held in 2007. Preliminary meetings were conducted with donors and international organizations. The MOH reported about progress on Health Reforms in Kyrgyzstan. TB issues receive little attention from health reformers, even though TB is one of the priorities under the Manas Taałimi Program. The KR MOH and the National Phthisiology Center (NCPH) are aware of this lack of attention and are planning to bring it up for discussion during the Health Summit in May 2008.
3. A new Minister of Health was appointed in late December 2007. Marat Mambetov was a TB specialist at the beginning of his career. He is familiar with Health SWAp as he used to be a Head of the Health Reform Coordination Department. All international and local NGO organizations continue their work with the support of the MOH. All problems related to the previous Minister of Health have been eliminated.
4. The Coordinating Council meeting was held in June 2007. The TWGs made their reports and 2007 work plans were discussed. Also, the TWG on Education was approved.

**QUARTERLY PROGRESS SUMMARY**

5. The TWGs held 11 meetings of various groups in Q1. There is sustainable TB control work under way with the TWGs coordinating the work of international agencies and local organizations in Kyrgyzstan.
6. The Project HOPE Medical Director visited Bishkek. A field visit to Karabalta in Chui oblast was made which included several meetings with TB authorities.

**I. BUILDING POLITICAL SUPPORT FOR TB CONTROL**

7. Project HOPE has signed a contract with Imperial College to implement TB sub-accounts. A plan of activities has been developed and the Health Policy team has been working on organizing a workshop on TB sub-accounts.
8. The first draft of the TB sub-account methodology, including a classifier, has been developed.
9. The Regional Health Policy Specialist visited Bishkek, and presented, together with the Policy team, and discussed the plans on TB sub-accounts with the Director General of the National Center of Phthisiology. Professor Alisherov pointed out the importance and utility of that work and made a promise to support it.

**II. BUILDING HUMAN AND SYSTEMS CAPACITY FOR TB CONTROL****Integration between TB services and PHC network**

10. During Year 4, 10 monitoring visits were made to health facilities: 33 PHC and TB facilities. The following problems were noted from all over the Republic:
  - The city and oblast TB centers have weakened their supervising activities
  - Health staff provide insufficient IEC work among patients
  - Monitoring visits of specialists from the city and oblast TB centers to the rayon level are made irregularly and infrequently, although they have been receiving funds from GFATM for monitoring in a timely manner since 2006
  - The Feedback system which analyzes the monitoring does not work efficiently in regards to taking timely measures to eliminate detected shortcomings
11. During Y4, there were 4 meetings of TWGs on MPT (monitoring, planning, and treatment). In Q1 2008, there were 2 monitoring visits made. Seven PHC and TB facilities in Chui oblast and

Bishkek city were visited by the TB centers' specialists. Rayon, city and oblast specialists were trained in monitoring elements, making analysis of cohort data, and detecting and tackling challenges. Some results from monitoring visits in Chui oblast:

- Physicians do not always use diagnostic algorithm when detecting TB cases
- Health personnel do not always follow sputum collection procedures and DOT
- Not all health facilities have standard sputum collection containers
- The register for recording inspection visits is not being completed by TB center coordinators.

12. Sufficient positive progress was noted in the following areas in Bishkek city:

- The level of diagnostic algorithm observance by physicians when detecting TB cases has increased
- Health personnel, who observe sputum collection, possess knowledge of the correct method for sputum collection
- Observed treatment has improved
- Monitoring visits are made 2 times a year on a regular basis by the Department for monitoring and information of the City TB center.

13. Although there was progress in the above areas in Bishkek, treatment failure, treatment default and transference rates' have increased to 13.3%, 11.7% and 5.5% respectively and these were noted in treatment outcomes in new detected SS (+) cases. One explanation for the increases may be that among treatment failure outcomes there was primary drug resistance in 75.3% of cases. Among treatment defaulters and transferences, patients admitted from other regions constituted 67.4% and 81% respectively. These patients will receive treatment at NCPH. According to the NCPH Prikaz of 2004, individuals are to be registered at the place of TB detection, but very often, after the intensive phase of treatment, patients who transferred in leave for other regions of their residence and do not inform the city TB center, which then effects treatment rates.

14. Instructions in the Kyrgyz language for observed treatment and sputum collection have been adopted.

15. Members of the TWG on MPT (DOTS), together with the Board of Directors, took part in the analysis made on the DOTS implementation in the Kyrgyz Republic based on the monitoring performed in 2007. At the meeting, it was discussed that FMC Directors in some regions had poor supervising activities.

#### **Strengthening the Laboratory Network**

16. In 2007, microscopic detection of TB at PHC facilities increased from 9% to 11.6%.

17. Laboratories at 29 PHC facilities and TB facilities in Bishkek city, Osh city, Batken, Osh, Talas, Naryn and Issyk-Kul oblasts were monitored in 2007. Monitoring results were discussed at the meetings of TWG on laboratory and the TWG's plans were corrected to match the needs identified by the results of the monitoring.

18. During joint monitoring, the PROJECT HOPE Laboratory specialist assisted the NRL in panel testing of laboratory specialists from the monitored laboratories.

19. The Project HOPE Laboratory Specialist participated in the second part of the training, held in Tajikistan, on culture detection of TB and DST.

20. The drug resistance survey began in the Bishkek pilot project. Project HOPE was involved in the development of registration forms for the survey, in the trainings for Bishkek city health professionals on sputum collection for culture examination, and in the finalization of the identification forms for the survey performance. In the course of preparation for the survey, the ICRC, NRL and Project HOPE laboratory specialists prepared a one-day workshop program. Two workshops were conducted and 50 medical workers were trained. The following questions were highlighted at the workshop: goals and stages of the survey, sputum collection and transportation for culture examination, referral and registration forms when a patient undergoes examination. The workshop was held with the assistance of ICRC funds.

21. The Project HOPE Laboratory Specialist assisted the NRL in monitoring drug susceptibility research (DSR): database maintenance, case definition, and cleaning of patients' databases at NCPH, Bishkek city TB Center, and Bishkek city FMCs.
22. Training materials for basic trainings on acid fast bacterioscopy, developed by the Project HOPE Regional Specialist, were adapted. Materials were approved by TWG members and tested by the NRL specialists during regular trainings in Bishkek and Osh. The approval of the materials by the MOH has been received and they are being used in basic trainings.
23. The prikaz on approval of the concept for laboratory network development in KR was issued by the KR MOH. This concept became the basis for the strategy of the TB control program laboratory component, on which the TWG on laboratory has been working.
24. Training materials for culture trainings, developed by the Project HOPE Regional Specialist, were adapted for training lab specialists in Kyrgyzstan.
25. Two culture trainings were provided for lab specialists from NRL and oblast TB centers in collaboration with the Global Fund in Y4. 15 lab specialists were trained. This is a very important stage in the laboratory component development, because diagnosis of TB by culture examination hasn't been performed at oblast TB centers for many years.
26. MGIT was purchased and installed at the NCPH for the funds of MSF and ICRC. Trainings on MGIT utilization were conducted for TB diagnosing and DST. Laboratory Specialists attended those trainings.
27. In Q1, 2008, monitoring was performed at 5 facilities in Chui oblast and Bishkek city. Per the monitoring results, a significant improvement in the work of the laboratories was observed. This improvement was caused by the improved activities of Oblast Coordinators in Chui oblast. The problem of providing laboratories with reagents for staining remains. The question of purchasing acid and xylene hasn't been tackled because suppliers do not have permission papers for importing those reagents because they are included in the list of drugs used for the production of narcotics (precursor). These problems were not settled during the last year, although they have been discussed with the NTP specialists.
28. The meeting of the TWG on laboratory was conducted and focused on the approval of the TWG annual plan, discussion of problems with regards to provision of laboratories with supplies and reagents for bacterioscopic examinations.
29. The training schedule, as well as DST training to be provided by Project HOPE, and the training for oblast laboratory coordinators were coordinated with the NTP Coordinator.
30. The Project HOPE Laboratory Specialist was involved in the training for leadership of oblast TB and monitoring centers in the section "Rationalization of laboratory network and basic requirements to the laboratories of the oblast and rayon levels". We hope that the information obtained at the training will draw more attention to strengthening laboratory staff and creating better conditions for laboratory coordinators.

#### **Strengthening Human Resource Capacity**

31. During Y4, 14 trainings were provided for 180 persons in cooperation with the Kyrgyz State Medical Institute for Continuous Education (KMIC) and the NCPH. During the trainings, 77 PHC health professionals were trained in DOTS strategy; 15 health professionals were trained in interpersonal communication skills; and 19 specialists from TB services were trained in monitoring of the National TB Program (NTP) implementation. Trainings on LMIS of anti-TB drugs were also provided for 48 different level health professionals. Project HOPE Regional Technical Advisor conducted the EpiInfo training on research skills for 10 health specialists. The technical and methodical assistance in providing all health professionals and journalists with the knowledge for NTP implementation is on-going.
32. The scope of work and work plan of the newly created TWG on education were presented and approved at the regular meeting of the KR Coordinating Council on TB. All partners, including

NTP specialists, representatives of leading health education institutions and international agencies, and health professionals responsible for and involved in medical training in the country are involved in the work of that TWG. The TWG members began the work on standardization and updating training programs on NTP implementation, taking into account new regulation documents and formal recommendations.

33. Within the activities of the TWG on education, the study of DOTS strategy implementation at all levels of health education in KR was carried out. Reports and recommendations, developed in conjunction with ZdravPlus Project, based on the results of the study of the DOTS strategy implementation level and NTP elements at pre-diploma and post-diploma health education institutions in KR were presented and discussed at the TWG meetings. Those recommendations will be used in the future when standardizing and updating training programs for NTP implementation.

#### **Creating Rational Drug Management Systems**

34. During Y4, Project HOPE assisted the NTP with making arrangements for the Global Drug Facility (GDF) Delivery and country visit (September, 2007). As a result of the visit, the Technical Committee (TC) approved delivery of the first line anti-TB drugs for the second year under the grant agreement with GDF (T9-370-67 KYR). Project HOPE assisted in dissemination of the GDF technical report among TWG members.
35. To provide availability of anti-TB drugs, technical assistance was rendered in the development of the application for the 16<sup>th</sup> round of the GDF Grant. The application for anti-TB pediatric drugs was approved by the TC and the drugs will be supplied (for 2 years) through UNITAID. The first supply is expected in 2008.
36. Technical assistance was rendered to the NTP in processing registration of the GDF anti-TB drugs in the country, conducting negotiations with interested sides, and translating registration dossiers from English into Russian. At present, dossiers for streptomycin, ethambutol, and water for injections have been accepted by the Department of Drug Provision (DDP) for registration.
37. The LMIS pilot project implementation results were compiled. The results were presented in a poster presentation entitled "LMIS Modification in Kyrgyzstan NTP" at the 4<sup>th</sup> Congress on Lung Diseases and TB for the states of the European region, held in Riga, Lithuania, on June 27-30, 2007.
38. An information system for the management of anti-TB drugs under the NTP program "Tuberculosis-2" has been developed by Project HOPE and was approved by the KR MOH Prikaz #458 as of December 26, 2007.
39. All health facilities began to use the new forms in accordance with the NCPH Prikaz#№01-4-317 dated January 25, 2008 "On application of recording forms approved by KR MoH Prikaz #458"
40. The LMIS training program has been developed and approved at the national level. In compliance with the approved plan for Y4, provision of the cascade LMIS trainings with the NCPH began nationwide through the financial support of Project HOPE. A drug management training preceded by TOT elements was conducted (December 17 – 21, 2007) for 11 oblast coordinators. Trainings began for 12 TB Coordinators and 25 PHC nurses in Osh oblast.
41. During the reporting period, the following monitoring visits were made: 5 three-day monitoring visits to the regions of the country and 4 three-day monitoring visits to Bishkek health facilities. In the course of all visits, on-the-job-trainings on LMIS form utilization were provided.
42. There were 4 meetings of the Drug Management TWG. One of the main achievements of this structure was development of the resolution on legalization of LMIS through the KR MOH.
43. Multi-country research of the frequency of serious adverse reactions to the first-line anti-TB drugs within the NTP was completed. An abstract with results of the research was submitted to the Conference Secretariat for the 39<sup>th</sup> Union World Conference on Lung Health to be held in Paris, France, 16-20 October 2008.

**COMMUNITY ADVOCACY AND MOBILIZATION**

44. The National IEC strategy, including the logo, was integrated into the National Health Promotion Strategy produced by the Republican Health Promotion Center.
45. Kyrgyz and Russian language banners – 1 of 6x3 m and 2 of 2x4 m – were produced, together with Global Fund, and placed along the highway Bishkek-Issykkul in Kant city, Chui Tokmok. The banners have been hanging since April 2007.
46. The Project HOPE TB Specialist was awarded with the diploma of the Kyrgyz State TV & Radio Company for a professional and informative broadcast talk in the Kyrgyz language.
47. The IEC/BCC/Small Grants Coordinator was involved in JHU ToR for Regional BCC Workshop entitled “Involving Community and Holding Information Campaign” held in Tashkent on April 24-27, 2007. The workshop improved skills for working with mass media and implementation of the information campaign about TB challenges in the community.
48. The Project HOPE Small Grants program was implemented. The goal was to increase interest and involvement of NGOs in IEC work to control TB. The grantee was the Osh branch of the KR Association of FGPs and FMCs with the project “For the world without TB!” Within the program, 14 workshops (10 attendees in each) entitled, “Tuberculosis, DOTS and IEC work” were conducted for nurses, trainers, students, medical schools, students of the Osh State University medical faculty (OSU MF), and Osh city kindergarten teachers.
49. In Q1, 2008, information materials about TB, in Kyrgyz and Russian languages, were disseminated among the Osh city population. The opening and closing of the project were combined with the round table attended by the Osh oblast, rayon, and city administration, Osh oblast and City TB Center leaderships, oblast and city health coordinators, FMC Directors, OSU MF, and education department representatives. The event was broadcast by the mass media: OshTV, EL TV & Radio; and Oblast newspapers the “Osh Janrygy.”
50. Video spots were created about TB in the Russian, Kyrgyz and Kazak languages. Casting of the Video spot over the National TRC (TV&Radio Company) and EL TV & Radio is being prepared.
51. The IEC/BCC/Small Grants Coordinator, together with KSMI CE, took part in the training “Interpersonal Communication Skills” (IPC skills) for nurses and volunteers of the KR National Red Crescent Society aimed at increasing adherence of TB patients to treatment.
52. To increase social mobilization, round tables devoted to improved provision of TB services and social support to needy TB patients at the rayon level were held, together with ZdravPlus Project, in Chui oblast’s Jail rayon and Kara-Balta town, where the TB epidemiological situation has become the most critical.
53. There were 3 meetings of the TWG on IEC at which booklets issued by MSF for the penitentiary system were considered, amended, and approved. It was the first time when the TWG logo was placed on the cover page of the booklets. The scenario of the video spot, plan of events devoted to the World TB Day (WTBD), as well as actions for the current year were discussed at the meetings.
54. A training “The Role of Journalists in Informing Population about TB Prevention” was held in cooperation with the Regional Specialist on Social Mobilization, Health Communication Advisor Dr. Arzum Ciloglu on January 24-25, 2008 in Bishkek. In total, 11 journalists of oblast and republican newspapers were trained..
55. The WTBD events conducted by Project HOPE raised interest and drew attention of the governmental and non-governmental organizations to TB challenges. This interest will make it possible to create close cooperation in TB control at all levels of the community. Different events give impetus to the development of adequate attitude to TB challenges, not only among patients and their relatives, but among the entire population and risk groups.
56. In the framework of WTBD the following events were done:

- A Press-conference was held on March 27, 2008. Participants included the KR Health Minister, NCPH Director General, the Head of the WHO office in Kyrgyzstan, USAID Health Programs Specialists, Project HOPE TB Program Manager, and the Chief of the MSF Mission in Kyrgyzstan.
- A poster contest about TB took place among adult patients and a drawing contest took place among children ;
- The exhibition of photos about TB was organized with the MSF and KSMI at the GUIN prisons.
- A round table was held at the Oblast FMC “Too demi” in Osh city under the Small Grants program. The oblast and city authorities, oblast and city TB centers, city and rayon FMCs, AFGPs, and KR mass media participated. The TV broadcast about TB was organized at the “Manas FM” radio. A recording of the telecast at the “ELTR” TV Company was organized and Project HOPE took part in the direct casting devoted to the WTBD on the “Alatoo+” Kyrgyz State TV & Radio Company.
- A month devoted to TB control in the Jail rayon was conducted with ZdravPlus under the pilot project “Improved TB Services and Social Support.”

#### **PRISONS**

57. As for the prison component of the program, Project HOPE has been working within the framework of the TWG on TB in prisons. The team of TB Coordinators for TB control actions, MDR-TB treatment included, at the KR MOJ GUIN facilities was considered and approved at the TWG meeting.
58. Several meetings were held with a new TB Coordinator in prisons – the MOJ GUIN medical unit specialist – to familiarize him with our stand concerning TB challenges and clarify our joint activities on NTP implementation in KR MOJ GUIN.
59. A joint work on reforming KR MOJ prison health care aimed at improving conditions for prevention and therapy actions, including TB control, at the oblast penitentiary institutions in the southern region of the country is ongoing with the working group. The mechanism for interaction between MOJ GUIN institutions and oblast TB facilities in the south of the country was discussed at the joint meeting with the KR MOJ department for health care reform.
60. The ways for implementation of the program “Before Release from Prisons” in terms of improved inter-departmental close communication between civil and penitentiary health sectors under NTP implementation were discussed at the regular joint meetings. Based on that project, plans have been made to elaborate on the inter-departmental prikaz in cooperation with the CC members for health protection in the KR MOJ penitentiary system. That prikaz will be included into the State program “Preparation of inmates for release and their social adaptation in the community” which is being prepared by them. At present, the document is being developed.
61. Also, possible ways for tackling the risk of TB infection transference to the detained persons at the investigatory isolation wards of Ministry for Internal Affairs (MIA) were discussed. It was resolved to prepare a joint draft prikaz of KR MOH and MOJ on maintaining TB patients in the penitentiary system, since there is currently a lack of approved regulation on that question. This document will enable following appropriate rules on maintaining TB patients at all levels of different punishment execution institutions.

#### **MDR-TB**

62. During Y4, there were 4 meetings of TWG on MDR-TB

The following are the results of the TWG:

- Incentives (food kits, transportation fees) are given to patients, health providers involved in DOTS +;
- TWG members are provided with reports on the work done every 3 months;
- Work on the MDR-TB section of the National guideline is in progress, using a draft application to the GLC as a source of information

- Recording and reporting documentation on MDR-TB was approved with amendments (TB01-TB11) ;
  - It was recommended to report on Poly Drug Resistant (PDR) and MDR TB cohorts two years and three years respectively after each cohort year.
  - The check-list for the control of anti-TB drugs taken by patients was developed on the basis of the Latvian MDR form.
63. The TWG members worked together with the Board of Directors to analyze the monitoring results of the DOTS+ pilot project on MDR-TB patients' treatment in Bishkek and Chui oblasts. As a result of the report, the necessity of observed treatment of MDR-TB patients during the continuation phase at FMCs was emphasized. For that purpose, it was recommended that all people in charge of DOTS + treatment should report quarterly on MDR-TB to the TWG meeting.
64. In Q1, 2008, there was 1 meeting of the TWG on MDR-TB.
65. Project HOPE is providing technical assistance for the work being done to unify the register for all MDR-TB cases in the republic.
66. Project HOPE took part in the Doctors' Conference by selecting patients for the DOTS+ treatment.

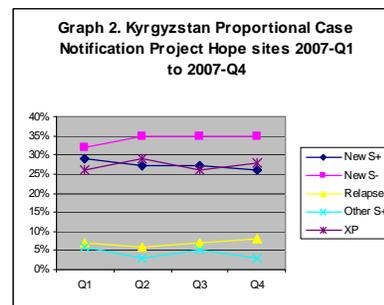
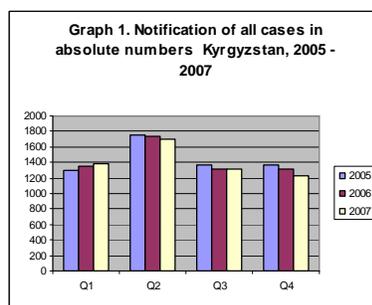
**TB/HIV**

67. During Y4, there were 5 meetings of the TWG on TB\HIV.
- Since Q3 of 2007, the Capacity project has been coordinating activities of the TWG on TB\HIV. As a result of the meeting, the following activities were done by the members of the TWG:
- Protocols for TB\HIV were reviewed in compliance with recent WHO recommendations
  - A presentation of training materials on TB\HIV for nurses was prepared
  - In order to assist the TWG in working more efficiently, the list of the membership was enlarged to include representatives of the state and international organizations
  - Taking into account intentions to gradually implement the interaction model of TB and HIV services, the review of the KR MOH and MOJ joint Prikaz #184 "On measures for strengthening the fight against HIV/TB co-infections in the Kyrgyz Republic" was started so that a new joint Prikaz, based on the existing one, could be created;
68. In Q1, 2008, there were 2 meetings of the TWG on TB/HIV.
69. A draft of the joint MOH and MOJ Prikaz on actions for strengthening TB/HIV co-infection control was discussed. It was decided to introduce some amendments into it after new protocols on TB/HIV which comply with recent WHO recommendations were adopted by the KR MOH.

**Epidemiological analyses**

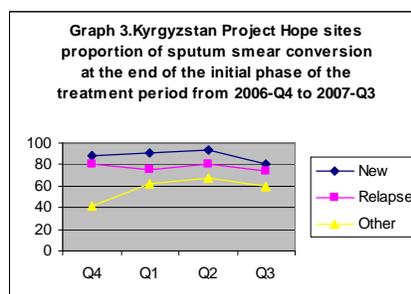
70. The epidemiological situation in the Kyrgyz Republic remains serious – TB incidence exceeds 100 per 100,000 population, however, there is a tendency towards reduction. Quarterly, a 1% decrease in the rate of smear positive cases was noted. The ratio of smear positive cases among pulmonary TB cases has also decreased from 47.6% in Q1 to 41.5% in Q4. The smear conversion rate (81%) as well as the treatment success rate (82%) has become worse in comparison with the previous quarters. These points have been brought to the attention of the National TB Program and shortages will be addressed at the Directors Counsel involving all Oblast TB Program Directors.

## Tables and Graphs



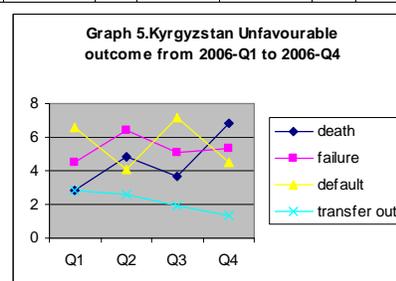
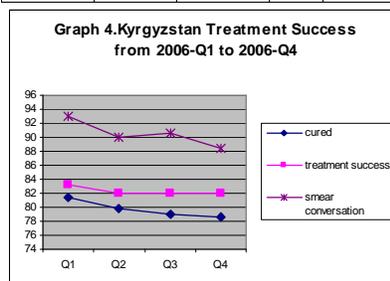
**№1. Kyrgyzstan. Absolute and proportional case notifications for 5 TB categories from 2007 - Q1 to 2007 - Q4**

	Q1		Q2		Q3		Q4	
<b>New S +</b>	461	29%	508	27%	403	27%	346	26%
<b>New S -</b>	508	32%	660	35%	522	35%	487	35%
<b>Relapse</b>	109	7%	117	6%	104	7%	114	8%
<b>Other S +</b>	85	6%	52	3%	76	5%	46	3%
<b>Xp</b>	414	26%	542	29%	383	26%	389	28%
<b>Total</b>	1577	100%	1879	100%	1488	100%	1382	100%



**Table 2. Kyrgyzstan.** Sputum smear conversion at the end of the initial treatment period in absolute and proportional figures for 2006 -Q4 to 2007 - Q3 for different categories of smear positive TB cases

	Q4			Q1			Q2			Q3		
	Absolute number			Absolute number			Absolute number			Absolute number		
	Cohort	Convert	%									
<b>New</b>	398	352	88	462	423	91	507	470	93	402	326	81
<b>Relapse</b>	117	94	80	106	79	75	115	93	81	99	73	74
<b>Other</b>	43	18	42	73	45	62	40	27	68	57	34	60

**Table 3. Kyrgyzstan.** Treatment outcome from 2006-Q1 to 2006-Q4.

	Q1		Q2		Q3		Q4	
	N	%	N	%	N	%	N	%
<b>Notified</b>	423		584		429		398	
<b>Evaluated</b>	422		582		429		398	
<b>Cured</b>	342	81.4	464	79.7	339	79	313	78.6
<b>Completed</b>	8	1.9	14	2.4	13	3	14	3.5
<b>Death</b>	12	2.8	28	4.8	16	3.7	27	6.8
<b>Failure</b>	19	4.5	37	6.4	22	5.1	21	5.3
<b>Default</b>	28	6.6	24	4.1	31	7.2	18	4.5
<b>Transfer out</b>	12	2.8	15	2.6	8	1.9	5	1.3
		100		100		100		100

**Tajikistan—Q1 2008****ANNUAL AND QUARTERLY SUMMARY**

1. The annual and quarterly summaries provide a general overview of TB control activities in Tajikistan - they include information on various areas of the country and various agencies involved in TB control efforts. At the same time, the description under USAID objectives deals only with activities directly supported by the USAID grant unless mentioned otherwise. Project HOPE, as the implementing agency of the USAID grant and the primary recipient of the Global Fund grant for Round 3 is synergizing its activities with the National TB program and other implementing agencies. This helps to ensure that DOTS implementation will build a comprehensive, effective and sustainable TB control program throughout the country.
2. By the end of 2007, the DOTS program covered 100% of the population of Tajikistan. The population of thirteen rayons where the DOTS program is mainly supported by USAID funds is 1,762,500 – 26.3% of the country (Dushanbe city, Rudaki rayon, Vose, and Kulyab region: Kulyab city, Kulyab rayon, Farhor, Hamadoni, Mominobod, Taimur Malik, Shourobod, Nurek, Khowaling, Baljuwan). At the same time, human resources and system building activities of the grant such as provision of technical advice through Thematic Working Groups or development of national guidelines benefit the TB control system as a whole in Tajikistan.
3. Project HOPE initiated restoration of the work of the MOH Coordination Council on TB chaired by the First Deputy Minister of Health. It was decided to conduct the meetings every month. The Deputy Minister accepted this responsibility and the first two meetings were held under his leadership in November and December. During these meetings many problems concerning TB were discussed: quality of monitoring visits, destruction of expired TB drugs, and other current issues.
4. In Q3 2007 the second round of the Small Grants Program started. It was titled, “The world without Tuberculosis” and was focused on social mobilization. 26 project proposals were received from local NGOs registered in Dushanbe, Rudaki and Kulyab region. The Grants Committee selected 4 project proposals, and these projects began implementation in September.
5. In June, the MOH issued Prikaz # 308 that gave permission to conduct the Rational Drug Use survey in the country.
6. The GFATM Round 3 TB grant to Tajikistan with Project HOPE as Principal Recipient was recognized by GFATM for its high level performance and was invited to submit a Proposal for a six year extension in the frame of the Rolling Continuation Channel (RCC). In December, a special meeting on RCC was held in the MoH. Project HOPE initiated creation of a Working Group (WG) on writing the Technical Proposal for RCC. The first Deputy, who became the Minister of Health in January, was appointed as a chairman of the WG. The WG decided to invite an international consultant for supporting NTP and CCM in writing the RCC Proposal. The WHO volunteered responsibility on selection and invitation of the consultant. In the frame of WG, a few sub-groups were created, covering all components of the TB program: Drug supply, monitoring and evaluation, laboratory activities, trainings, social mobilization of the population and strengthening the NTP structure.

Project HOPE was actively involved in the WG, proposed ideas and drafted the activities that were included in the Proposal. The final version of the proposal was presented to the CCM and on March 28, the RCC proposal/Tajikistan/Tuberculosis was submitted to the GFATM.
7. Project HOPE continued negotiations with UNDP regarding the coordination between activities of Round 3 and Round 6 and about Project HOPE's role as sub-recipient on the Round 6 grant. Taking into consideration Project HOPE's experience in the country, technical capacity and proposal, the UNDP selected Project HOPE to conduct a Drug Resistance Survey (DRS). Numerous meetings were held on this issue and the agreement was signed in December. The DRS will cover two rayons of the country: Rudaki and Dushanbe. Project HOPE Regional and country

laboratory specialists carried out all preparatory work assessed capacity of laboratory network of those rayons and drafted the DRS Protocol.

8. For the Round 6 grant, the UNDP announced the tender for the following activities: trainings on TB management, epidemiology, M&E, trainings for social support group members, advocacy and social mobilization events. Project HOPE produced a proposal and submitted the application in November. The UNDP tender commission announced Project HOPE as a winner of the tender and the contract was signed in February 2008.
9. The preparation and celebration of World TB Day was conducted jointly with many national and international organizations – MOH NTP and Healthy Life Style Centers, Project HOPE through USAID and GFATM grants, UNDP through GFATM Round 6 grant, ZdravPlus, American Red Cross, National Red Crescent Society, Project SINO, Aga Khan Foundation as well as local NGOs supported by USAID Small Grants Program. A joint plan was developed at the meetings of the Thematic Working Group on TB Communication.

#### **I. Building Political Support for TB Control**

10. The program focused on strengthening political support for the TB control program on all levels- from the rayon to the national level through promoting open and transparent discussion on TB control issues and advocating for increasing prominence of the TB program.
11. The evidence of high-level political commitment to address the TB problem in Tajikistan is shown in the drafting of sub-laws of the new TB law that was created and signed in 2006. Earlier in the year, the National Coordination Committee of the Republic of Tajikistan created a new Thematic Working Group on legal and policy issues for HIV/AIDS, TB and malaria. In the framework of this group, with USAID and GFATM R3 co-sharing the sub-group that worked on creation of by-laws for the Tajik TB law was created. The sub-group that consisted of key persons from the NTP and MOH produced a package of by-laws. The documents include standards on number of staff for TB facilities, food rations for TB patients, health and social benefits for TB personnel, etc. The package is essential for the implementation of the TB law. Project HOPE actively participated in this work by providing the comments to the draft version and participating in finalizing the document.
12. Project HOPE continued to organize meetings of the Interagency Coordination Council with participation of national non-governmental and international organizations working in the TB field in Tajikistan.
13. Project HOPE actively participated in the work of Thematic Working Groups on drug management, IEC/BCC and laboratory that became effective tools for the provision of technical advice to decision-makers and for the coordination. Also, Project HOPE was involved in the work of the TWG on TB/HIV that was created by the CAPACITY Project funded by USAID.
14. Project HOPE held several meetings with upper MOH management and numerous meetings with NTP leadership to discuss program implementation. One of the main results of Project HOPE advocacy and insistence is reviving the MOH Coordination Council on TB as a strategic decision-making and coordination body and restoring monthly Medical Council meetings at the RTBC as a tool for solving operational issues.

#### **II. Building Human and Systems Capacity for TB Control**

##### **Integration of TB Control within a Reformed Health System**

15. Project HOPE continued its collaboration with ZdravPlus in terms of strengthening the role of the PHC system in TB control. In May, in the framework of the Continued Medical Education program, Project HOPE, ZdravPlus and NTP specialists conducted three sessions on TB for PHC doctors of Sugd Oblast in Khujand. In October, three sessions were held in Dushanbe. Three one-day trainings were carried out in Dushanbe policlinics #8 and #9. A total of 175 PHC doctors attended the sessions.

16. In October, Project HOPE signed an agreement with the Healthy Life Style Center (HLSC) concerning training for community leaders and volunteers. According to this agreement, Project HOPE trained trainers of HLSC which in turn carried out cascade trainings for the general population, volunteers and community leaders.
17. Generally, Year 4 witnessed an improvement in participation of PHC specialists in the TB control program. Constant attention to this issue, especially working with Directors of Central District Hospitals and local health authorities during monitoring visits, contributed to the progress.

#### **Strengthening TB laboratory Network**

18. The number of functioning laboratories in the rayons supported by Project HOPE/USAID is 27. Internal and external quality control for all rayons by the NRL in Dushanbe, is done in the majority of laboratories (The NRL Conducts the external QC). During Y4 of the program, substantial improvements were reached in most laboratories (i.e. mistakes in sputum microscopy significantly decreased).
19. Project HOPE specialists assisted NTP staff in carrying out monitoring visits in USAID-supported rayons. The Dushanbe monitoring team conducted independent monitoring visits in the first half of the year. In Q3 the team was strengthened by the Project HOPE laboratory specialist who together with a city laboratory coordinator provided recommendations on the improvement of sputum microscopy in Dushanbe policlinics. During the monitoring visits, some improvements were observed: integration between the laboratories at the rayon level, oblast and central level has been strengthened, and laboratories of the Kulyab region and Rudaki improved quality of smearing. However, there are some weaknesses: lack of motivation contributed to high turnover of the laboratory staff in Khovaling, Muminobod and Sharabad, and quality of microscopy is poor in some policlinics of Kulyab. To address those shortcomings, more time should be dedicated to working with these specific locations.
20. Since the culture method of diagnostics and DST have been introduced in Tajikistan, Project HOPE laboratory specialists conduct monthly monitoring of the reference laboratory activities. In 2007, 688 culture investigations were done for new SS+ cases and 119 for re-treatment cases. DST was done for 340 new and 82 re-treatment cases.

In Q1 2008, a total of 176 culture investigations were done, including 146 for new SS+ cases and 30 for re-treatment cases. DST was done for 108 new and 27 re-treatment cases.
21. In Q1 2008, External Quality Assurance (EQA) was done in 23 laboratories of USAID-supported rayons. 420 slides were selected for blind re-checking. In 20 laboratories no serious mistakes were identified - highly false positive or negative results. Low false negative results were found in only three laboratories.
22. In Y4, Project HOPE laboratory specialists carried out EQA situational analysis throughout the country. The aim of this work was to assess whether EQA could be done at the oblast level, which would not require transportation of the slides to Dushanbe. In Q3 Project HOPE and NTP laboratory specialists conducted the last visit to GBAO. The visit was carried out under GFATM grant co-sharing with the USAID TB grant. Thus, in Q3, assessment visits to all regions were completed and in Q1 2008, the situational analysis report and protocol for implementation of blinded rechecking was finalized by the Project HOPE laboratory specialists. It was decided to begin EQA procedures at the regional level in the Sughd oblast where the laboratory team will set up the appropriate procedures, with the assistance of NTP and Project HOPE specialists.
23. In Y4, Laboratory Thematic Working Group (TWG) meetings were conducted. Specialists from the NTP and various international organizations (Project SINO, UNDP, Project HOPE and American Red Cross) discussed many important issues: the criteria for selecting sputum for culture investigation and logistical details of the procedure (medical facilities that will be covered, delivery, etc.). It was confirmed that Tajikistan would like to ask the laboratory in Gauting, Germany serve as a Supra National Reference Laboratory for Tajikistan, concerning the conduction of a Drug Resistance Survey (DRS). Project HOPE will be responsible for the Survey and it will be financed by UNDP in the scope of the GFATM Round 6 grant. The TWG

emphasized the importance of the DRS and selected Dushanbe city and Rudaki rayon as the locations for the Survey. Also, the TWG identified weaknesses in laboratory service and proposed to include some activities for improvement of the laboratory infrastructure in the new RCC proposal.

24. All laboratories in USAID supported rayons received laboratory reagents purchased with GFATM support. Project HOPE organized this procurement as Principal Recipient of the round 3 GFATM grant. PSF is the sub-recipient responsible for procurement.

#### **Strengthen Human Resources Capacity**

25. Project HOPE continued building local human capacity through various trainings. As the program focuses on sustainability of the NTP, a group of trainers was prepared. All trainings were carried out with the involvement of NTP trainers. The following trainings were conducted: 2 refresher trainings on Interpersonal Communication and Counseling Skills for 20 patronage nurses in Kulyab, 24 nurses in Vose and a ToT for 13 HLSC workers in Dushanbe; 2 seminars for the members of local NGOs applying to the Small Grants Program (22 participants in Dushanbe and 17 in Kulyab); training on LMIS for drug coordinators; and a seminar for 16 journalists in Kulyab.
26. In June, Project HOPE organized a training on Epidemiology and Epi-info for its staff members involved in operational research as well as for partners from the NTP, the Center of Sanitary-Epidemiological Surveillance, the UNDP Project Implementation Unit and the TB Department of Tajik Medical University.
27. In Q1 2008, Project HOPE and NTP specialists carried out advance training on microscopy with the participation of 12 laboratory coordinators. 23 TB specialists from Machedon hospital took part in training on tuberculin and cytological diagnostic of TB. Also, 4 journalists from USAID-supported rayons participated in the seminar for journalists in Dushanbe.

#### **Creating Rational Drug Management System**

28. In Y3, Tajikistan became the first country in the region where the Logistic Management Information System (LMIS) for the first-line TB drugs was developed. In Y4, Project HOPE also continued implementation of the LMIS with a series of trainings on LMIS. A detailed plan of the trainings was prepared, training materials for oblast and rayon levels were developed and new recording/reporting forms on LMIS were printed. Trainings on LMIS were carried out for the drug managers of the oblast and rayon levels from TB facilities of Sughd Oblast, Khatlon Oblast and GBAO. A total of 21 specialists (oblast and rayon drug coordinators, and persons responsible for storage and distribution of the drugs from different level) participated from USAID-supported medical facilities. In terms of preparation of specialists for LMIS trainings, 3 specialists from MOH, NTP and Project HOPE participated in the Regional workshop on LMIS in Tashkent. Specialists gained the skills in developing and implementing the LMIS in the country.
29. Project HOPE Regional and country drug specialists developed the protocol and conducted a Rational Drug Use (RDU) Study. The goal of the study was to understand the main problems of using TB drugs including the frequency of non-compliance with standard treatment protocols, patients' expenditures on drugs – both TB and non-TB, and patients' adherence to treatment. The questionnaires to be used during the study were tested in PHC facilities and Machedon hospital. The protocol was approved by the MOH with the Prikaz #308.

The RDU covered 29 rayons of the Sugd, Kulyab, Rudaki regions and Dushanbe. Project HOPE and NTP specialists interviewed and checked medical cards of 212 patients who were randomly selected. All information was entered in Epi Info. Detailed analysis will be done in Q2 2008.
30. Project HOPE drug specialists provided technical assistance to the NTP in preparation for Tajikistan's application to the GDF grant for the pediatric formulation of the drugs. The Technical Review Committee (TRC) of GDF reviewed the application and the country will receive these drugs in 2008.
31. In April-May, a GDF monitoring mission visited the country. The aim of the mission was to assess TB drug management in Tajikistan and estimate drug needs for the next year. Project HOPE

provided technical and logistical assistance to the mission. The estimates were used for the order to GDF through direct procurement using GFATM financing. The order included loose drugs and Stop TB kits.

In Q1 2008, Tajikistan received the Stop TB Kits and loose drugs. Project HOPE drug specialists assisted the NTP with customs clearance and storage of this order. Project HOPE specialists also provided technical assistance to the State Drug Expertise Center in registration of the TB drugs; 6 TB drug/combinations (HRZE, RH 150/75, E 400, RH 150/150 and S 1.0) were registered in the country and 4 others are under observation.

32. In Y4, several TWG meetings on the drug component were held. TWG meetings serve as a tool for the provision of technical expertise to policy-makers. Examples of issues discussed in the TWGs included the adjustment of national TB treatment protocols to the latest WHO recommendations, recall procedures for expired TB drugs from DOTS rayons and their disposal. Some MOH Prikazes had a reference to TWG input.

In Q1 2008, the TWG discussed issues regarding LMIS implementation and problems raised during the usage of the new LMIS forms. The national drug coordinator emphasized the need for timely provision of quarterly reports in order to avoid inadequate delivery of drugs and raising the amount of expired drugs. TWG members proposed new ideas for the RCC proposal and suggested including some crucial points for the development of the electronic logistic information system called "Pipeline".

33. The NTP and Project HOPE drug specialists participated in all monitoring visits. All visits were conducted with active participation of republican, oblast and city coordinators (in the case of Dushanbe) on drug management. The main weaknesses that need to be addressed in the next year are the lack of a systematic approach to the preparation of the order and delivery of stock, and the delay in reporting to upper levels of NTP management.

In Q1 2008, Project HOPE drug specialists participated in monitoring and supervisory visits in the rayons of republic coordination, Machedon and Kulyab region.

#### **Improve Program Management, Supervision and Surveillance**

34. In Y4, 23 monitoring visits were conducted: 10 in the Kulyab region, 4 in Nurek, 4 in Machedon, 4 in Rudaki and 1 in the Children's TB hospital. Monitoring visits in Dushanbe were carried out by the city monitoring team.
35. In Q1 2008, four monitoring and supervisory visits were done in Rudaki and Machedon, and two visits were conducted in the Kulyab region.
36. The MOH and the chief specialist of TB continued emphasizing the TB problems, especially the monitoring activity. In November, a meeting with the National monitoring team was held, where problems found during the monitoring visits were discussed. Attention was focused mainly on the results of the Q3 and Q4 2007. At the end of the meeting, an adequate resolution was finalized.
37. During monitoring visits, Project HOPE specialists discovered some shortcomings in the field. 1) Oblast monitoring teams did not carry out independent monitoring visits regularly. Project HOPE mentioned this during meetings with oblast health authorities but no improvement was observed. Usually they explain this is due to the lack of financial resources. 2) In some rayons of the Kulyab oblast, coordination/integration between PHC and TB facilities are weak. It seems that TB problems are the main concern only for the TB specialist, and the PHC medical personnel's role in case finding of TB is neglected. 3) Treatment under direct observation is not followed in most of the places. Medical personnel give TB drugs to the patients once a month (or once in the whole course of treatment) and do not observe them. This causes irregularity and interruptions in treatment and as a result will likely lead to the development of resistance to the TB drugs. 4) Sputum collection procedure is not done correctly – it is not observed and the technique of the expectoration of the sputa is not correct, which can result in smear negative results by microscopy while severe changes are observed on the X-ray. 5) In some places, there is a notably low awareness by the patients regarding the disease and treatment procedures. It was found that many

patients were not aware of the length of the treatment and the importance of having their family members tested.

38. Project HOPE continues cooperation with partner organizations (UNDP, ARC and SINO) related to the monitoring of the Program. Project HOPE had several meetings with partners in terms of coordination and development of a unified approach for monitoring and evaluation in the country and strengthening of the role of oblast monitoring teams and rayon TB coordinators. The monitoring visit to Macheton hospital was carried out together with specialists of Project SINO. Also, Project HOPE provided technical assistance in conducting cohort analysis training for specialists of rayons supported by Project SINO.
39. In Y4, Cohort analyses workshops were carried out for 35 TB coordinators from USAID-supported rayons. In Q1 2008, 4 TB specialists took part in a cohort analysis workshop.
40. Project HOPE specialists participated in meetings of HIV/AIDS treatment, care and support that includes a TB/HIV group as sub-group.

### III. Community Advocacy and mobilization

41. The TWG on IEC/BCC meets on a quarterly basis, serving as an effective tool for coordination in the IEC field. According to the decision of the Secretariat of the CCM, a combined Thematic Working Group on IEC activities in HIV/AIDS, TB and malaria fields was organized. The TB IEC group, with all its members, was incorporated as a subgroup within the new group. At the meeting of the newly established group, the Project HOPE Regional Social Mobilization and Small Grant Specialist presented the results of two-years of work by the TB IEC group. In the TWG meetings held in Q2-Q4, the agenda included the following topics: presentation of the new IEC material on TB for various target groups of the population developed by Project HOPE, and the results of a pre-test of the new materials carried out by HLSC. In Q1 2008, the TWG also discussed some actions that were planned for inclusion in the RCC proposal.
42. In October 2007, Project HOPE, together with the RTBC, conducted TOT for the HLSC workers at the national, oblast and district levels. Thirteen trainers have been prepared and will be able to conduct trainings for community leaders. The TOT participants gained the following skills: a) working with adult audience with basic TB information for the population, and b) skills of organization work with leaders and active community members on IEC for the population. Furthermore, in December, those trainers conducted 4 trainings for community leaders in Dushanbe city, Kulyab, Vose and Rudaki districts under the agreement between Project HOPE and HLSC. As a result of those trainings, 82 people were trained on working with the population.
43. 75 members of the Treatment Support Group (TSG) continued activities in Kulyab city and region, Vose and Rudaki. Coordinators conduct monitoring and provide information about newly identified TB cases and defaulters. During monitoring they also deliver information on TB to patients' families. Thanks to their good work, a few patients who had interrupted their DOT resumed treatment.
44. The Project HOPE Social Mobilization and Small Grants Program coordinator and a representative of the HLSC took part in the "Regional workshop on IEC on TB prevention among population" that was organized in Tashkent by Project HOPE with the assistance of Arzum Ciglu from Johns Hopkins University. Continued collaboration with specialists of the HLSC is focused on increasing the long-term effect of the program.
45. In Q2 2007, the first round of the Small Grants Program was completed. The final analysis of the program was done based on reports of grantees (6 grantees), monitoring data and information provided by NGOs that were administrating the grants (2 administrating NGOs). As a result of six projects that were implemented in Dushanbe, Rudaki, Kulyab and Vose, 13,729 persons received information about TB, 6,256 leaflets on TB were distributed, 10 theater performances were staged in Jamoats and Makhalas of Rudaki rayon and Dushanbe, and 12 puppet shows were staged in Kulyab. Due to awareness campaigns conducted by volunteers in PHC facilities during the grant implementation period, 454 persons with TB symptoms came for a medical exam and TB was diagnosed in 49 cases.

The second round of the Small Grants Program started in September and was completed in Q1 2008. Four projects implemented activities on information and social mobilization of the population on TB:

- The NGO “Mairam” of the Temurmalik district of Kulyab Region trained 40 volunteers that are active community members of 2 villages, 570 meetings have been conducted among the population which covered 1,712 people with TB messages and 1,500 Tajik-language booklets on TB have been distributed to the population. The telecast on TB issues was broadcast on the Kulyab channel under the support of the NGO. In November, “Mairam” organized the first Round Table with participation of the Chairman of the Khukumat Temurmalik District, Jamoats and representatives of community volunteers.
- The Tajik Association of electronic Mass Media (TAJANESMI) prepared 10 social ads about TB for TV broadcasting in 2 languages: Tajik and Russian.
- The NGO “Nekroy” developed a booklet for their primary target group – labor migrants going to Russia by train. The labor migrants received information from railway workers. During the training for railway workers (stewards) of the Dushanbe-Moscow train, 25 of them got the information about TB. The modules on TB issues, 1000 booklets for working with target audience and questionnaires for labor migrants, were distributed among participants during the training.
- The NGO “SVAST” issued 3 publications with key messages on TB in the regional newspaper in Rudaki and prepared the ad for the radio performance on TB which was broadcast on 2 central radio channels.

46. A workshop for journalists, “Proper delivering of information on TB in Mass Media” was arranged by the NTP with the support of Project HOPE and took place in October in Kulyab. This workshop involved a total of 16 participants: representatives of Khatlon Regional Television, state channel “Saphina”, representatives of Regional radio channel, printing offices, and representatives of the Regional TB Centers.

In Q1 2008, a workshop for 20 journalists from Dushanbe was held. This workshop was organized by Project HOPE in cooperation with the MOH, the NTP and financed by USAID and GFATM Round 6. The agenda included: a special session on journalists ethics on TB issues coverage, the role of journalists in proper delivering of information on TB among population, a practical overview of archival articles on TB, etc. The USA Ambassador and the first Deputy of the MOH attended the opening ceremony. Workshop reporting was included into the news summary and was broadcast by central TV and radio stations. The next day a special press-conference on TB issues was held for mass media (30 journalists participated).

47. Activities devoted to World TB Day were organized in cooperation with various governmental structures as well as with local and international NGOs. The activities supported by the USAID grant included:
- IEC Campaign “*I can stop TB*” - Project HOPE conducted an IEC event in Dushanbe, Kokhi Jomi cinema-hall. The event gathered around 750 people (students, schoolchildren, medical workers) and included a theater performance on TB, a rap concert and a quiz on TB for youth. Prizes with World TB day symbols were given to winners of the quiz. The USAID Deputy Country representative and guests from the MOH, the Youth Committee, and the UNDP participated in the event.
  - In close collaboration with NTP and partners, and cost sharing with GFATM Round 3, Project HOPE organized round tables in Dushanbe, Kulyab, Kurgan-tube, Sugd and GBAO. The results of the TB program were discussed in these meetings.
  - Members of the Treatment Support Group received hygiene kits as incentives.
48. In Y4, a few types of IEC materials were developed, printed and distributed by Project HOPE: 22,000 health promotional booklets for general population, 5,000 booklets of “Rules for Sputum Collection” for medical personnel, 7,000 booklets and 500 posters for TB patients, and 5,000 copies of “TB patients’ counseling” for medical personnel.

49. In Q1 2008, Project HOPE, with USAID and GFATM financial support, printed and distributed 2,000 booklets for patients, 10,000 booklets for the general population and 5,000 copies of “Rules for Sputum Collection” for medical personnel. Partner organizations have been involved in distribution of the IEC materials : HLSC, Mercy Corp, the Red Cross, and the Red Crescent Organization.

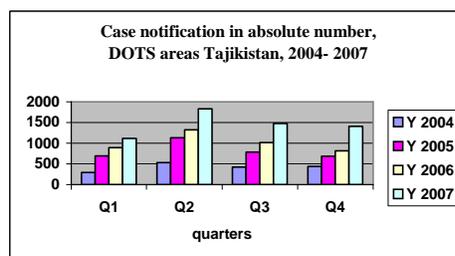
#### IV. Incentives and Enablers Program

50. In Q3 2007, Project HOPE and World Food Program (WFP) signed a new project proposal for the period of July 2007 – June 2008. Under this proposal, WFP allocated 1,391,592 metric tons (MT) of food.
51. In 2007, the Incentives and Enablers Program conducted food distribution and monitoring in 7 districts. The total amount of food distributed in Dushanbe, Rudaki, Konibodom, Khujand, Kulyab and Kulyab rayon, Vose and Mastoch was: wheat flour 761,234 MT, vegetable oil 25,422 MT, salt 11,036 MT and peas 70,733 MT.
52. In Q1 2008, a Take Home Ration Distribution and an Institutional Feeding Distribution were conducted in Dushanbe, Rudaki, Sugd and Khatlon Oblast. The total amount of food distributed was as follows: wheat flour 252,415 MT, vegetable oil 9,460 MT, salt 3,154 MT and peas 23,734 MT.
53. In Q1 2008, Project HOPE and WFP specialists began Operational Research (OR) on “Food impact on treatment outcomes of TB patients in Tajikistan”. The aim of the study is to identify the impact of the Food Program on treatment results of TB patients in five rayons before and after implementation of the Food program. For the first step, data on the patients from the Kulyab region was collected, 964 questionnaires were filled in using the TB register and medical cards.

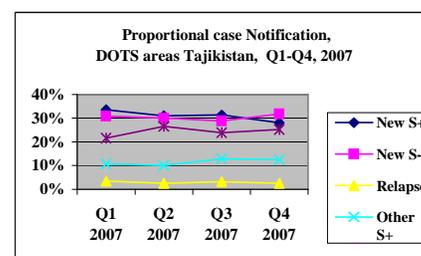
#### CHARTS

54. Chart 1 and 2 reflect data from 65 DOTS rayons.
55. Chart 3 reflects data from 52 rayons where smear conversion results are available.
56. Chart 4 and 5 reflect treatment outcomes of the patients from 41 rayons: Dushanbe, Rudaki, Vose, Kulyab, Varzob, Dangara, Khujand, Khorog, Rushan, Farkhor, Shurabad, Hamadoni, Muminabad, Baljuvan, Temur-Malik, Matcho, Kurgan-tube, Bokhtar, Vakhsh, Iavan, Nurek, Sarband, Khovaling, Kanibadan, Istravshan, Isfara, Penjikent, ShakhriNAV, Tursun-zade, Shungan, Hisaar, Jami, Kolkhozabad, Spitamen, Rasulov, Gafurov, Khurason, Ganchi, Jirgital, Nurobad and Tajikabad.

#### CHART 1



#### CHART 2



57. **Chart 1** reflects an increasing number of all new cases detected under DOTS. While in 2005 the absolute number of all new cases was 3,268 patients, the number for 2006 is 4,049 and in 2007 it reached 5,545. It is significantly higher than in 2005 due to DOTS expansion to new rayons. The DOTS coverage was 62% at the end of 2005, 78.8% in 2006 and 100% by the end of 2007.

58. **Chart 2** divides all TB cases registered in 2007 in various categories. The portion of new sputum smear positive cases among all new pulmonary cases remained stable during the year, in the 52% - 46.7% range, which is slightly less than in the previous year - 56-61.1%. There is a scope for DOTS program improvement as WHO suggests that the portion of TB smear-positive cases out of the total of pulmonary TB cases should be at least 65%. Project HOPE will continue to assist the NTP in strengthening links between PHC and TB services in order to better involve the PHC in TB control, particularly in case-finding and adherence to the microscopy method of diagnostic.
59. The portion of smear negative TB cases is relatively high – 49.6%, compared to the 2006 figure – 42%. According to the observations of the M&E team, this is the result of unobserved sputum collection procedure and an irregularity of external quality assurance. These shortcomings might cause mistakes in diagnostic and some smear positive cases were registered as negative TB cases.
60. The high percentage of the extra-pulmonary cases (24.5% of all cases) calls attention to the necessity of following the diagnostic algorithm for extra-pulmonary cases including the procedure for differential diagnosis with other diseases.

**Table 1. Absolute and proportional case notifications for 5 categories for the 4 quarters of 2007.**

	Q1 2007		Q2 2007		Q3 2007		Q4 2007	
New SS+	432	32.8%	640	30.7%	550	31.3%	392	27.9%
New SS-	398	30.2%	630	30.2%	507	28.8%	447	31.8%
Relapse	46	3.4%	54	2.6%	56	3.2%	37	2.6%
Other SS+	163	12.4%	209	10.0%	226	12.9%	175	12.4%
XP	279	21.2	554	26.5%	418	23.8%	355	25.3%
Total	1318	100%	2087	100%	1757	100%	1406	100

**Table 2. Sputum smear conversion at the end of the initial treatment period in absolute and proportional figures for Q3 2006 to Q2 2007 for different categories of smear positive TB cases.**

	Q3 2006			Q4 2006			Q1 2007			Q2 2007		
	Absolute numbers			Absolute numbers			Absolute numbers			Absolute numbers		
	Cohort	Conversion	%									
New	428	402	93.9	348	313	89.9	432	386	89.4	629	559	88.9
Relapse	27	21	77.8	28	21	75	46	42	91.3	56	43	76.8
Other	200	155	77.5	171	138	80.7	162	119	73.5	213	160	75.1

CHART 3

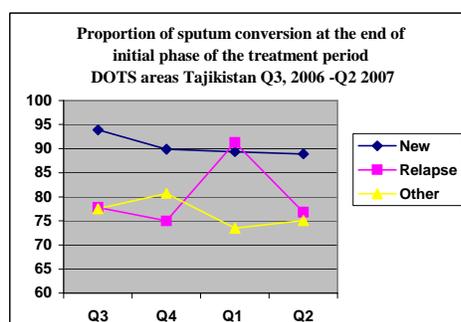
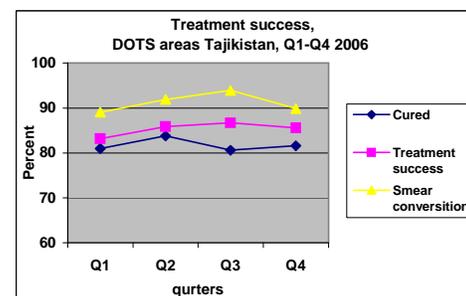


CHART 4



61. **Chart 3** reflects good results of smear conversion among new cases, it should be noted that the program has expanded without sacrificing its quality. This is probably a reflection of good adherence to treatment during the intensive phase.

**Table 3. Treatment outcome of new pulmonary SS+ cases, Q1 2006 – Q 4 2006**

	Q1 2006		Q2 2006		Q3 2006		Q4 2006	
	N	%	N	%	N	%	N	%
Notified	358		512		428		348	
Evaluated	358		511		428		347	
Cured	290	81.0	429	83.8	345	80.6	284	81.6
Completed	8	2.2	11	2.1	26	6.1	14	4.0
Death	16	4.5	21	4.1	17	4.0	12	3.4
Failure	26	7.3	31	6.1	15	3.5	20	5.7
Default	17	4.7	18	3.5	24	5.6	16	4.6
Transfer out	0	0	1	0.2	1	0.2	1	0.3

62. **Chart 4** shows that the cure rate is in the range of 80.6%-83.8% and treatment success rate - 84.1-86.3%. The good results are caused by a mixture of many factors, including better precision in case definition.

CHART 5

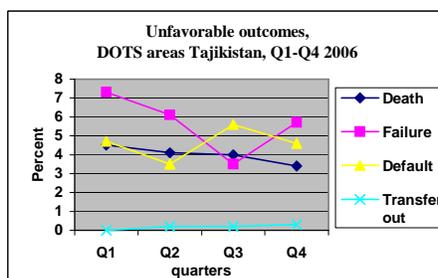
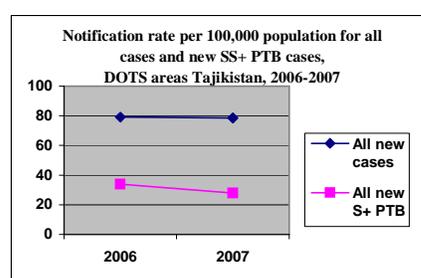


CHART 6



63. **Chart 5** shows unfavorable treatment outcomes (the low number of patients could lead to some quarterly variations that are not obviously a sign of major trends). Annual results were as follows: “transfer out” – 0.2 %, “default” – 4.6%, “failed” –5.6%, “death” – 4%.

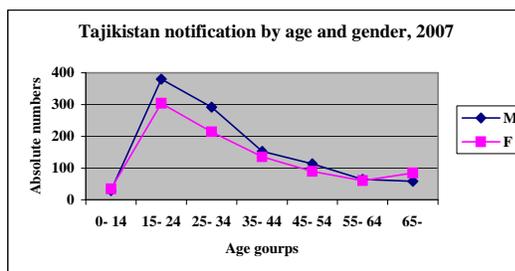
64. Death rate is varied by regions and was worse in rural areas that tend to be especially poor. Analysis of death cases reveals late detection due to patients’ limited access to health services.

65. Failure rates are within an acceptable range of 3.5 to 7.3%. The default rate during a year varied from 3.5% to 5.6. Improvement in this field is a result of efforts of the monitoring team following patients as well as IEC/BCC work with patients and their relatives ensuring that a patient completes a full course of treatment.

**Table 4. Notification rate per 100.000 population for all cases and new SS+ pulmonary cases in DOTS areas for the period 2005-2007**

	2005	2006	2007
All new cases	75,1	79,1	78.5
New SS+ cases	41,2	32	28

CHART 7



66. **Chart 7** shows the age and sex structure of the disease. The most affected group in absolute numbers is young women and men ages 15 – 24.

**Turkmenistan – Q1 2008****QUARTERLY PROGRESS SUMMARY**

1. During the period from April of 2007 to March of 2008, Project HOPE continued its collaboration with the Ministry of Health (MOH) and the Medical Industry of Turkmenistan (MOHMIT), the TB Prevention Center (TBPC), the TB Faculty of the State Medical Institute, and other national and international partners to fulfill the plans for the 4<sup>th</sup> year of the Program.
2. To meet the plans of the MOHMIT for implementing the DOTS strategy countrywide, Project HOPE assisted the MOHMIT with the implementation of DOTS in the entire Balkan velayat. Intensive preparation work preceded the implementation which allowed for the training of all 181 PHC doctors and also 159 PHC nurses in DOTS in the velayat.
3. 2 Trainings of Trainers (TOT) were organized in Ashgabat: one, on the Logistic Management Information System (LMIS) for key specialists of the central and velayat levels of the Program, with the purpose of strengthening the drug management system, was conducted by the Regional Drug Management (DM) Specialist and a JSI Consultant; another, on TOT for community leaders on TB, was conducted by the Regional Social Mobilization (SM) Specialist. Both TOTs were followed by a series of LMIS trainings in Balkan velayat for 87 TB and PHC personnel involved in drug management and for 35 community leaders.
4. 10 binocular microscopes and also reagents and consumables were provided to the MOHMIT: 5 of the microscopes were installed in Balkan velayat and the other 5 in other velayats of Turkmenistan.
5. Regular monitoring trips and meetings with Balkan velayat TB specialists were held by Project HOPE staff, together with the TBPC and the TB Faculty specialists.
6. Project HOPE regularly assisted the TBPC in the calculation of TB drug needs for Project HOPE/USAID sites and other velayats, in the development of drug distribution lists, analyzing reminders and the re-distribution of drugs whenever it was need.
7. Project HOPE/USAID provided assistance to the NTP in equipping and opening the DOTS training center in the TB Faculty.
8. All these activities facilitated implementation of the DOTS strategy in the Balkan velayat and supported the MOHMIT to implement DOTS in other velayats as well.
9. The National Strategy for TB Health Communication was approved by the MOHMIT. Informational materials for TB and PHC specialists were produced and distributed to the Project HOPE/USAID sites.
10. During Q1, 2008, the planned activities have been fulfilled in close collaboration with partners involved in TB control in Turkmenistan. Informational materials for the patients and general population have been developed and have been submitted to the publishing company for printing. The LMIS manual and recording/reporting forms were approved by the MOHMIT and are being revised by the TB chair. With the assistance of the Regional DM specialist and the JSI consultant, a training on the drug management cycle was conducted for specialists involved in drug management for the TB control system. Project HOPE, with its partners, organized and actively participated in the activities devoted to World TB Day 2008.

**I. BUILDING POLITICAL SUPPORT FOR EFFECTIVE AND SUSTAINABLE TB CONTROL**

11. During the year Project HOPE Turkmenistan was visited twice by officials from the USAID/CAR office: Karen Welch – Director of USAID/CAR Office on Education who met with NTP managers and took part in the ceremony of opening the DOTS Training Center in the TB Faculty that was equipped with Project HOPE/USAID support; Laurel Fain – Health and Education Office Deputy

Director conducted a number of meetings with the NTP managers and Project HOPE staff and traveled to the Project HOPE/USAID site Mary city to study the status of DOTS implementation and to identify problems and needs of the Program there.

12. Project HOPE specialists attended a partners meeting organized by the WHO office. At the meeting, the Strategic plan of the National Program was presented and other partners' contributions in implementing the Strategic Plan were discussed.
13. Project HOPE organized the partners meeting with the participation of representatives of the TBPC, TB Faculty, USAID, and WHO where the partners discussed and coordinated their activities in TB Control in Turkmenistan. Project HOPE presented the planned activities for Y5 of the Program and also discussed effective ways to utilize expected additional funds from the USAID.
14. The Project HOPE Turkmenistan office was visited by the Project HOPE CAR Regional Technical Advisor, Dr. Epcó Hasker. He held meetings with Dr K. Elyasov – the MOHMIT Deputy Minister, NTP managers, head of the TB Faculty of the State Medical Institute, and the USAID country office. During the meetings, the current issues of the TB Program, ways to overcome them, the need to coordinate activities of partners involved in the TB control in the country, and potential areas for future cooperation were discussed. He also organized a participatory planning meeting with the Project HOPE Turkmenistan technical team and drafted a proposal for utilizing funds allocated by USAID for the Turkmenistan TB Program.
15. Project HOPE prepared the order for lab equipment to be purchased in the next quarter.
16. CDC CAR representative Indira Aitmagambetova visited the Project HOPE Turkmenistan office. She shared their plans of the implementation of the ESCM system in Turkmenistan for epidemiological surveillance.

## **II. BUILDING HUMAN AND SYSTEMS CAPACITY FOR TB CONTROL**

### **Strengthening TB Laboratory Network**

17. Microscopy labs of Ashgabat, Mary, and Balkan velayat were monitored regularly by the TBPC specialists. In Q1 2008, during the monitoring visits the microscopy centers in Mary and in Balkanabad cities, Serdar and Bereket etraps were visited by the TBPC regional supervisor. The following issues, resulting from the fact that untrained personnel was preparing slides, were addressed in Bereket: a low proportion of AFB+ smears and low quality of the slides. To improve quality, it was recommended to have only trained personnel participate in slide preparation, to pay more attention to sputum collection, and to train the lab technician who is preparing the slides.
18. 10 microscopes and lab consumables were procured for Turkmenistan: 5 were handed over to the Balkan velayat TB Hospital for installation in the labs of the velayat TB Hospital and in Mahtumkuli, Etrek, Esenguly and Bereket etraps of the velayat, the remaining 5 microscopes were handed over to the MOHMIT and NTP to equip TB labs in 2 etraps of Mary and 3 in Lebab velayats, where the DOTS strategy was recently implemented. All microscopes in Balkan velayat were adjusted and set up to work by the head of the TB laboratory of the Balkan velayat TB Hospital.
19. A Comprehensive Strategic Plan for upgrading the Laboratory Service and capacity-building training plan were developed by the Project HOPE Regional Specialist, together with the NTP Lab Specialist. This plan will be part of the new National TB Program 2009-2015. A Supranational reference Lab was identified by the WHO. It is the lab of the Nederland's National Institute of Public Health and the Environment.
20. The Regional Lab Specialist conducted Advanced Training on Smear Microscopy for the managers of all 5 velayat central labs and the specialists of the National Central Lab. Emphasis was made on the management of the laboratories and on quality assurance.

### **Strengthening Human Resource capacity**

21. In Y4, Project HOPE raised an important issue to local partners of strengthening the supportive supervision component of the program. On the initiative of Project HOPE, the joint work was done for development and adaptation of training materials on supervisory visits. Project HOPE specialists served as trainers at the WHO organized trainings on supportive supervision at the velayat level, and later conducted the supervision training for Balkan velayat etrap specialists as well. To improve implementation of TB services into the PHC system, DOTS trainings for Balkan velayat PHC personnel were conducted and all 181 PHC doctors as well as 159 PHC nurses were trained in DOTS in the velayat. With support from Project HOPE/ USAID, a DOTS training center was opened at the TB Faculty of the Turkmen State Medical Institute. The center can accommodate groups of 25 and has been equipped with all the necessary training equipment.
22. In November 2007, Project HOPE conducted a training on epidemiology and use of EPI Info, and a follow-up training was conducted in March 2008. Participants were employees of statistical analysis departments of NTP and MOHMIT, as well as staff responsible for TB data management from the TB Faculty of the State Medical Institute and Velayat TB hospitals.
23. 5 DOTS trainings were conducted for PHC nurses in Balkan velayat for 88 nurses.
24. Project HOPE, in cooperation with USAID, funded an Internet Access and Training Program (IATP) which is administrated by the International Research and Exchange Program (IREX). Two 5-day trainings on use of the internet were organized for two groups of doctors from the TB Prevention Center. 18 doctors learned about basics of the internet, (ie. working with Internet Explorer browser). The doctors learned how to create and use e-mail. As the result of this training, they obtained tools for search and analysis of professional medical information on the internet.

#### **Creating Rational Drug Management System**

25. In Y4, considerable efforts were made toward implementation of the Logistic Management Information System (LMIS). The National TB Program specialists (2 representatives) and Project HOPE Drug management specialist attended the Regional Workshop on LMIS implementation. The LMIS Manual, recording and reporting forms, as well as instructions were translated into the Turkmen language, adapted, and approved by the MOHMIT. Due to the delay with the approval of LMIS process, the implementation was postponed and will start in the second quarter of Y5. LMIS training materials for the PHC and etrap level were developed and translated. LMIS Training of trainers was conducted by the Regional Drug Management Specialist and JSI Drug Management Consultant. The ToT was provided to: velayat DOTS trainers and DM coordinators, represented by TB unit managers and TB doctors; and the specialists from TB Faculty, TB Prevention Center and Ashgabat Department of Health Service. The participants were trained on how to introduce LMIS trainings and monitoring at the etrap level in the regions of the country.
26. One TWG on drug management was organized on the issue of national protocols for pediatric TB. As a result of discussions, the pediatric TB management protocols will be included in National TB guidelines. Pediatric and adult dosages, recommended by the WHO, were added to the National Essential Drugs List. Project HOPE assisted national partners in calculation of the needs of pediatric doses and in applying to the GDF for pediatric TB drugs. The application was approved by GDF. Project HOPE also assisted the TBPC in communication with the GDF and customs clearance procedures. Project HOPE supported the TBPC in monitoring and analyzing of the drug status in the velayats, calculation of needs, preparation of distribution lists, and redistribution of drugs if needed.
27. In Q1 2008, advanced copies of the LMIS manual and recording/reporting forms were handed over to the Director of the TBPC for submitting to the MOHMIT. TBPC managers and the TB Chair intend to revise the manual before beginning implementation. After consultations with an editorial company, it was discovered that a special Prikaz is needed for printing and using the mentioned materials. The Director of the TBPC was informed about this requirement.

28. A 4-day training on the Drug Management Cycle was conducted by the Regional Drug Management Specialist and a JSI consultant for 18 national and velayat level specialists who are involved in the management of TB drugs.
29. 6 LMIS trainings were provided to the PHC personnel of Balkan velayat, thus a total of 87 medical specialists were trained.
30. During the visit of the Regional Drug Management Specialist and JSI consultant in March 2008, monitoring of LMIS training for PHC level in Balkan velayat was carried out. Also, during their visit, the working meetings with the Director of TBPC and the TB chair were held and the following issues were discussed: questions were raised concerning revising the LMIS manual and forms; issuing of the Prikaz; allowing printing and usage of the LMIS Manual and forms were discussed; stages of reporting at the moment were cleared up; and also the question of assigning velayat DM coordinators was raised. The Director promised to follow up on the question with the Prikaz about printing, and also has showed reports from velayats, which show the presence expiring anti-TB drugs. The TB chair confirmed that the revision of the LMIS manual and forms would be completed soon.
31. On March 11, during monitoring of the drug status in the Balkan velayat, TB medicines, which were distributed on February 8, 2008 under the order made by TBPC administration, were found to have expiration dates of March and May 2008. On March 26-27, 2008, further monitoring of the TB drug status was performed in Balkan velayat, including monitoring of warehouses of the Balkan velayat TB hospital, Serdar etrap TB department, Bereket etrap's TB department, Gumdag etrap hospital, and also DOTS cabinets in Bereket and Gumdag. A surplus amount of HRZE, RH 150/75, and Z400 with short shelve lives was detected. Of additional concern, these are interchangeable drugs, i.e. if one uses HRZE, then RH 150/75 and Z400 are not used, and vice versa. In addition, in Gumdag the absence of registration documents of consumption and reminders of TB drugs was also detected. Recommendations based on monitoring findings were made on-site and provided to the Head of Balkan TB services as well.
32. Analysis of the drug status showed surplus amounts of the above mentioned drugs in other velayats as well. This issue was discussed with the Director of the TBPC. Once more, the necessity of implementation of LMIS was emphasized as the reliable system of recording/reporting of anti-TB drugs. Project HOPE offered their assistance to the TBPC for analysis of data and in drawing up distribution lists for Project HOPE pilot areas and in case of need, for all regions of the country. Also, it was indicated repeatedly that the TBPC drug coordinator should be more actively involved and should be given more authority.
33. The LMIS manual is still being revised by the TB chair. Once this is completed, the final decision about LMIS implementation will be made.
34. Due to the shortage of Streptomycin, water for injection and syringes stock, Project HOPE, at the request of the TBPC, contacted the GDF concerning acceleration of delivery of GDF Year 3 Grant drugs, particularly Streptomycin, water for injection and syringes. As a result, this part of the order has already been sent and is on the way to Turkmenistan.

#### **Improve Program management, Supervision, and Surveillance**

35. In Y4, DOTS implementation started in all remaining administrative units of Balkan velayat. These units are Makhtumkuly, Etrek, Esenguly, Bereket, Turkmenbashi etrap and Khazar, Gumdag, and Garabogaz towns. Thus, the WHO-recommended TB services are currently available for the whole population of Balkan velayat – 403,000 people. A seminar and round table meeting were organized for the Balkan TB specialists soon after implementation began to refresh skills obtained at preceding trainings. One Round table was organized in Mary as well. After Project HOPE made recommendations, the TBPC administration issued a Prikaz on appointment of regional supervisors for each velayat with a fixed monitoring schedule. Regular Monitoring visits were done, together with the national partners, in Ashgabat, Mary city and Balkan velayat sites. Shortcomings were identified and solutions were recommended.

36. In Q1 2008, one monitoring visit was done to Mary city TB facilities and no major discrepancies from standards were found.
37. One supervisory trip was done to Balkan velayat: Balkanabad and Gumdag cities and Bereket and Serdar etraps. In new sites, i.e. in Gumdag and Bereket some mistakes were found, particularly related with algorithms of TB patients' identification and with registration forms. Appropriate recommendations were made to the specialists on the site and to the Head of Velayat TB services.

#### **MDR TB**

38. Project HOPE provided financial and technical assistance for the Head of the TB Faculty to participate in the 10-day WHO courses held in Riga for TB Program Managers on organizing TB and MDR TB control.

### **III. COMMUNITY ADVOCACY AND MOBILIZATION**

39. In Y4, the National Social Mobilization Strategy was approved. Project HOPE, together with the Press Center of the MOHMIT, conducted a training for journalists on the "Role of Journalists in Informing the Society on TB Prevention Issues". Participants included the Regional Social Mobilization Specialist and representatives of different national and velayat-level mass media (TV, radio, newspapers, magazines) and the purpose was to further cooperation and consistent coverage of the TB issues. As the result of the training, a considerable number of articles were published in print media, a program on TB prevention was broadcast on TV, and several programs on TB control aired on national radio channels.
40. Project HOPE, together with the MOHMIT Press Center, organized a ToT for Community Leaders on TB advocacy activities for representatives of velayat AIDS Prevention Centers and for the Press Center employees (AIDS Prevention Centers are the main link in Public Awareness activities in velayats). The training was conducted with the participation of the Regional Social Mobilization Specialist and aimed at training the national trainers to further strengthen and improve the TB prevention activities among the population. The TOT was followed by 2 trainings for community leaders. Two TWGs were organized: one for discussion of informational materials for PHC medical personnel and the NTP logo, and another one for planning World TB Day 2008 activities and discussion about information materials for patients and the general population.
41. Information materials for PHC doctors and nurses have been printed and distributed. The NTP logo is being widely used in all public awareness campaigns. Information materials for patients and the population are ready to be printed. Preparation of a PSA video was delayed by the Press Center of the MOHMIT and development of toolkits for health care providers was postponed at the regional level until Y5.
42. In Q1 2008, Project HOPE took a leading part in the activities devoted to the World TB Day 2008 by coordinating efforts of local and international partners.
43. Preparation of a PSA video was discussed at the TWG meeting. Appropriated comments were made and corrections were recommended. Production of the video PSA has been delayed by the Press Center.
44. Informational materials on TB which were addressed to the general population, as well as materials addressing TB patients were finalized, pre-tested and approved by the TWG. These materials are currently being printed.
45. Together with the Press Center of MOHMIT, the Project HOPE Social Mobilization Specialist monitored the work of community leaders on TB awareness in Balkanabad. These community leaders are residents of Balkanabad city - teachers, trade union leaders, activists of the National Red Crescent Society, members of women and youth organizations. Briefings and discussions were held with different parts of the general population. They conducted 77 meetings with an average of 15-30 persons attending each (1,500 attendants in total). The following

recommendations were made by the Balkan AIDS center and the community leaders themselves to improve their work: to provide enough printed standard monitoring forms to the community leaders and another form to the AIDS center for quarterly report; and provide enablers to the community leaders.

46. Project HOPE facilitated organization of the following activities devoted to the WTBD:

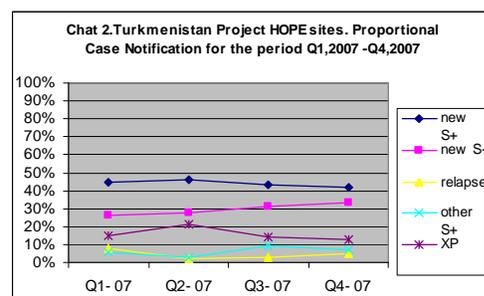
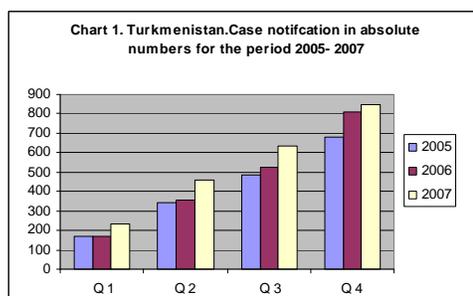
- On March 24, together with MOHMIT and TBPC, a scientifically-practical conference called “Urgent questions of TB” was held. All TB specialists of the country participated in the conference. The U.S. Ambassador in Turkmenistan, Richard Hoagland attended the conference and addressed the participants.
- The action for the schoolchildren in Balkanabad was organized together with the Balkan velayat’s AIDS Center, TB hospital and Press Center of the MOHMIT. The competition focused on skits centered around the TB theme and healthy lifestyle, and prizes were awarded.
- TB health education activities were organized for 200 military servicemen in Balkanabad city.
- Together with the National Red Crescent Society and the Press Center of the MOHMIT, an activity for the children registered at the TB dispensary was organized. The children recited poems, and performed skits and dances. All the children received prizes for their participation.
- Project HOPE specialists facilitated a health education activity organized by the National Red Crescent Society for their volunteers and the visitors of the Public Affairs Section of the US Embassy.
- Together with the National Red Crescent Society, ZdravPlus and Press Center of the MOHMIT, Project HOPE produced T-shirts and cups with the WTBD 2008 logo “I am stopping TB”. The cups and T-shirts were distributed during all the activities devoted to the WTBD.

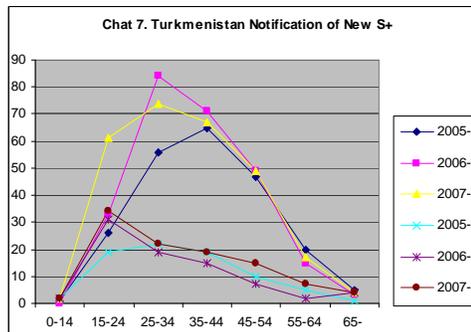
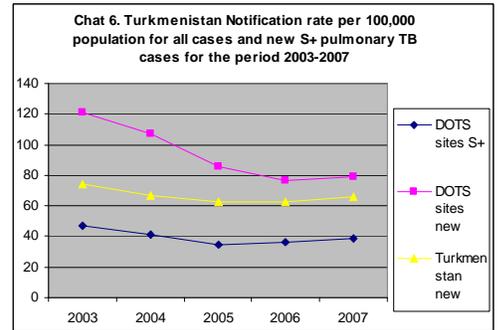
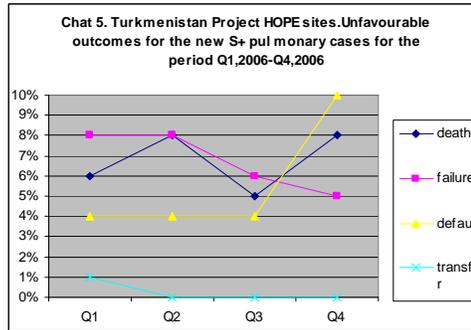
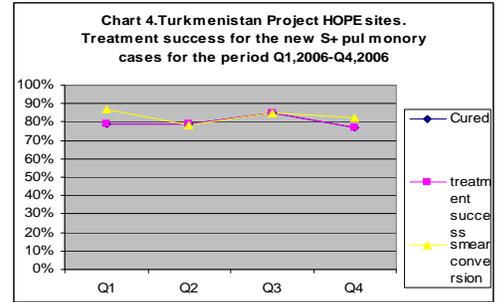
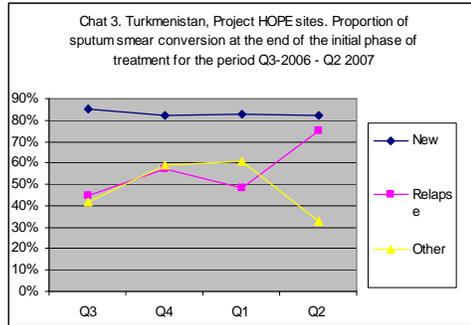
#### ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS IN CHARTS AND TABLES

47. Case notification has increased with DOTS expansion (chart 1). New smear positives are the most common type of case notified (chart 2). From chart 6 it becomes apparent that the proportion of new smear positives among new cases has steadily increased over the past 4 years, reflecting improvement in case finding and diagnosis. Remarkably the case notification rate for new smear positives is way above the WHO estimated annual incidence of 32/100,000 (chart 6).

48. For the 2006 cohort an 80% cure rate has been achieved (chart 4). Deaths, failures and defaults account in equal proportions for the 20% that did not have a favorable outcome (chart 5). Neither of these rates is very high and there is considerable fluctuation as a result of the small numbers evaluated. With DOTS now implemented nationwide the picture is likely to become increasingly clear, after which measures can be designed to further improve the cure rate.

49. With young adults making up the bulk of notified cases (chart 7), the epidemic shows no signs of waning yet.





**Table for the chart # 2**

Turkmenistan. Absolute and proportional case notifications for 5 TB cases types for the period Q1, 2007 – Q4, 2007

	Q1- 07		Q2- 07		Q3- 07		Q4- 07	
new S+	106	45%	105	46%	74	43%	92	42%
new S-	60	26%	64	28%	54	31%	72	33%
relapse	19	8%	4	2%	5	3%	10	5%
other S+	13	6%	9	3%	15	9%	16	7%
XP	35	15%	46	21%	24	14%	27	13%
Total	233	100%	228	100%	172	100%	217	100%

**Table for the chart # 3**

Turkmenistan. Sputum smear conversion at the end of the initial treatment period in absolute and proportional figures for the period Q3, 2006 – Q2,2007

	Q3-06			Q4-06			Q1-07			Q2-07		
	absolute numbers			absolute numbers			absolute numbers			absolute numbers		
	cohort	converted	%									
New	82	70	85%	107	88	82%	106	88	83%	105	87	82%
Relapse	11	5	45%	19	11	57%	19	9	48%	4	3	75%
Other	7	3	42%	22	13	59%	13	8	61%	9	3	33%

**Table for the chart # 4**

Treatment outcome for the period Q1, 2006 – Q4, 2006.

	Q1-06		Q2-06		Q3-06		Q4-06	
	Number	%	Number	%	Number	%	Number	%
Notified	72		74		82		107	
Evaluated	72		74		82		107	
Cured	57	79%	59	79%	70	85%	82	77%
Completed	0		0		0		0	
Death	5	6%	6	8%	4	5%	9	8%
Failure	6	8%	6	8%	5	6%	5	5%
Default	3	4%	3	4%	3	4%	11	10%
Transferred Out	1	1%	0	0%	0	0%	0	0%

**Uzbekistan Q1- 2008****QUARTERLY PROGRESS SUMMARY**

1. The end of the 1<sup>st</sup> quarter of 2008 also marks the end of the 4<sup>th</sup> project year for the Project HOPE Consortium. Details on the achievements for each of the main objectives during the quarter of report will be provided in the sections below. Each section will be preceded by a short update on overall developments during the 4<sup>th</sup> project year.
2. During the report period project HOPE was closely involved in new TB control Prikaz development
3. A participatory planning seminar was organized to define problems in the area of TB control in Uzbekistan
4. A series of trainings on “Management of TB program” were conducted for rayon and oblast level health managers.
5. A proposed costing study and a study on health financing, that was designed to understand resource allocation and provider payment system for tuberculosis services was not accepted by MOH
6. A TOT on “Smear microscopy” was conducted with the aim to train and establish a team of National trainers in Uzbekistan.
7. A series of trainings on “Supportive Supervision” for rayon and oblast TB coordinators have been completed. During the trainings participants discussed the goals and objectives of supervision at rayon and oblast level, gained interpersonal communication skills, learned knowledge on management styles as well as skills in defining and solving problems
8. Regional TOTs on “Counseling skills” were conducted for oblast TB Chief nurses. After successful completion of the TOTs, trained trainers conducted “Counseling skills” trainings for other nurses under supervision of Project HOPE specialists.
9. 4 regional TOT trainings on “Logistics Management Information System” were conducted. 53 TB program staff from 10 oblasts of Uzbekistan and the Republic of Karakalpakstan were trained as trainers on LMIS.
10. A “Rational drug use” operational research study has been completed and a first draft of the report has been made.
11. Project HOPE is actively participating in implementation of the National IEC strategy. A regional workshop on IEC work among the population was conducted together with John Hopkins University Bloomberg School. To increase population awareness about TB a TV PSA about TB symptoms was developed in Russian, Uzbek and Karakalpak languages. The PSA was pre-tested among target groups and approved by MoH for broadcasting on TV.
12. A series of activities dedicated to World TB Day (WTBD) was organized with joint efforts of National and International counterparts
13. During the quarter of report the documents for re registration of Project Hope as a branch office were submitted to the Ministry of Justice and documents for the banking commission were prepared and submitted as required by local regulations.

**I. BUILDING POLITICAL SUPPORT FOR TB CONTROL**

14. One of the main issues during the 4<sup>th</sup> project year was the development of a new Prikaz on TB control which will unify the currently existing DOTS and non-DOTS guidelines. Meetings continued throughout the year and consensus appears to have been achieved on several key issues. However the process has not yet been completed.
15. A participatory planning seminar has been organized in collaboration with the ZdravPlus project to

define problems in the area of TB control in Uzbekistan and also to find the ways to overcome these problems. Participants were invited from the Ministry of Health, TB Institute, DOTS Center, Ministry of Interior/ GUIN, AIDS Center, CAPACITY, WHO, MSF, ZdravPlus, Red Crescent, Ishonch (association of PLWHA) as well as heads of Oblast TB services from all 14 Oblasts, some doctors from general polyclinics and some TB patients. A problem tree was constructed by and discussed with all participants. Based on the problem tree, the following 6 objectives were defined:

- Reducing default rates
  - Reducing the prevalence of MDR TB
  - Reducing mortality as a result of TB/HIV co-infection
  - Improving health care seeking behavior for TB
  - Improving management of TB suspects
  - Improving case finding among risk groups
16. In order to improve of understanding TB program by health managers at rayon and oblast level “Management of TB program” trainings were conducted in three oblasts: Fergana, Samarkand and Andijan. for details please see paragraph 31 below
  17. During the 4<sup>th</sup> quarter Project HOPE started to support the Republican DOTS center in preparing an application for GFATM Round 8. The process is on going.
  18. During the year 2 roundtables were conducted in Samarkand oblast and Fergana Valley for specialists from Andijan, Fergana and Namangan oblast. Health managers, TB specialists and PHC doctors attended for discussing of performance of TB program.
  19. Thematic working groups were conducted on a needs basis. During the 4<sup>th</sup> project year such meetings took place on IEC-BCC, MDR-TB, operational research, training, laboratory and TB-HIV. Apart from the TB-HIV working group, none of the working groups has a formal status. Nevertheless the meetings were generally well attended and productive. The thematic working group on TB in prisons has still not been established.
  20. A protocol of costing study and a study on health financing, resource allocation and provider payment system for tuberculosis services has been developed and provided to head of National TB institute. Unfortunately he did not approve of the study.
  21. During the year Project HOPE supported participation of national TB specialist, Parpieva N.N., in IUATLD conference in Riga city from 27 to 30 June, 2007.

## **II. BUILDING HUMAN AND SYSTEMS CAPACITY FOR TB CONTROL**

### **Integration of TB control within a Reformed Health System**

22. During this year Project HOPE completed a series of “Supportive Supervision” trainings for rayon and oblast TB coordinators around the country by conducting the last regional Supportive Supervision trainings for oblast TB coordinators from Bukhara, Kashkadarya and Syrhandarya oblasts, for details please see paragraph 31 below.
23. During this year LMIS trainings for PHC nurses have been completed. It was conducted by trained trainers, under supervision of Project HOPE and Republican DOTS Center specialists. For details please see paragraph 34 below.
24. Heads of Oblast DOTS centers were also provided a 2-day seminar on the ‘Logistics Management Information System’ (LMIS).

### **Strengthening laboratory network**

25. During the 1<sup>st</sup> quarter of 2008, 2 monitoring trips were made to laboratories in Fergana oblast and

Tashkent city. Twelve laboratories were visited, 7 in TB facilities and 5 in general health facilities. Visits were carried out jointly by Project HOPE staff and counterparts from the DOTS Center and National Reference lab. In 12 facilities visited, the following problems were identified:

- No weekly internal quality control was conducted in 7 out of 12 facilities visited.
- Storing stained slides for external quality control were not adhered to in 5 laboratories.
- Poor quality of slide preparation in 7 out of 12 facilities visited.

26. During the quarter, of all TB suspects examined in PHC facilities visited, 0.9% turned out to be smear positive. The average number of slides examined per TB suspect case in those facilities was 2.99; average weekly workload per lab technician was 16, 4 slides. Of all diagnostic samples, 1,3 % were saliva in laboratories located in PHC facilities. The results of 57 slides rechecked (33 negatives and 24 positives) were all confirmed; only one grading error was identified. All findings and all problems identified were discussed with staff from facilities concerned and with the rayon TB coordinators.
27. During the quarter, the Project HOPE laboratory specialist participated as an observer on the 2<sup>nd</sup> regional seminar “The modern concept of smear microscopy” which was organized by WHO from March 13-17 in Tashkent. It was conducted for National and Oblast laboratory coordinators from all Central Asia countries. During the seminar, the following topics were discussed: a modern concept of external and internal quality assurance; investigation algorithm of laboratory mistakes based on panel testing and blinded rechecking; laboratory indicators and analysis skills; problem orientated supervision concept and planning skills in order to improve of a quality of smear microscopy examination.
28. During the year, 11 monitoring trips were made to laboratories in 6 oblasts. 54 laboratories were visited, 28 in TB facilities and 26 in general health facilities. Of all TB suspects examined in PHC facilities visited, 2.5% turned out to be smear positive. The average number of slides examined per TB suspect case in those facilities was 2.81; the average weekly workload per lab technician was 13.4 slides. Of all diagnostic samples, 1.3 % were saliva in laboratories located in PHC facilities. Results of 216 slides rechecked (119 negatives and 97 positives) were all confirmed; only 6 grading errors were identified.
29. During the year, a TOT on “Smear microscopy” was conducted by lab specialists from Kazakh and Uzbek Project HOPE offices with assistance of the Project HOPE Regional Lab Specialist. The aim of training was to establish a team of National trainers in Uzbekistan. Nine trainees successfully completed the TOT and are now ready to support the nationwide roll out of this training. Project HOPE finalized the Russian and Uzbek versions of the training curriculum, materials and handouts for TOT “Smear microscopy” in collaboration with Republican DOTS center, PIU GFATM and Reference laboratory. All materials have been officially passed to Republican DOTS center for further use.
30. Project HOPE laboratory specialist provided technical support for training on External Quality Assurance as a co-trainer, conducted by the national Reference laboratory specialists for 10 laboratory specialists from Tashkent city, Andijan, Fergana, Syrdarya, Navoi, Djizak, Tashkent, Khorezm, Namangan oblasts and Karakalpakstan.

#### **Strengthen Human Resource Capacity**

31. As mentioned earlier, the series of trainings on “Supportive Supervision” for rayon and oblast TB coordinators have been completed. During the quarter, the trainings on supervision for oblast TB coordinators from Bukhara, Surhandarya, Kashkadarya oblasts were conducted. Participants discussed the goals and objectives of supervision at rayon and oblast level, gained interpersonal communication skills, knowledge on management styles as well as skills in defining and solving problems. All skills taught were strengthened during field visits to TB dispensaries and primary health care facilities. Participants perceived the training as highly relevant to their daily work.
32. During the quarter, four regional TOTs on “Counseling skills” were conducted for oblast TB Chief nurses from 10 oblasts in Urgench, Ferghana, Samarqand and Bukhara cities. Five trainings on “Counseling skills” were conducted by trained trainers under the supervision of Project HOPE

specialists in Tashkent, Urgench, Ferghana, Samarqand and Bukhara cities. For details please see Objective 3 below.

33. Project HOPE prepared a 3 days seminar on “TB management at rayon and oblast level”, including a training curriculum, guidelines for facilitator and participants, presentations and handouts. Six seminars for rayon and oblast decision makers from health departments were conducted in Fergana, Samarqand and Andijan oblasts. Participants discussed the goals and objectives of the TB program, program indicators, supervision system at rayon and oblast level, gained epidemiological analysis skills, gained knowledge on management styles as well as skills in defining and solving problems. The case detection and treatment on the continuation phase problems have been discussed in detail. Participants perceived the training as highly relevant to their daily work.

#### **Creating Rational Drug Management Systems**

34. During the 4<sup>th</sup> year of the project 4 regional TOT trainings on “Logistics Management Information System” were conducted. 53 TB program staff from 10 oblasts of Uzbekistan and the Republic of Karakalpakstan was trained as trainers on LMIS. Most of them conducted 3-4 trainings under supervision of Project HOPE and Republican DOTS center specialists. At this time 19 trained trainers have enough teaching skills and knowledge and can conduct trainings by themselves.
35. At the beginning of the 4<sup>th</sup> year, a regional seminar for Central Asian countries on “Logistics Management Information System” was conducted. A John Snow Inc. consultant facilitated the seminar. After that an important activity realized was the completion of the Logistics Management Information System (LMIS) and its roll out to other oblasts of Uzbekistan. The series of trainings on “Logistic Management Information System” for drug specialists at the rayon level, including PHC facilities, in 10 oblasts were completed. Last series of 1-day trainings were conducted in Samarkand, Djizak, Tashkent oblasts and Karakalpakstan by 8 newly trained trainers under supervision of Project HOPE and Republican DOTS center specialists. Chief nurses and nurses responsible for DOT from PHC facilities, chief nurses from rayon health departments and drug specialists from rayon and oblast TB dispensaries participated. Among 8 trainers, 6 demonstrated good teaching skills and knowledge, 2 were adequate, but still in need of improvement. The Project HOPE drug management specialist will continue to work with the trainers to further improve their skills.
36. The data analysis of the “Rational drug use” operational research study has been completed and a first draft of the report has been made. The preliminary results show that for new TB cases treatment regimens and dosages prescribed are adequate. Treatment is administered regularly though DOT is poorly adhered to. Patients incur substantial costs as a result of non-TB drugs being prescribed. Further discussion of results with partners during the next quarter and identifying ways to improve of patient adherence by rationalization of non-TB drug prescriptions and strengthening of DOT is planned.
37. During the reporting period, 7 monitoring visits were conducted to TB facilities as well as to general PHC facilities. Among all oblasts visited, most problems were identified in Tashkent, Djizak, Namangan, Fergana oblasts and Tashkent city. In TB facilities DOT was well observed, in PHC facilities this was not always the case. The main problems were:
  - Lack of coordination on transfer of TB drugs between oblast and rayon TB dispensaries after end of intensive phase of treatment.
  - Difficulties of coordination on transfer of TB drugs between rayon TB dispensaries and PHC facilities due to misunderstanding of LMIS.
  - Insufficient TB drugs for children in regions where Stop TB kits have been introduced.
  - Based on the findings from last monitoring trips, the most problems in rational drug use were identified in Tashkent city and Djizak oblast. According reports for 24 % (16 out of 68) patients had been prescribed incorrect dosages of TB drugs or incorrect regimens of treatment. But most of them are re-treatment and chronic cases.

- Last monitoring in Khorezm oblast showed that doctors prescribed 2<sup>nd</sup> line TB drugs for “chronic” TB patients, in spite of the lack of an MDR department.

Problems identified were discussed with those responsible at Oblast and/or rayon level.

38. An electronic version of LMIS called ‘Pipeline’ and guideline has been received from Regional drug management specialist. At the time of reporting, the Uzbekistan drug management specialist is familiarizing herself with it. Another program currently used in Uzbekistan is also being assessed and compared to ‘Pipeline’ to see which program is most suitable. This is to be discussed further during the next thematic working group session.
39. Based on the results of the “Rational drug use” operational research an abstract has been made and submitted to the 39<sup>th</sup> International IUATLD conference.

#### **Improve Program Management, Supervision and Evaluation of Treatment Outcomes**

40. In order to achieve this objective, the main focus during the 4<sup>th</sup> project year has been on improving the supportive supervisory system at rayon level and creating supervisory capacity at oblast level. After consensus had been achieved on the concept of having an oblast TB coordinator supervising the rayon level, a curriculum was developed for training these oblast TB coordinators as supervisors.
41. Another focus area during the 4<sup>th</sup> project year related to this objective has been operational research. In order to improve rational TB drug use, Project HOPE conducted a detailed study into the issue of prescribing practices for TB in Uzbekistan. Details are provided in the section in objective II above.
42. Supervision at the rayon level is going on with varying degrees of success. In some rayons there has been a real change and rayon TB coordinators are actively involved in supervision of PHC facilities and laboratories, in other rayons not much has changed. A major obstacle in all rayons is lack of transport for carrying out supervisory trips. Furthermore, most rayons have too many PHC facilities for one single person to regularly visit. This is often solved by splitting up rayons into three or more geographical zones, each zone having its own supervisor.
43. Supervision from oblast to rayon level was embarked upon with varying degrees of success too. They have the same problem with transport for carrying out supervisory trips. But in comparison with supervision at the rayon level, these visits are carried out more regularly.
44. Once responsibility for supervision is shifted to rayon and oblast level, supervisors from the higher level will need to change their approach. This includes Project HOPE supervisors and their DOTS Center counterparts. Rather than to directly monitor DOTS implementation, these supervisors will now need to supervise the work of rayon or oblast level supervisors. The discussion of this issue began and completion of recommendations is expecting during next quarter.
45. Trainings on the “Management of TB program” for decision makers at rayon and oblast level have been conducted in three oblasts. Further continuation of this activity in other oblasts is planned for the 5<sup>th</sup> project year. For details please see Objective II.
46. During the year, Project HOPE monitoring visits were carried out according to plan, excluding last three visits, which were postponed due to banking problems. Together with the counterparts from the DOTS Center, Project HOPE staff conducted monitoring visits in 117 Rayons in Andijan, Fergana, Namangan, Syrdarya, Samarqand, Tashkent, Djizak and Khorezm Oblasts, Tashkent City and the Autonomous Republic of Karakalpakstan. Visits outside the 6 pilot Oblasts for the USAID grant were financed through GFATM.

#### **MDR-TB management**

47. During the 4<sup>th</sup> project year Project HOPE was involved in the process of preparing a manual for DOTS Plus pilots based on the WHO “Guidelines for the programmatic management of drug resistant tuberculosis” and participated in TWG meetings, which were organized by the Republican DOTS

Center (RDC) for discussing it. The guidelines are being finalized now and will be included as a part of the new Prikaz.

48. During the 4<sup>th</sup> project year Project HOPE specialists participated in a meeting, which was organized by the RDC for discussing of expansion of the DOTS Plus program in Karakalpakstan. The meeting was attended by representatives from the MoH of Karakalpakstan, RDC, MSF, oblast and rayon TB facilities.
49. Data entry of results of the DST survey in Tashkent city into the SDRTB4 database is ongoing. At this time data for 615 patients has been entered into the database. Among these, 109 patients are new smear positive. To investigate the prevalence of MDR TB, a DST survey was initiated in Tashkent City, starting on January 1st, 2006. The official data on the WHO website showed 14% prevalence of primary MDR TB among new cases. Based on this, it was decided to conduct a study to investigate the relationship between initial MDR and failure or relapse, while at the same time trying to substantiate the reports on high relapse rates.
50. The study protocol and questionnaire were developed, discussed with partners and approved by National Ethics Committee of MoH of Uzbekistan. At the moment we are waiting permission from MoH to visit facilities in Tashkent city, which were included in the DST survey.

#### **TB/HIV management**

51. In the field of TB-HIV, during the 4th project year, Project HOPE has been actively participating in the thematic working groups established in the framework of the CAPACITY project. This project has established a TB-HIV pilot in Tashkent City and Tashkent Oblast, focusing mainly on improving cooperation between TB and HIV services. The system is now going to be rolled out nationwide.
52. During the 4th year of project, Project HOPE specialists were involved as well in the process of preparing monitoring and evaluation checklists and guidelines for supervisors as preparing of protocol "Methods of TB Detection, Registration, Treatment, and Prevention in HIV-Patients in the Republic of Uzbekistan".

#### **TB in prisons**

53. During the 4<sup>th</sup> project year Project HOPE advocated for development of the thematic working group on TB in prisons, but it has not yet been established.
54. The Project HOPE technical advisor participated in a seminar on TB in prisons organized by the Ministry of Interior for the occasion of World TB Day.
55. Two indicators related to TB in prisons were included in the supervision check list for oblast level. These indicators both relate to continuity of treatment among released prisoners.

#### **III : Raising awareness about TB among health providers and communities**

56. During the year Project HOPE is actively participated in implementation of the National IEC strategy. A regional workshop on IEC work among the population together with John Hopkins University Bloomberg School was conducted. As a result TWG members in collaboration with advertising agency developed a PSA about TB symptoms for the general population in Russian, Uzbek and Karakalpak languages. The PSA was tested among target groups and approved by the MoH for broadcasting by TV agencies. 50 copies of the PSA were passed to the Health Institute and its branch offices, all TWG members, and journalists.
57. Based on the "Patterns of defaulting from tuberculosis treatment, and risk factors related to defaulting in Tashkent City" operational research findings, a five day TOT on counseling skills was organized. It has been facilitated by an international consultant from Moldova and Project HOPE specialists. Training materials were adapted to be used for TB facilities. During the year, 5 TOT on "Counseling skills" were conducted in Samarqand, Khorezm, Bukhara and Ferghana oblasts and Tashkent city. Six trainings on "Counseling skills" were conducted by trained trainers under supervision of Project HOPE specialists in the same regions. As a result, TB nurses are providing TB information to patients

on regular basis and in a consistent manner. A toolkit containing key messages on TB for use by nurses was developed, tested and approved by the TWG. It will be printed and disseminated during next quarter.

58. On the eve of the World TB Day, 2 trainings for journalists were conducted under the slogan "I can stop TB!" announced by the Stop TB Partnership. One training was conducted from February 12 to 14 for students of international journalism faculty of Tashkent State World Languages University by a trained journalist trainer and Project HOPE specialist. As result, well-informed and motivated volunteers have been prepared to provide TB information for general population. The second training was from February 25 to 27 in collaboration with the International Retraining Journalist Center for professional journalists working in electronic and printing mass media agencies from 6 regions of Uzbekistan. They were journalists who are especially interested in health issues. As a result, they prepared a series of materials related to TB which has been published and broadcasted.
59. In March 24 a display of children's art work for the contest «Children for the world without TB» was organized in collaboration with partners in one of the capital's first-rate park where art work produced by children on admission in TB hospitals was on display. In the context of the display a competition of drawing on asphalt also was held by a similar name. This activity on social mobilization of population has already became an annual tradition and widely covered by mass media. This year the activity was conducted by support of the Fund "Batir Zakirov" which prepared concert program with participation of Ravshan Zakirov - well-known Uzbek singer who is the director of this fund. Throughout the concert children's groups presented key information on TB to the public during the process of their appearing on stage appearances ("TB is curable!", "Symptoms of TB", etc). Also students-volunteers were participated during this action.
60. The press conference dedicated to the World TB Day was conducted in the National press centre in Tashkent city on March 27, 2008. It was conducted by International retraining journalist centre in cooperation with the Republic DOTS Centre of the Ministry of Health of the Republic of Uzbekistan with support from the Project HOPE/TB program. Representatives from the Ministry of Health of the Republic of Uzbekistan and international organizations which conduct activities on prevention of TB in the Republic of Uzbekistan, as well as donors participated in the press conference. Also a competition among journalists for better coverage of TB in mass media was announced. The goal and aims of this competition are to get mass media and large community to problems of prevention and treatment of tuberculosis, to help to disseminate the information against with this disease among population.
61. 4 TOT on counseling were conducted for head of nurses from Oblast TB hospitals of Samarkand, Bukhara, Khorezm and Ferghana valley. During the process of TOT the nurses were acquainted with educational methods which recommended for conducting trainings on counseling. Several seminars on counseling were conducted for nurses from a similar Oblast TB hospital and first TB clinic hospital of Tashkent city. During the seminars participants got knowledge and developed skills on counseling TB patients during the hospital based phase of treatment.
62. The article was prepared for medical journal based on qualitative research "Patterns of defaulting from tuberculosis treatment, and risk factors related to defaulting in Tashkent City", conducted by Project HOPE in Tashkent city in 2007.
63. During the 4th year of the project, Project HOPE specialists participated in a TWG meeting, which was organized by the Red Crescent Society to discuss ways and possibilities for IEC for MDR patients in Tashkent city.

#### **ANALYSIS OF EPIDEMIOLOGICAL DEVELOPMENTS:**

64. Though DOTS implementation has generally been successful, not much change can be observed in the standard indicators from pilot rayons over the past 7 years. Case detection for new smear positive cases remains low, just above 40% of the estimated annual incidence (table 4). Treatment success rates stay stable between 70 and 80% (chart 4), smear conversion rates range from 85 to 90% (table 2, chart 4).

65. Treatment success rates are not too far from the 85% WHO target, but there has been no real improvement over the years. Failure rate about twice increased in the 4<sup>th</sup> quarter, 2006, and has been a sharp increase over the year 2006.
66. The investigation of default reasons showed that many of defaulters live in the cities (Tashkent, Andijan and Ferghana), have concomitant disease (diabetes, HIV/TB) and detected late (36.8% - 7 out of 19). Moreover, official data on the WHO website showed 14% prevalence of primary MDR TB among new cases for the same period. This information indicates that there is a need to conduct operational research to investigate the relationship between initial MDR and failure outcome.
67. Training more staff and intensifying supervision from central level is unlikely to have any impact on the problems mentioned. During the final project year, Project HOPE will shift its focus to further stimulating local capacity to supervise TB program implementation. In addition Project HOPE will continue to critically review the existing TB program set up and advocate for improvements in accordance to locally identified possibilities and needs.

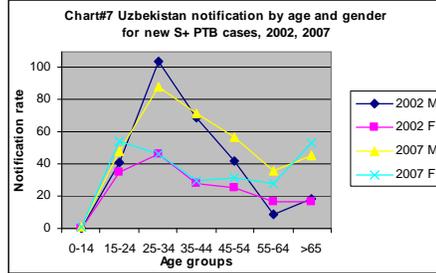
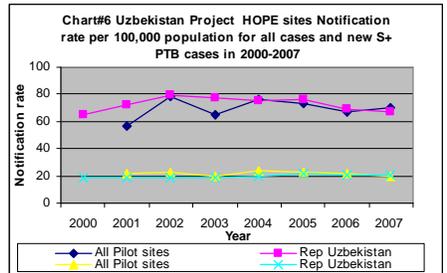
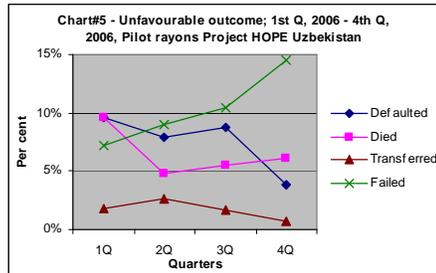
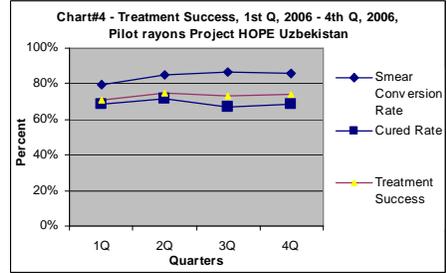
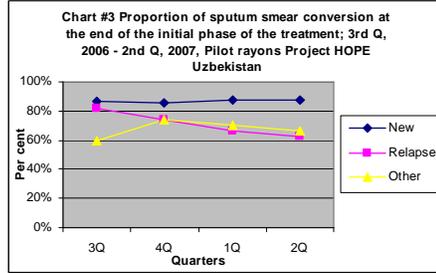
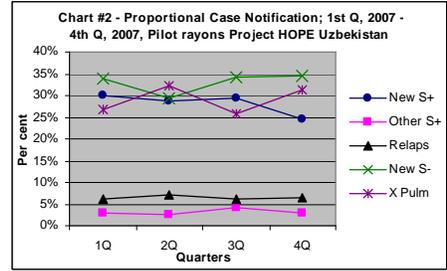
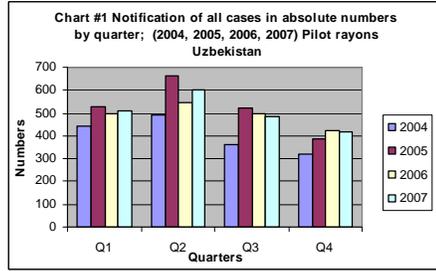


Table 1  
Absolute and proportional case notifications for 5 TB categories  
from 1<sup>st</sup> quarter of 2007 till 4<sup>th</sup> quarter 2007 (Pilot rayons, Project HOPE, Uzbekistan)

	Q1		Q2		Q3		Q4	
	absolute numbers	%						
New S+	158	30%	131	29%	158	30%	105	25%
Other S+	15	3%	25	6%	15	3%	12	3%
Relapse	33	6%	31	7%	33	6%	28	7%
New S-	179	34%	148	33%	179	34%	148	35%
Extra Pulm.	141	27%	115	26%	141	27%	134	31%
Total	526	100%	450	100%	526	100%	427	100%

Table 2  
Absolute and proportional sputum smear conversion at the end of the intensive phase from 3<sup>rd</sup> quarter of 2006 till 2<sup>nd</sup> quarter of 2007, for different categories of smear positive TB cases  
(Pilot rayons, Project HOPE, Uzbekistan)

	Q3			Q4			Q1			Q2		
	absolute numbers			absolute numbers			absolute numbers			absolute numbers		
	cohort	converted	%									
New	183	159	87	131	112	85	158	138	87	177	155	88
Relapse	28	23	82	31	23	74	33	22	67	43	27	63
Other	35	19	54	49	33	67	38	27	71	50	31	62

Table 3  
Treatment outcomes for new smear positives from 1<sup>st</sup> quarter 2006 till 4<sup>th</sup> quarter 2006 (Pilot rayons, Project HOPE, Uzbekistan)

Outcome	Q1		Q2		Q3		Q4	
	N	%	N	%	N	%	N	%
notified	92		175 <sup>1</sup>		188 <sup>2</sup>		1313	
evaluated	92		174		186		130	
cured	67	73	117	67	134	71	90	69
completed	2	2	7	4	6	3	7	5
death	6	7	16	9	9	5	8	6
failure	8	9	12	7	17	9	19	15
default	6	7	18	10	15	8	5	4
transfer out	3	3	4	2	5	3	1	1
		100		100		100		100

Table 4

Notification rate per 100,000 populations for all cases and new S+ PTB cases  
Pilot rayons and country, Uzbekistan

Site	Year								
	2000	2001	2002	2003	2004	2005	2006	2007	
All cases Pilot sites		56.4	78.7	64.8	76.0	73.0	67.0	70.0	
All cases Uzbekistan	64.5	72.4	79.1	77.2	75.4	75.9	69.2	67.5	
New Sm+ves Pilot sites		21	22	20	24	23	22	20	
New Sm+ves Uzbekistan	19	19	19	18	20	22	21	21	

<sup>1</sup> In one case diagnosis was cancelled

<sup>2</sup> Two cases was cancelled from DOTS treatment: one – cirrhosis, the other – refuse treatment and go abroad

<sup>3</sup> In one case diagnosis was cancelled