



**USAID**  
FROM THE AMERICAN PEOPLE

# PREVENTING HIV/AIDS AND HEPATITIS B&C IN MOLDOVA

FINAL REPORT

**March 2009**

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of Emerging Markets Group, Ltd. and do not necessarily reflect the views of USAID or the United States Government.



# PREVENTING HIV/AIDS AND HEPATITIS B&C IN MOLDOVA FINAL REPORT

FINAL REPORT

**Submitted by:**  
Emerging Markets Group, Ltd.

**Submitted to:**  
USAID/Moldova

**Contract No.:**  
GHS-I-02-03-00031-00

## DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.



---

## TABLE OF CONTENTS

<b>ACRONYMS.....</b>	<b>II</b>
<b>INTRODUCTION .....</b>	<b>1</b>
BACKGROUND AND OVERVIEW .....	1
SUCCESSIONS .....	2
CHALLENGES .....	4
<b>PROJECT RESULTS .....</b>	<b>6</b>
OBJECTIVE 1: STRENGTHEN VOLUNTARY COUNSELING AND TESTING (VCT) SERVICES FOR HIV/AIDS AND INTEGRATE THEM WITH HEPATITIS B AND C SERVICES .....	6
<i>Achievements</i> .....	6
<i>Recommendations for Future Programming</i> .....	7
OBJECTIVE 2: STRENGTHEN PROGRAMS IN BEHAVIOR CHANGE COMMUNICATION (BCC) TO PREVENT THE TRANSMISSION OF HIV/AIDS AND HEPATITIS B AND C AND TO REDUCE THE STIGMA AND DISCRIMINATION ASSOCIATED WITH HIV/AIDS.....	7
<i>Achievements</i> .....	8
<i>Recommendations for Future Programming</i> .....	9
OBJECTIVE 3: IMPROVE THE SAFETY OF BLOOD AND BLOOD PRODUCTS .....	9
<i>Achievements</i> .....	10
<i>Recommendations for Future Programming</i> .....	10
OBJECTIVE 4: STRENGTHEN THE LABORATORY CAPACITY TO DIAGNOSE HEPATITIS B AND C AND TO IMPROVE EPIDEMIOLOGICAL SURVEILLANCE.....	11
<i>Achievements</i> .....	11
<i>Recommendations for Future Programming</i> .....	12
OBJECTIVE 5: IMPROVE GUIDELINES FOR MEDICAL PRACTICES TO PREVENT THE TRANSMISSION OF INFECTIONS OF HIV AND HEPATITIS B AND C IN HEALTHCARE FACILITIES AND SUPPORT THE IMPLEMENTATION OF THESE PRACTICES .....	13
<i>Achievements</i> .....	13
<i>Recommendations for Future Programming</i> .....	14
<b>PROJECT IMPACT AND LESSONS LEARNED .....</b>	<b>16</b>
 <b>ANNEXES:</b>	
ANNEX 1: PROJECT PERFORMANCE MONITORING PLAN	
ANNEX 2: PROJECT RESULTS PRESENTATIONS	
ANNEX 3: SELECT CASE STUDIES	



---

## ACRONYMS

BCC	Behavior Change Communication
CDC	Centers for Disease Control and Prevention
COP	Chief of Party
CSW	Commercial sex worker
EMG	Emerging Markets Group, Ltd.
GOM	Government of Moldova
IC	Infection Control
IDU	Intravenous drug user
IEC	Information, Education, and Communication
ISO	International Organization for Standardization
KAP	Knowledge, Attitudes and Practices
M&E	Monitoring and Evaluation
MIS	Management Information Systems
MOH	Ministry of Health
MSM	Men who have sex with men
NBTC	National Blood Transfusion Center
NGO	Non-Governmental Organization
PD	Process document
PEPFAR	President's Emergency Plan for AIDS Relief
PHHP	<i>Preventing HIV/AIDS and Hepatitis B&amp;C in Moldova Project</i>
PMTCT	Prevention of Mother-to-Child Transmission
PMP	Performance Monitoring Plan
QA/QC	Quality assurance/quality control
SOP	Standard operating procedure
STTA	Short-Term Technical Assistance
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing



## INTRODUCTION

The Preventing HIV/AIDS and Hepatitis B and C Project (PHHP) began in June 2006 and was planned as a four-year, US \$6.2 million effort in Moldova. The United States Agency for International Development (USAID) contracted the Emerging Markets Group (EMG) to implement PHHP with assistance from two subcontractors—the American International Health Alliance and Pathfinder International. USAID/Moldova was forced to curtail funding in October of 2008 in response to a funds directive from USAID/Washington. Subsequently, the Project was reorganized into a two-and-a-half year program. Despite a shorter-than-anticipated implementation period, PHHP was successful in meeting most of its targets and in its efforts to support and strengthen ongoing programs of Moldova’s Ministry of Health (MOH), the National AIDS Center, the National Blood Transfusion Center (NBTC), the Center for Preventive Medicine and other key government agencies. Implementation was in line with government policies and strategies, and this contributed to immediate results and the establishment of solid frameworks for sustainability. Throughout implementation, PHHP cooperated closely with international organizations such as UNAIDS, the World Bank, the World Health Organization, as well as the Global Fund to Fight AIDS, Tuberculosis (TB) and Malaria.

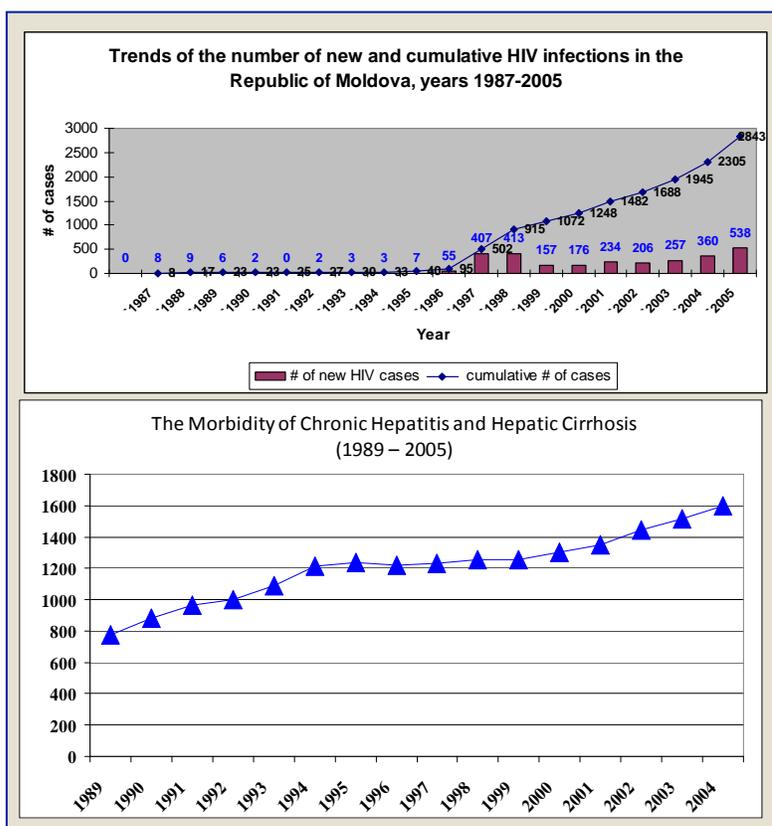
## Background and Overview

Across the Republic of Moldova, declining economic and social conditions, increased risk behavior of young people, inadequate in-hospital infection control, and inability to assure the safety of donor’s blood have lead to increased HIV and viral hepatitis B and C incidences. In fact, viral hepatitis is the fifth leading cause of death in Moldova and mortality rates from the disease are seven times higher than in the rest of Europe. HIV/AIDS and viral hepatitis are widely spread among high risk groups, but also among the general population. PHHP addressed Hepatitis B&C, a major public health threat and a common HIV co-infection in Moldova. It should be noted that no other donor-funded program in the country did.

In accordance with USAID’s Moldova Country Strategy, this Project contributed to its “Investing in People” goal and worked towards the objective of ensuring that the social safety net reached vulnerable groups. The goal of PHHP was to decrease the transmission of HIV/AIDS and viral hepatitis B & C in Moldova through cost-effective preventive measures thereby contributing to a reduction in public health risk of these diseases.

More specifically, the Project had five objectives:

1. Strengthen voluntary counseling and testing (VCT) services for HIV/AIDS to meet WHO and UNAIDS standards and expand VCT capacity to integrate viral Hepatitis B and C services





2. Strengthen programs in behavior change communication (BCC) to prevent the transmission of HIV/AIDS and Hepatitis B and C and to reduce the stigma and discrimination associated with HIV/AIDS
3. Improve the safety of blood and blood products in Moldova, assuring specifically blood free of HIV and Hepatitis B&C
4. Strengthen the laboratory capacity to diagnose Hepatitis B and C and to improve epidemiological surveillance
5. Improve guidelines and update safe medical practices in accordance with international standards that will reduce cross-contamination with HIV and viral Hepatitis in healthcare facilities and support the implementation of these practices.

PHHP led efforts to assist the Government of Moldova to improve blood safety, to strengthen the laboratory capacity and epidemiological surveillance and to promote sustainable changes in policies, protocols, systems and standards to ensure continued delivery of quality services to mitigate the incidence of HIV/AIDS and Hepatitis B&C. In terms of technical expertise, PHHP provided advice and assistance which was an amalgam of epidemiology, sociology and management science. The approach employed the Project by was innovative and unique in its comprehensive nature: integrating behavior change communications, voluntary counseling and testing, and quality management for blood safety, infection control, and laboratory surveillance into one coherent, country-wide program allowed PHHP to address the problem of preventing HIV and Hepatitis B&C from all angles simultaneously. It also allowed PHHP's experts the ability to build both "demand" for quality services, and to strengthen the "supply" of such services by building the capacity of institutions and health personnel.

Throughout the Project, two common implementation strategies were employed and proved to be successful. Firstly, the PHHP developed - in close collaboration with the Ministry of Health - rules, regulations, and guidelines to create a foundation for and to support changes in public health programming and infection control. Secondly, PHHP used data and research to carry out thoughtful pilot testing instead of employing a one-size-fits-all approach across the country. By creating a solid policy framework for change and testing key interventions, PHHP was able to assure more broad buy-in and support from key collaborators. As a main method of implementation, PHHP established or used existing working groups with participation of staff from partner agencies to manage and implement technical assistance. Overwhelmingly, that assistance was in the form of international (frequently regional) and local consulting assistance, as well as training and capacity building.

This report details how EMG, along with its subcontractors and local partners, worked toward achieving Project objectives and the resulting successes, challenges encountered in the course of the Project and lessons learned. Case studies, select project presentations and other relevant materials can be found in the annexes to this report.

## **Successes**

PHHP-supported activities were of great significance to country's efforts to prevent and control HIV/AIDS and hepatitis B and C, and left a lasting impact across several areas of the Moldovan health sector. The following achievements deserve to be mentioned in particular. Establishing a quality, functioning VCT system was an important addition to the HIV/AIDS prevention and control program, and it filled a major gap in national efforts. The national campaign on hepatitis B and C conducted with Project's assistance was the first of its kind in Moldova. The new legislation for a quality blood service system and all-volunteer blood donor program are essential for establishing services that meet international standards. The NBTC's quality management system and standard operating procedures developed with substantial support from PHHP were a first of its kind in a government agency. The work to establish a joint reference laboratory for HIV/AIDS and hepatitis B and C was a significant step forward in the reorganization of the Center for Preventive Medicine and introduction of a quality



---

management system throughout the lab network. PPHP's support for the national program to prevent nosocomial (in-hospital) infections is a major government effort to address a pressing need.

Many significant successes of PPHP were predetermined by the choice of method to provide technical assistance. Most of new concepts, proposed changes to methodologies and policies, and suggested pilot tests were discussed and elaborated in dedicated working groups (either already existing or established *ad hoc* by the Project), which included the staff from key local and international counterparts in Moldova. These officially recognized working groups were an effective means for facilitating the policy reform process. This way of working was also a guarantee that Project's activities became an integral part of systemic changes in Moldova's health sector and did not duplicate any similar on-going efforts.

Technical assistance was also delivered through training, not only of the medical personnel in pilot rayons, at MOH and other key health institutions but also - and often - of journalists, advertising agencies and NGOs. This was actually above and beyond what was needed to accomplish the basic objectives of the project. However, it increased the capacity and motivation of the non-governmental and private sector players to participate in public health efforts.

The Project also used other forms to deliver assistance. The Project sponsored several international observation tours (e.g. to Sweden and Ukraine). It provided significant support for a major communication campaign based on a national knowledge, attitude and practice (KAP) survey and focus group research. The campaign included mass media advertising, distributing print materials and outreach activities through contracted NGOs. A major international request for proposals to procure equipment for the reference laboratory was also done. PPHP also conducted smaller procurements for goods, survey research and printing, thus providing income generation opportunities for local businesses.

There were several advantages to these methods of technical assistance:

- The working groups are a standard mode of operations in Moldova. Because PPHP staff prepared well and the Project's component leaders were experts in their respective fields and had the trust of important counterparts, the groups had a positive effect on project implementation.
- Developing new legal frameworks was a necessity. Because government and project interests coincided and the project provided high-quality technical support, these efforts were generally successful.
- The extensive use of data and research was also essential. The care PPHP staff took to involve government in these processes led to broad acceptance of the findings and use of the data.
- The approach to contract and train a set of trainers in HIV/AIDS and hepatitis B and C and adult education, and then use them in a series of different settings was quite effective. It increased the institutional capacity for training. Using international experts to train local blood service staff to develop standard operating procedures (SOPs) and process documents (PDs) has effectively institutionalized the quality management system.
- The BCC team leader's approach of working with NGOs not only to achieve PPHP objectives but to build their capacities beyond those objectives has been extremely beneficial to their long-term effectiveness.
- Another reason for the success of training was the very close involvement of key local government and counterpart experts in the design and implementation of the courses. International experts were used only when there was no local alternative, and the experts were consistent throughout the project.
- The media campaign was a great success due to the careful research and development, which are essential for designing the right messages for the right groups.
- The international procurement for lab equipment was managed in the most rigorous way to ensure open competition to get the best product at the best price.



- The observation tours successfully raised awareness of practices in other countries and exposed high-level decision makers to project activities. They also provided an opportunity for staff and counterparts to present PPHP activities and research to a broader international audience.

There were, however, some disadvantages to the technical assistance as well:

- Local training costs varied and would be difficult for the government to match in some cases, so they might not be sustainable.
- Everything else being equal, international short-term technical assistance (STTA) is more effective if provided by expert from Romania or Russia; however, it became increasingly difficult to contract Romanian experts in a manner that meets USAID requirements after Romania joined the European Union.
- The existing BCC working group that was established as part of the HIV/AIDS and TB coordinating mechanism was not very interested in working on hepatitis issues.

## Challenges

When a government commits to a new program it is important that adequate, long-term human and financial resources are available. PPHP advocated including a member from the national health insurance corporation on the VCT working group to ensure the sustainability of the centers, which the Project helped strengthen. The Project did the same in the infection control component, but as the costs of sustainability are more significant in this instance (i.e. purchasing consumables), arriving at a final solution has been more difficult.

Perhaps the most important challenge has to do with establishing the reference laboratory for hepatitis B and C. Shortly after the Project started, the MOH requested more than the agreement specified. They wanted a national reference lab for all infectious diseases in a location that needed significant renovations. Though PPHP experts thought this was an excellent and cost-effective idea, they had to tell the government that PPHP resources were not sufficient for such an undertaking. The MOH asked PPHP to seek financing from other donors which was done but without success. PPHP further took the position that it would be inappropriate to procure equipment for a reference laboratory unless the government had adequate resources to cover capital costs and to maintain it. After more than a year of deliberations, the government made a decision and established the legal framework for a combined Reference Laboratory for HIV and hepatitis in an appropriate facility. It also agreed to provide strong, ongoing support. At that point PPHP initiated the procurement of the equipment needed. The lesson is to be flexible but not to make a large financial commitment unless the government guarantees the means to finance and sustain the ultimate objective.

During the second year of implementation, it appeared that the Project would not have adequate resources to fund local activities. To fully implement the Project, the management had to revise the budget and spend less on international STTA and more on local activities. At several points the Project had to adjust its assistance to make the best use of counterpart donors' resources who were working to achieve the same objectives. For example, to improve blood services PPHP worked closely with the Council of Europe Bank for Development that provided 8 million Euros of assistance. With the help from PPHP, the Bank selected a firm to redo the management information system (MIS), while the Project contributed by training over 100 officials in computer skills and assisted with the design and implementation of the all-volunteer blood donation system. Another example is our collaboration with the Global Fund programs: PPHP staff members demonstrated flexibility with timing and changed the plan for implementing the pilot test for the VCT centers to maximize the success of the expansion financed by the Global Fund. The Project also arranged the monitoring of the centers and planned and coordinated their inaugurations.



---

The shortfall in funding was a serious problem. When USAID communicated to the Project that it would not receive full funding, at USAID's initiative other resources were sought. At PPHP's initiative and with its key support in the proposal development process, Moldova got a \$1.4 million grant from the Japan Social Development Fund, administered by the World Bank, to finance the BCC, VCT and blood service components beyond PPHP's end date. The Minister of Health has also committed to financing the external technical assistance needed to get international accreditation for the Reference Laboratory. This additional support was obtained because of the importance of these activities to the government and because of the success of PPHP implementation and negotiation efforts.



## PROJECT RESULTS

By the end of PHHP, the team succeeded in completing all planned activities and interventions according to the revised Project terms. All five project objectives were achieved to a significant degree despite the shorter time frame. In fact, eight of the original 21 targets set for June 2010 were met by December 2008. The text below presents project results achieved in the period June 2006 through the end of the Project by objective. First we provide an overview of the objective and activities which were undertaken to reach the objective. Then we discuss achievements and present results vis-à-vis targets set in the project monitoring and evaluation plan (PMEP). We conclude by providing recommendations for future programming.

Additionally, Annex 1 includes PMEP as revised in the Project Close-Out plan per USAID instructions. It shows a detailed list of target performance indicators and the actual results achieved as of December 2008 when all the technical activities of the Project were completed. Annex 2 includes presentations made by the component team leaders at the Project closeout conference. These presentations contain detailed step-by-step accomplishments of the Project in Year 1 and Year 2.

### Objective 1: Strengthen voluntary counseling and testing (VCT) services for HIV/AIDS and integrate them with Hepatitis B and C services

Voluntary Counseling and Testing (VCT) is a key entry point to health services for people infected with or affected by HIV/AIDS and/or hepatitis B and C. Prior to the Project, VCT services have not been widely available or accessible in Moldova, and lacked consistency and reliability. In order to meet the objective of this component, PHHP undertook the following activities:

- Assessed training and service capacity of health professionals;
- Strengthened the National AIDS Center and its role in VCT;
- Built the capacity of existing VCT facilities;
- Supported integration of VCT with other health services;
- Developed pre-service training and technical materials; and
- Established national VCT network in collaboration with the Ministry of Health.



*Inauguration of a VCT Center at the Rayon Hospital in Stefan Voda*

### ACHIEVEMENTS

A significant accomplishment of the VCT component is assistance for the establishment of a legal framework - including an MOH order and regulations - for a new national network of 40 VCT centers with integrated HIV and hepatitis B and C services. This framework also includes guidelines for training, a Specialist's Manual, a monitoring and evaluation plan and health insurance funding. This significant addition to the national HIV/AIDS prevention and control program was accomplished in close coordination with the Global Fund and UNAIDS. The carefully designed pilot testing and rollout of the VCT network was successfully implemented. A meeting was then held with the pilot participants to review findings. As a result, the National AIDS Center sent out an order requiring actions to further strengthen the VCT centers in communications, management and counseling. The rollout of the new centers was coordinated with the Global Fund so that all 40 centers are now functioning. These centers have been established in existing government facilities and will be funded by the national health insurance program. This will promote their sustainability since the centers will not depend on donor financing on an ongoing basis, unlike the majority of VCT programs in other



countries in the region. MOH is monitoring the centers using a special management information system established for that purpose. There are plans to extend the network to the Transnistrian region.

Target beneficiaries now have access to quality VCT services throughout the country for HIV/AIDS and hepatitis B and C. These services have already been used by more than 4500 persons in the six Project's pilot rayons (districts) alone, compared to the baseline of 128 people that utilized services in 2006, the year PHHP started. In September – December 2008 alone, more than 9135 persons visited 34 VCT centers supported by PHHP (see a case study 'Voluntary Counseling and Testing' in Annex 3)

### **Final Results against Performance Monitoring Plan**

Indicator	Target	Actual
Number of VCT centers that meet international standards to provide quality services for HIV & Hepatitis	34	34
Number of VCT centers that provide integrated HIV and Hepatitis B and C services	34	34
Number of people receiving HIV testing and counseling in six pilot VCT centers established in December 2007	2574	4534
A stronger National AIDS Center, including its role in VCT	1	1

### **RECOMMENDATIONS FOR FUTURE PROGRAMMING**

The full expansion of the network of centers was achieved in December 2008 when the last eleven centers went into operation. With the exception of the six pilot centers, the remaining 34 have been functioning at most for seven months; some have been opened for a much shorter time. There has thus been very little time to monitor their effectiveness and to supervise their performance. In addition, unlike in the six pilot rayons, very little has been done to educate the public about the new services available. If the full network is to function well and to survive, there is a need for ongoing monitoring, supervision and oversight. There is also a need to establish a network among the centers and for them to forge stronger relationships with their local communities. This will require support for promoting and raising awareness of the VCT program. MOH has been providing oversight, but this is not enough. These activities will require additional external assistance. A recent external audit of the VCT centers, conducted by a PHHP-funded international consultant, highlighted specific areas that need support. There should be a follow-up check with respect to implementation of the recommendations from the pilot test in each rayon, as set out in the National AIDS Center directive.

It is also important to address two other issues in the near future. First is that currently hepatitis testing is free only to persons with health insurance. Second concern is that high-risk groups are reluctant to use the centers, in PHHP's experience. However, their participation is extremely important as HIV infections are mainly in these groups.

### **Objective 2: Strengthen programs in behavior change communication (BCC) to prevent the transmission of HIV/AIDS and Hepatitis B and C and to reduce the stigma and discrimination associated with HIV/AIDS**

Behavior Change Communication is not a new concept for health professionals in Moldova, and has the support by the Government, as demonstrated in the national communication strategy. However, prior to PHHP's work, Hepatitis B & C had fairly limited attention in public communication campaigns, particularly with respect to prevention. Capacity and skills set of the local journalists and media groups to implement public health related BCC activities was also rather limited.

Therefore, PHHP proceeded in the following way:

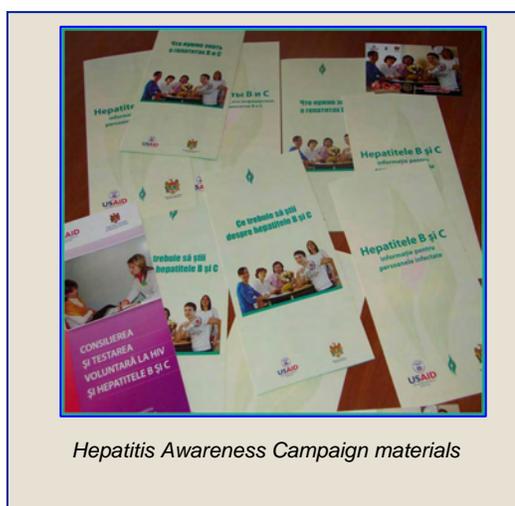


- Compiled results and best practices in disease prevention BCC;
- Developed and conduct campaigns for general population and vulnerable groups;
- Piggybacked Hepatitis B & C messages onto on-going local HIV/AIDS prevention campaigns;
- Held workshop for journalists, media organizations, NGOs, and officials;
- Integrated BCC into undergraduate and post-graduate medical education curricula;
- Maintained and further developed mechanisms for free broadcasting; and
- Monitored and evaluated BCC interventions.

## ACHIEVEMENTS

A national behavior communication campaign was conducted from March through September 2008. It pursued three objectives: (i) improve knowledge of hepatitis B and C in the general population and to reduce high-risk behaviors; (ii) motivate people to use the new VCT centers, and (iii) motivate medical personnel to change their behaviors to reduce infection transmission in healthcare facilities.

The campaign was based on a rigorous analytical approach that included support for a national KAP survey on hepatitis B & C and VCT, extensive focus group discussions about proposed messages, and international and local experts' technical support and advice. This campaign was the first of its kind in Moldova and included distributing 760,000 information materials. Among those materials were 30,000 calendars; 330,000 brochures for the general population; 22,000 brochures for infected people; 300,000 leaflets; 18,000 posters and 60,000 VCT brochures distributed in all districts of Moldova. The campaign also included broadcasting 14 programs lasting 600 minutes on local TV and 29 programs lasting 1079 minutes on local radio. Additionally, approximately 600 'spots' were broadcasted on national and local radio and TV. Details of this program activity can be found in Annex 3, a case study 'Promoting Viral Hepatitis Awareness'.



Hepatitis Awareness Campaign materials

The total of 1202 events and outreach activities sponsored by NGOs were held in the six VCT pilot areas: Chişinău, Bălţi, Edineţ, Cahul, Ştefan Vodă, and Comrat. It reached more than 80,000 people and covered four district centers, two municipalities and 111 villages. A significant number of NGO outreach activities were explicitly targeted at high-risk groups such as commercial sex workers, intravenous drug users and prisoners.

In the six pilot rayons that the BCC campaign was focused on, the increase in the comprehensive correct knowledge about hepatitis B and C transmission in the general population reached a very high level and exceeded the target of 60%. The impact report indicates that nearly 90 percent of the population in the pilot regions have heard of hepatitis B&C and are aware of the seriousness of the virus. Assuming the six pilot rayons are representative, the Project successfully improved the knowledge of 90% of beneficiaries. Compared to the 2007 baseline, there was an increase in the percentage of respondents who knew how viral hepatitis was transmitted: the study showed that the integrated indicator of "correct knowledge" about viral hepatitis increased from 12% in 2007 to 22% at the end of the Project (a respondent possessed correct knowledge when he could name at least two modes of transmission of viral hepatitis and could recognize misinformation). The knowledge of hepatitis B and C transmission among the most at risk



population also improved from 25% to more than 90%. The number of beneficiaries who are now aware of VCT services in the six pilot areas is 25%. While the BCC focus was on hepatitis, VCT and health service providers, correct knowledge about HIV in high-risk groups continued to improve, easily achieving the PHHP target.

### **Final Results against Performance Monitoring Plan**

Indicator	Target	Actual
Comprehensive correct knowledge about HIV among most-at-risk populations: IDUs, CSWs, MSM (UNGASS).	IDU 50%, CSW 50%, MSM 47%	IDU 50%, CSW 50%, MSM 47%
Comprehensive correct knowledge about hepatitis B and C transmission among most-at-risk populations: IDUs, CSWs, prisoners.	IDU 25% CSW 25% Prisoners 25%	IDU 92% CSW 100% Prisoners 93%
Comprehensive correct knowledge about hepatitis B and C among general population.	60%	62%
Total number of persons trained in behavior change communication (media organizations, community outreach, university teachers).	70	121

### **RECOMMENDATIONS FOR FUTURE PROGRAMMING**

The initial campaign was done only in the six pilot rayons. As mentioned in the section above, there is a need to replicate the successful communications campaign for hepatitis and for using the VCT centers in the other rayons in which such centers have been established. Again, the campaign should focus on educating the public about hepatitis B and C and on increasing the awareness and use of the centers through mass media and printed materials. A strong focus on local community outreach activities using local leaders and NGOs is a must. The results of the comprehensive follow-on KAP survey, done at the end of PHHP in December 2008, could be used to design these activities. There is also additional need to strengthen the correct knowledge and practices of healthcare providers on hepatitis and HIV/AIDS. This should be supported through research and training. All these activities will require additional external assistance as the government budget for communication campaigns is limited. This assistance should be designed in cooperation with other donors supporting related programs especially the Global Fund and UNICEF.

### **Objective 3: Improve the safety of blood and blood products**

In Moldova, blood is collected at the national and regional centers and in the regional departments, but blood testing is only done at the national center and one regional center. In 2005, some 10 percent of blood screened at transfusion center tested positive for transfusion-transmitted infections (including HIV and Hepatitis B and C). Although the infected blood was discarded, there has been a need to improve the safety of all of Moldova's blood and blood products.

In order to achieve this objective, the Project implemented the following activities:

- Developed national guidelines and quality assurance procedures;
- Developed and implemented training plan for improved blood safety;
- Established data collection and management information system; and
- Provided support for volunteer donor recruitment campaigns.



## ACHIEVEMENTS

A major accomplishment was PHHP’s comprehensive support to the government to draft a new law revising national standards for blood transfusions. The law includes two major initiatives to bring the blood service system up to international standards. One is the establishment of a new quality management program at NBTC, based on new SOPs for blood donations. This program is the first of its kind in a government agency. The second initiative relates to establishment of an all-volunteer blood donation program.

PHHP’s contribution to implementation of the quality management program for blood services was substantial. It included the full design and implementation of 196 new SOPs. Sixty percent of all new process documents (PDs) required by the quality management program have also been developed with PHHP’s assistance. An internal monitoring unit for implementing the quality management system was also established and is now functioning at NBTC.

With PHHP’s assistance, NBTC has developed a comprehensive plan to establish the voluntary blood donation system which is an important step to ensure that there is sufficient national blood supply for those who need it. This Plan was kicked off at a successful public relations event on the World Blood Donor Day in June 2007, which was televised nationally and supported with posters and informative leaflets. The Deputy Prime Minister, the Minister of Health and the US Ambassador spoke. The focus was on voluntary blood donations. More information about this activity and the PHHP’s role can be found in a success story ‘Promoting Voluntary Blood Donation’ in Annex 3.



All targets in the revised PMEP were met or exceeded. For example, the target for reducing the percent of blood discarded due to infectious markers was met, and the target for the number of blood personnel trained was exceeded. Because the Project was shortened, work on the policy and the manual was not initiated, and a quality blood service system meeting international standards was not established though a great deal of progress was made. All required SOPs were designed and implemented, and so were 60% of the PDs. The real impact on target beneficiaries can be measured after the quality system has been fully implemented. For more information see a case study ‘Improving Blood Safety in Moldova’ in Annex 3.

## Final Results against Performance Monitoring Plan

Indicator	Target	Actual
A quality system in line with international standards established (completion rate)	40%	60%
# of blood personnel trained	275	315
% of blood discarded due to infectious markers of Hepatitis B, C and HIV	4%	3%
Number of SOPs (standard operating procedures) developed and implemented.	125	196

## RECOMMENDATIONS FOR FUTURE PROGRAMMING

There is a strong need to continue the efforts initiated under PHHP for strengthening quality management and implementing an all-volunteer donation program. Unfortunately, these efforts ceased in the middle of implementation when the project funding was cut. As mentioned above, all the required SOPs for the quality management system were designed and implemented as planned. However, only 60% of the PDs



were completed, and work on the policy and the manual required to fully implement the program was not initiated. Completing these components will require a limited amount of additional external resources.

As it is the case with outcomes of the VCT component, regular monitoring, evaluation and feedback to local institutions is vital to ensure that results achieved by the Project are sustainable. In line with this philosophy, one of the last activities implemented the Project's Blood Safety component in November 2008 was building capacity for internal audit at NBTC, which was done with assistance from an international consultant funded by the PHHP. Internal auditing will play a key role in monitoring the implementation of the quality management system. It is also recognized that NBTC would benefit from additional external support. Additional assistance will help NBTC achieve its ultimate objective: to obtain external accreditation and recognition as a center of excellence. NBTC has a plan to establish an all-volunteer blood donation program, but implementation has only just begun. There is a need to experiment and pilot test a series of approaches before full expansion can take place. This, too, will require additional external resources.

#### **Objective 4: Strengthen the laboratory capacity to diagnose Hepatitis B and C and to improve epidemiological surveillance**

Immunization coverage for Hepatitis B in Moldova is very high. However, this is not enough to control the disease in Moldova. Prior to the Project, there had been critical gaps in establishing a national reference laboratory, which would perform verification and surveillance functions and be integrated with other laboratories in the country. Most of the hepatitis laboratory network operated independently, and the lab data was not reported or integrated at the national level.

To achieve the objective of the Laboratory Capacity component, PHHP undertook the following major activities:

- Conducted a baseline assessment of Moldova's laboratory capacity and developed a plan for laboratory network of viral hepatitis diagnostics;
- Developed a Guide for Laboratory Diagnostics of Viral Hepatitis and a Manual on Quality Assurance and Quality Control in Lab Diagnostics, in accordance with international standards;
- Procured equipment for the National Reference Laboratory and provided training and manuals on its use;
- Build local capacity in laboratory diagnostic through a series of trainings;
- Conducted National Conference on Laboratory Diagnostics to reach consensus on national diagnostic standards and surveillance system;
- Prepared recommendations for other laboratories.

#### **ACHIEVEMENTS**

After some delay, the government made a decision to establish a joint reference laboratory for HIV/AIDS and Hepatitis B and C in a newly refurbished location. This decision of MOH represented a significant change in the healthcare system since the new Reference Laboratory can greatly improve accuracy of tests and the epidemiological surveillance overall. The goal for the Reference Laboratory is to be the first public laboratory in the health sector to achieve ISO 15189 accreditation.

For the Reference Laboratory the PHHP procured high quality diagnostic equipment for viral hepatitis and HIV, valued at USD 271,000. The equipment was installed and the lab staff were trained in its use (see a success story '*Reference Lab for Hepatitis and HIV*' in Annex 3). The MOH promises continued



support from now on to cover staffing and recurrent costs, as stipulated in its Regulation which serves as a policy framework for the Reference Laboratory.

International STTA funded by PHHP contributed to establishing requirements to achieve ISO accreditation. Ultimately, the Reference Laboratory will have the authority to accredit and certify other laboratories and can thus rationalize the lab network in Moldova. In PHHP's opinion, the reference laboratory will be cost-effective and sustainable because testing for hepatitis will be combined with HIV/AIDS diagnostic services, which attracted many donor resources.

As part of the laboratory capacity strengthening efforts, PHHP developed two new guides on modern methods of viral hepatitis diagnostics. These guides, which are approved by the MOH, will facilitate implementation of international standards and quality management systems. Five hundred copies of each guide were printed and distributed.

The Project worked with four laboratories in Chisinau and twelve medical laboratories in other rayons. However, due to earlier than initially planned end of the project and also to some delays with procurement of necessary medical products which was outside of the PHHP's control, by the time of the Project closeout it was not possible to ascertain whether or not these laboratories implement internationally recommended practices for diagnosing Hepatitis B (the second indicator for this component in the Project's PMEP, see the table below). Now these activities are expected to be continued with support from the Moldova Governance Threshold Country Program (MGTCP) funded by the Millennium Challenge Corporation. PHHP purchased a testing panel for quality control and distributed in several laboratories. Once the control panel has been tested by laboratories, they will present results and complete a special questionnaire about all activities in a laboratory. The outcome of these tests can determine which laboratories meet international standards. PHHP experts believe that such conclusion would probably be made in the fall of 2009.

During the life of the project, PHHP conducted 15 training sessions for regional laboratory specialists. Two hundred specialists from across the country were trained in methods of viral hepatitis diagnostics, and 30 lead specialists of lab services were trained in Quality Management and ISO, according to both international accreditation criteria and the European Quality Management System requirements.

### **Final Results against Performance Monitoring Plan**

Indicator	Target	Actual
National reference laboratory (NRL) for viral Hepatitis that meets international standards for monitoring and quality control for lab diagnosis	1	1
Number of facilities implementing internationally recommended lab practices for diagnosing Hepatitis B	5	N/A

### **RECOMMENDATIONS FOR FUTURE PROGRAMMING**

As a short-term recommendation, PHHP suggest conducting a sample external review of effectiveness of lab diagnosis of viral hepatitis and to implement an algorithm for lab diagnostics which was developed by the Project. PHHP also recommends continuing capacity building efforts in quality management, which were initiated by the Project. As mentioned above, PHHP developed, printed and distributed QA/QC manual, and also provided support to select and train trainers and to initiate the training of specialists. This training should be continued to include all laboratory specialists in the country. The Project also provided support for developing new recording/reporting templates for the epidemiological surveillance of hepatitis. Depending on government's decision about reorganization at the national and local levels, this area may need further assistance.

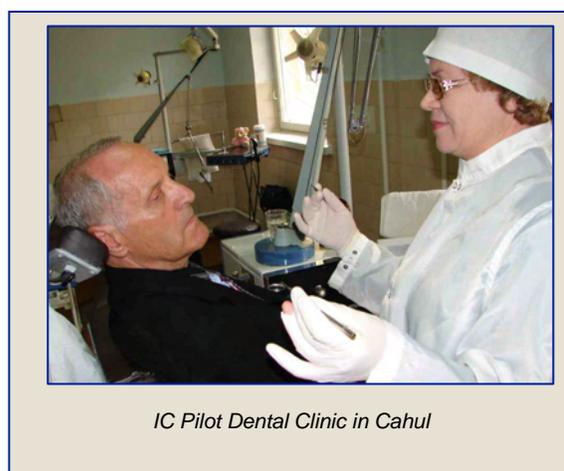


The National Reference Laboratory for hepatitis and HIV/AIDS is now equipped and functioning. Laboratory specialists have received initial training in QA/QC, and detailed recommendations have been made as to how the reference laboratory can achieve ISO 15189 accreditation. However, it is understood that it will be a lengthy process: according to the PHHP's estimates, another 18 months of technical support is required before the Reference Laboratory can get international accreditation. Achieving this very important objective will require additional funding either from the government or from external sources. After that, the Reference Laboratory will be in a position to regulate, certify and accredit other labs throughout the country. This will help to reform and rationalize the country's lab network and thus substantially improve the accuracy of diagnosis and the cost effectiveness of services.

### **Objective 5: Improve guidelines for medical practices to prevent the transmission of infections of HIV and hepatitis B and C in healthcare facilities and support the implementation of these practices**

While guidelines for infection control existed in many Moldovan health facilities, they were often inconsistent with international standards, and providers are generally lax in their application. A lack of adherence to guidelines - and guidelines themselves that are up to international standards - have resulted in increased risk for patients and health care providers to contract HIV and Hepatitis B and C in medical settings. In order to begin changing the widespread practices of health professionals and to lay a solid foundation for infection control, PHHP conducted the following major activities:

- Reviewed existing guidelines and protocols with the purpose to identify areas for update/revision;
- Drafted revised guidelines for nosocomial infection control according to international standards;
- Built consensus among key stakeholder in the health sector regarding new guidelines;
- Tested draft guidelines in pilot sites;
- Improved knowledge, attitudes and practices related to infection control among the healthcare personnel in pilot institutions through training seminars;
- Revised and finalized guidelines; formalize their endorsement by the Ministry of Health;
- Formally publicize and launched the new guidelines to promote their implementation; and
- Conducted a surveillance study to assess reduction in HIV and viral hepatitis B and C in healthcare settings.



*IC Pilot Dental Clinic in Cahul*

### **ACHIEVEMENTS**

The most significant achievement of the Infection Control component was development by PHH Project experts, in collaboration with Ministry of Health officials, of the National Guidelines for Nosocomial Infection Control and Surveillance. Apart from more general recommendations which called for the establishment of a special infection control system that would incorporate all health facilities, the Guidelines provided practical descriptions of international standards for medical personnel hygiene.

Another achievement of PHHP and the first step in implementing a comprehensive national program on infection control was approval of these new guidelines by the working group of recognized Moldovan



experts, which was created and facilitated by PHHP. The working group conducted its activities with substantial technical and administrative support from PHHP, and was instrumental in achieving buy-in of the Moldovan medical community and health officials.

The guidelines were implemented in three pilot institutions which included a main hospital in Moldova’s capital city Chisinau, a smaller hospital in an outlying district (Edinet Rayonal Hospital), as well as a dental clinic (a public clinic in Cahul). Upon completion of the pilot test, the Project analyzed the data, prepared a report with recommendations for revising the guidelines, for training needs, for organizational restructuring and for consumable requirements, and submitted it to MOH. Based on this report, a draft national plan for implementing the guidelines and reducing nosocomial infections was developed. The plan for implementation included recommendations for:

- Dissemination of the Guidelines to relevant healthcare institutions
- Establishment of infection control committees and a position of epidemiologist/assistant of epidemiologist in each healthcare institution
- Evaluation of morbidity of nosocomial infections
- Training seminars for healthcare personnel on infection control
- Implementation of infection control standards (standard definitions, active surveillance, standard precautions, hand hygiene, personal protective equipment use).

To complete its role in dissemination of the Guidelines, PHHP printed and distributed 1000 copies of the Guidelines.

To make the new infection control standards operational, the PHHP Project - in collaboration with the Ministry of Health - conducted a series of training seminars for the pilot-institutions medical staff. Theoretical topics were coupled with practical presentations to maximize learning. In addition to the training, new hand washing spaces were established at the pilot sites—complete with liquid soap dispensers, antiseptic materials, disposable towel devices, trash bins for regular refuse, and safe boxes for medical waste. The number of staff trained in the pilot test meets the revised target of the Performance Monitoring Plan. More information about PHHP’s activities under this component can be found in a success story ‘*Hygiene Improved in Health Settings*’ in Annex 3. However, the full impact on target beneficiaries in healthcare facilities with the new Guidelines in place cannot be determined until the plan and program for their implementation are rolled out nationally. This is scheduled to occur after the PHHP’s closure.

### **Final Results against Performance Monitoring Plan**

Indicator	Target	Actual
Number of new guidelines drafted that meet international standards	1	1
Number of new guidelines approved and disseminated to relevant stakeholders	1	1
Number of staff trained in use of new drafted guidelines	100	100

### **RECOMMENDATIONS FOR FUTURE PROGRAMMING**

The national plan for implementing the new Guidelines to reduce nosocomial infections should be implemented. This will require additional government commitments for monitoring and supervision, large-scale training in the new Guidelines, reorganizing epidemiological management in healthcare facilities and additional government funding for consumables.



---

In the short run, PPHP recommends to establish the infection control committee in each healthcare institution and organize infection control seminars for healthcare personnel. Implementation of infection control standards can be facilitated through introduction of standard definitions and active surveillance over use of standard precautions, hand hygiene and use of personal protective equipment.

In the longer perspective, the Project experts recommend harmonization of national policy on infection control in accordance with international standards (included in the Guidelines) and developing national M&E system for nosocomial infections. Revision of the policy should take into account possibilities and capacity of healthcare institutions.



---

## PROJECT IMPACT AND LESSONS LEARNED

There are no unresolved programmatic issues. The Project was able to ensure successful completion of technical activities per the work plan, submit all contractual deliverables and implement Project Closeout in accordance with USAID guidelines. However, due to the reduction of the original project timeframe and budget, a number of larger technical issues will remain for the Ministry of Health to address internally, as well as with assistance from other donors and perhaps USAID in the future.

PHHP has already established a foundation for sustaining some of the technical interventions initiated by the Project with support from other sources. In order to maximize effectiveness of the project efforts, throughout the Project implementation the limited program funds were successfully leveraged with funding available from on-going programs supported by other international development agencies such as the Global Fund and the Council of Europe Development Bank. EMG has carefully documented cost-effective, sustainable approaches in all aspects of project assistance and passed these methodologies to local counterparts, as appropriate, for application in the future.

A lesson perhaps specific to Moldova is that locally available resources are limited. Therefore, when working with NGOs and other groups, capacity building beyond project objectives is desirable though it took PHHP more time and money than anticipated. However, the outcomes of these efforts were worthy.

All of the Project's five components have conducted significant capacity building including competitively selecting trainers and providing them additional skills in communicating with adults and on viral hepatitis and HIV/AIDS. These trainers are now a valuable resource and will hopefully remain so in the coming years. In addition to training of trainers, training programs on a variety of topics benefited more than 800 participants from MOH, NBTC, laboratories, rayon health centers, hospitals, VCT centers, epidemiology departments, advertising companies, media outlets, NGOs, the medical university, the National AIDS Center, and the School of Public Health. This included training in laboratory quality control and quality assurance, hepatitis diagnostics and epidemiological surveillance; infection control procedures; how to develop and implement SOPs; blood donor recruitment; MIS and computer operations; BCC methodologies; VCT advocacy, counseling, supervision and monitoring and the epidemiology of hepatitis B and C.

Experience of PHHP brought up other specific themes for impactful and sustainable implementation of an integrated disease prevention program. These themes are presented below.

---

### DEVELOPING NEW LEGAL FRAMEWORKS IS NECESSARY FOR SUSTAINED IMPACT

---

Because government and project interests coincided and PHHP provided high-quality technical support to the MOH, the development of new and revised legal frameworks *vis-a-vis* HIV and viral hepatitis prevention and control was successful. Adoption of legal frameworks in support of Project activities allowed for sustained impact even after PHHP close-out. The process by which PHHP worked with the MOH to develop new policy frameworks for infection control, blood safety, laboratory capacity strengthening, and voluntary counseling and testing services was highly participatory and collaborative. For example, as infection control activities became increasingly relevant, PHHP engaged into discussions with the MOH, and the Minister of Health issued executive orders mandating key government officials in infection control to become part of a working group led by PHHP. The Infection Control working group designed activities, reviewed documents and guidelines developed by PHHP, as well as provided a link to the Minister of Health and other decision-makers. The Project's component leaders were experts in their respective fields and had the trust of important MOH counterparts. Thus working groups were an effective method for facilitating the policy reform process. These officially recognized working groups ensured that PHHP activities were integrated into the Moldovan health system and not running parallel or duplicate efforts. Furthermore, once service delivery guidelines were established, the working groups



were able to make official recommendations for their nation-wide adoption directly to the Minister of Health, and the Minister in turn, was more willing to issue a quick regulatory reform in response.

---

#### **FLEXIBILITY IN PROGRAM DESIGN & DYNAMIC MANAGEMENT OF INTERVENTIONS**

---

The ability to read and respond to opportunities and constraints in the health community and MOH as they arise was critical for successful implementation of the Project. Disease rates and the changing realities of Moldova's public health sector required that structures and processes within the project are responsive to new health challenges. It was not appropriate for PHHP to develop a five-year strategic plan with pre-determined plan of activities that could not be modified as the Project life cycle continued.

When the PHHP's scope of work was initially articulated in EMG's proposal to USAID, infection control was almost a peripheral activity area and did not have the same 'weight' in programmatic plans or in the level of human resources allocated to it as other project components, like VCT or BCC. During the early months of implementation, it became apparent that IC should be elevated to be among core project activities because medical facilities themselves were found to be major contributors to the transmission of infections. PHHP verified these findings with the Ministry of Health and eventually hired additional staff headed by a team leader to implement IC activities on a more ambitious scale. Similarly, the blood safety component was not necessarily seen as a key intervention point in the proposal stage, but because of a highly experienced and motivated blood safety team and a local demand for assistance, these activities ended up being very successful, with widespread impact.

The implementation of the BCC component was a challenge. The original design of the Project called for having an impact on the knowledge of high-risk groups and of the general population about HIV/AIDS and hepatitis B and C and also for an impact on reducing the stigma associated with these diseases. This was too complex for a small project like PHHP. To have a successful advertising campaign, the message and the focus must be clear; otherwise it becomes diluted if the focus is too broad. The decision was therefore made to focus on educating the general population about hepatitis B and C and to use a communication campaign to increase awareness of the HIV and hepatitis services available at the VCT centers, thus closely linking two project components – BCC and VCT. Focusing on the significant disease burden of hepatitis when no other BCC campaign in the country was doing so, proved to be rewarding. A small component was added to reach high-risk groups. After discussion with USAID, stigma was dropped as an indicator when it was realized that many other donors working in HIV/AIDS were already supporting similar campaigns.

---

#### **PLAN FOR SUSTAINABILITY**

---

Clearly, the efforts, the research and the impact of PHHP have implications far beyond Moldova: the cost-effective, sustainable approaches that are being carefully documented in all aspect of project assistance can be replicated throughout the region. For example, including migrants, a high-risk population group, in disease awareness and prevention programs is especially relevant for Russia and Ukraine. Addressing hepatitis B and C in a comprehensive way is unique and has tremendous relevance for USAID and other donors worldwide in preventing the spread of these infections. Integrating testing for HIV/AIDS and hepatitis B & C in one Reference Laboratory promotes cost effectiveness and sustainability. The Project took an innovative approach combining sociological and medical expertise to support practical research and data collection efforts to design interventions that are then pilot tested and carefully monitored before national implementation. This list of valuable methodologies can be continued. However, the shortfall in funding was a serious challenge for keeping the momentum gained by the project and for sustaining results of already implemented interventions.



In EMG's view, to ensure sustainability of PHHP's results several aspects have to be taken care of. Firstly, policy and institutionalization work has to be continued, completing on-going activities particularly in the blood and infection control components. Also, new practices introduced at VCT centers and pilot medical facilities require monitoring to ensure that they are working as planned. Secondly, PHHP championed innovative forms of service delivery organization, health promotion through mass media and community mobilization, and created foundation for lasting quality control. The central and local government and medical community in Chisinau as well as in rayons showed commitment and growing interest to continue working on these issues. Therefore, the great potential to scale up these PHHP initiatives should be exploited. Finally, much of PHHP's achievements were in building the capacity of health professionals, local journalists, and NGO workers. These cadres of trained medical practitioners, health administrators and NGO workers have to be engaged sooner rather than later, before their newly acquired skills are lost.

EMG's role in Moldova has been that of a pro-active development partner, and we have already had experience of assisting the Government of the host country – on a voluntary, non-remunerated basis – with obtaining external funding for health programs. For example, the PHH project provided a valuable input to the development of the Government of Moldova application for funding under Global Fund Round 8 call for proposals. Thus, when the Project was notified that it would not receive full funding from USAID, other resources were sought. The management of the project mobilized a local NGO called Center for Health Policies and Studies (PAS) and put together a proposal for the Japan Social Development Fund (managed by the World Bank). After a long process of proposal revisions and negotiations, a \$1.4 million grant was awarded to PAS, which allows the Government of Moldova to continue activities and programs initiated by PHHP under BCC, VCT and blood service components beyond its end date. This also provided a platform for application of expertise and skills of the former project technical staff and many local groups who cooperated with the project. This grant of the Japanese government was a sign of international recognition of the importance of the project and the value of its lessons learned to the international community.

#### **EXPLOIT A PILOT OPPORTUNITY TO GENERATE STAKEHOLDER BUY-IN AND INFORMED SCALE-UP**

A common approach to sound program implementation is fostering the concept of pilot testing prior to ramping up programming. At pilot sites, interventions are tested in a small environment that encourages experimentation, participation, and innovation. This is widely believed to be effective because it allows the implementer to manage risk and tailor programming to respond to local demands and contexts. PHHP utilized the pilot site concept across project components. However, the rationale to use this methodology in the Project was somewhat unique and more than just a risk mitigation technique. PHHP leadership understood the unique cultural context of post-Soviet Moldova, and other psycho-social nuances at work in the health sector. It is important for implementers to understand that the former Soviet Union has a large cadre of highly trained health professionals who at large were quite comfortable with the deep rooted public health system of the Soviet era. This system, although it became stressed and later collapsed in many countries, was comprehensive and advanced. Because there was a working health system in the recent past, health practitioners and policy makers tend to be more reticent in blindly adopting new systems and approaches from donor projects. Pilots allowed the PHHP team the opportunity to demonstrate best practices and internationally recognized methodologies with smaller local audiences. When successes and buy-in from local health workers were demonstrated by the project, MOH decision-makers were more willing to stand behind a larger scale implementation and provide necessary policy support.



---

## EXTENSIVE USE OF DATA AND RESEARCH

---

PHHP staff involved the government and Ministry of Health in data collection and analysis, as well as in the research processes. This led to broad acceptance of the findings, and their more immediate use in planning for public health programming. A particular PHHP success in research and data collection was the utilization of *Knowledge, Attitude, and Practice* (KAP) surveys. A KAP survey collects information about cultural beliefs and routines by asking a structured and predetermined set of questions. Although KAP surveys provide unique information which may not be available otherwise and which ‘illuminates’ statistical data on specific topics, it is usually considered a rather costly and laborious method of collecting information. For this reason KAP surveys are not used so often in projects. However, the case of PHHP was different: presence of a highly qualified sociologist on the team (the BCC Component Team Leader), careful planning and creative cost-saving approach allowed the Project to conduct four different KAP surveys – for BCC, Blood Safety and IC components.

To establish the baseline data, the Project conducted two national baseline KAP surveys (on viral hepatitis and VCT, and on blood donor recruitment), which were used to design the BCC campaign. The blood survey results were also used as a PHHP’s input into developing a strategy for donor recruitment. Additionally, PHHP supported a smaller scale pre- and post-test KAP survey of healthcare providers where new guidelines in infection control were piloted. After the BCC communication campaign was implemented, PHHP also supported a special KAP survey to measure its impact. As a cost-saving measure, PHHP collaborated with the Soros Foundation’s HIV serological and behavioral surveillance survey of high-risk groups by adding a KAP and serological component for hepatitis to it.

Survey methods produced quantitative information from a large number of randomly selected individuals and at the end of the survey, data was analyzed. The Project’s KAP surveys provided a deeper and richer understanding of the factors that contributed to the spread of viral hepatitis and HIV—including socio-cultural beliefs and assumptions held by medical personnel. Nationwide survey findings allowed PHHP staff to understand and better plan project activities and reach key at-risk populations and medical personnel in pilot facilities more effectively with behavior change messages.

---

## MANAGEMENT OF PROJECT TEAM

---

Building a cadre of local professionals who can successfully ‘manage programs for results’ was another important issue on the Project’s agenda and a positive outcome of the PHHP. With exception of the Chief of Party, the project team was comprised of local Moldovan experts. PHHP’s Chief of Party ensured that overall program management was viewed as a critical component of successful project outputs. Staff were not only encouraged, but required to evaluate the immediate impact of their programming rather than just report on indicators and targets during the annual update of the Performance Monitoring Plan. Continual program and performance management was stressed, and staff had to understand and communicate the long-term as well as immediate effects of PHHP’s activities. This approach to implementation was novel to most of the technical experts on the team. The technical team was held accountable for ensuring that planned activities were implemented on time and achieved the necessary results. They were also encouraged to take interest in work planning and performance evaluation of other technical components besides their own. Because staff talents were fostered, personalities motivated, because there was trust in everyone’s professional credentials and confidence in their knowledge of the local implementation context, a demanding performance management requirement was not seen as a barrier but rather as a component of their technical leadership. As a result, internal capacity of the project staff to manage programs was built, and this will contribute to advancements in Moldova’s health sector beyond the end of the PHH project.



## ANNEX 1: PROJECT PERFORMANCE MONITORING PLAN

Indicators	Measurement Unit	Data Collection Method	Frequency and Schedule of Collection	Baseline Value	Actual Year 1 Results	Target for Year 2 (September 2008)	Revised Target for December 2008	Actual End Project Results
<b>1. Strengthened voluntary counseling and testing (VCT) services for HIV/AIDS to meet WHO and UNAIDS standards and expanded VCT capacity to integrate viral hepatitis B and C services throughout Moldova.</b>								
# VCT centers that meet international standards to provide quality services for HIV & Hepatitis	Simple number (disaggregated by geographic area)	Health facility project assessment	Annual	2	0	32 Actual 32	34 Actual 34	34
# of VCT centers that provide integrated HIV and Hepatitis B and C services	Simple number	Site visits using checklists for assessing quality to int'l standards	Annual	0	0	32	34	34
# of people receiving HIV testing and counseling in six pilot VCT centers established in December 2007	Simple number of people receiving counseling in six pilot VCT centers (for I semester 2008)	VCT center statistical assessment	Annual	128.605	No change	Actual Sept 1716	2,574 (50% increase II Semester 2008)	4534
A stronger National AIDS Center, including its role in VCT	# of Centers	External audit	Annual	0	0	Functioning VCT Unit	1	1
<b>2. Strengthened programs in behavior change communications (BCC) in order to prevent the transmission of HIV/AIDS and hepatitis B &amp; C.</b>								
Comprehensive correct knowledge about HIV among most-at-risk populations: IDUs, CSWs, MSM (UNGASS)	% of (IDUs, CSWs, MSM) who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Behavior Surveillance Survey	UNGASS 2005 2010	IDU-37%, CSW-35% MSM - 38%	Data not evaluated	IDU-42% CSW-40% MSM-43%	IDU 50%, CSW 50%, MSM 47%	IDU 50%, CSW 50%, MSM 47%
Comprehensive correct knowledge about hepatitis B and C transmission among most-at-	% of (IDUs, CSWs and prisoners) who correctly identify two	Trainee questionnaires	BSS - 2006 2008	No data available. BSS survey	Not available	To be established	IDU 25% CSW 25% Prisoners	IDU 92%, CSW 100%, Prisoners 93



Indicators	Measurement Unit	Data Collection Method	Frequency and Schedule of Collection	Baseline Value	Actual Year 1 Results	Target for Year 2 (September 2008)	Revised Target for December 2008	Actual End Project Results
risk populations: IDUs, CSWs, prisoners	modes of viral hepatitis Transmission		2010	(Soros Foundation Moldova) by end of November, 2007			25%  The base line indicators were measured before the training has been done	%  The impact indicators have been measured after the training has been done
Comprehensive correct knowledge about hepatitis B and C among general population	% of general population who correctly identifies at least two modes of transmission of HBV and HCV	Knowledge Attitudes and Practice Survey	PHH-2007 PHH-2009	51%	51%	60%	60%	62%
Total number of persons trained in behavior change communication (media organizations, community outreach, university teachers).	# persons trained	Training Reports	Annual	0	41	60	70	121
<b>3. Improved the safety of blood and blood products in Moldova assuring specifically, blood free of HIV and hepatitis B &amp; C.</b>								
A quality system in line with international standards established	Quality checklist	External audit	Annual	0	0	0 (40% progress)	40% complete	60%
# of blood personnel trained	Simple number	Training reports	Annual	0	51	250	275 persons	315 persons
% of blood discarded due to infectious markers of Hepatitis B, C and HIV	# units of blood discarded due to Hepatitis B, C and HIV/ total # units collected	NBC activity reports	Annual	6%	5.4%	5%	4%	3%
Number of SOPs (standard operating procedures) developed and implemented.	Simple number	External audit	Annual	0	110 developed, 0 implemented	125 developed, 110 implemented	125	196



Indicators	Measurement Unit	Data Collection Method	Frequency and Schedule of Collection	Baseline Value	Actual Year 1 Results	Target for Year 2 (September 2008)	Revised Target for December 2008	Actual End Project Results
<b>4. Strengthened the laboratory capacity to diagnose Hepatitis B and C and improved epidemiological surveillance in Moldova</b>								
National reference laboratory (NRL) for viral Hepatitis that meets international standards for monitoring and quality control for lab diagnosis	Simple number	Order to establish NRL External certificate of quality assurance	Annual	0	0	1	1	1
Number of facilities implementing internationally recommended lab practices for diagnosing Hepatitis B and C	Simple number	Expert review including public and private lab specialists and panel testing	Annual	0	0	5 best labs	5 best labs	<i>**Not able to ascertain before project closeout</i>
<b>5. Improved guidelines and updated safe medical practices in accordance with international standards that will reduce cross-contamination with HIV and viral hepatitis in health care facilities.</b>								
Number of new guidelines drafted that meet international standards	Simple number	Program reports	Annual	0	1	1	1	1
Number of new guidelines approved and disseminated to relevant stakeholders	Simple number	Program reports	Annual	0	0	1	1	1
Number of staff trained in use of new drafted guidelines	Simple number	Training reports	Annual	0	0	50	100 persons	100 persons



---

## ANNEX 2: PROJECT RESULTS PRESENTATIONS


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Strengthen Voluntary Counseling and Testing (VCT) Services for HIV/AIDS and Hepatitis B&C**

Iurie Cimasevski  
VCT Team Leader
Lucia Luca  
VCT Specialist

11 December 2008


Preventing HIV/AIDS and Hepatitis B&C Project

---

Through the VCT Component Implementation, PHHP worked to:

***Strengthen VCT services for HIV/AIDS to meet World Health Organization & UNAIDS standards and to expand VCT capacity to integrate viral hepatitis B&C services throughout Moldova***


Preventing HIV/AIDS and Hepatitis B&C Project

---

In order to achieve the overall objective, PHHP worked to:

- Increase the number of VCT centers that meet international standards to provide quality services for HIV and viral hepatitis
- Increase the number of VCT centers that provide integrated HIV and hepatitis B&C services
- Increase the number of people receiving HIV testing and counseling


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Key Counterparts & Partners in Implementation**

- Ministry of Health
- The Global Fund to Fight AIDS, Tuberculosis and Malaria
- National AIDS Center
- Local Public Administration
- Local Health Administration


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Geographic Areas of Work**

- 6 VCT pilot centers supported by the PHHP in: Edinet, Balti, Chisinau, Comrat, Stefan Voda, Cahul
- 28 VCT centers supported by the Global Fund in: Briceni, Ocnita, Donduseni, Soroca, Drochia, Riscani, Glodeni, Falesti, Singerei, Telenesti, Floresti, Soldanesti, Rezina, Orhei, Ungheni, Calarasi, Nisporeni, Criuleni, Dubasari, Anenii Noi, Causeni, Chisinau (4), Ialoveni, Straseni, Hincesti.


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Key Activities, Year 1**

- Selected the specialists for the MoH VCT working group on HIV and Hepatitis B&C.
- Completed and submitted the Draft legal framework for the VCT Centers activity to the MoH.
- Conducted the advocacy workshops (4) for high and middle level administrative officials in the field of VCT for HIV and hepatitis B&C.
- Identified National VCT Trainers.
- Identified VCT pilot sites.
- Developed and submitted the Draft VCT training curriculum (including Trainers Guide, Participants' Guide and Memory Aides/Counselor Tools and forms necessary for the VCT Center activity) to the VCT working group.


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Key Activities, Year 2**

- Training of 10 National VCT Trainers completed.
- Guide for TOT and VCT Counselors printed.
- Trained 101 Counselors: 68 counselors for 34 operational VCT Centers, and 33 counselors for the VCT centers to be opened by the end of December.
- Establishment of 6 pilot VCT Centers completed.
- Development of information materials about VCT services completed.
- Monitoring the activity carried out by the VCT Centers completed.


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Summary of Milestones**

- Legal framework for the VCT Centers activity
- Trainers Guide
- Participants Guide
- Counselors Tools
- M&E forms necessary for the VCT Center activity


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Key Results**

- Conducted the advocacy workshops (4) for high and middle level administrative officials in the field of VCT for HIV and hepatitis B&C.
- Training of 10 National VCT Trainers completed
- Training of 101 Counselors and supervisors for the VCT Centers completed.
- Four Trainings conducted for counselors and supervisors


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Lessons Learned**

- It is crucial to work together with all partners, especially with the MoH in order to achieve sustainable outcomes
- All deliverables shall be correlated with the WHO and UNAIDS standards and with the current situation and opportunities
- Sustainability of all deliverables after the Project close-out is mandatory


Preventing HIV/AIDS and Hepatitis B&C Project

---

**Recommendations for Future Action**

- Approve the revised forms necessary for the VCT center activity
- Develop a new database system in line with the revised forms
- Develop a MoH Disposition to regulate certain issues related to the split of primary healthcare and hospital healthcare
- Include the subject on the execution of the MoH Policy No. 344 concerning the "Establishment of the VCT Service for HIV and Viral Hepatitis B&C" in the Medical Collegium Agenda by the end of 2009
- Etc.

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

**Behavior Change Communication**

Ludmila Malcoci  
BCC Team Leader

Silvia Munteanu  
BCC Specialist

December 11, 2008

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

BCC Main Objective :

***Strengthen programs in behavior change communication (BCC) to prevent the transmission of HIV/AIDS and Hepatitis B & C and to reduce stigma and discrimination associated with HIV/AIDS***

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

**BCC Specific Objectives**

- Design and implement communication campaigns for general population and key populations at higher risk
- Capacitate Mass-media and NGOs in preventing HIV and viral hepatitis B & C
- Develop and integrate the BCC Curriculum into the education programs for students and post-graduate students
- Monitor and evaluate the interventions in the area of BCC

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

**The Main Partners in Objective Implementation**

- National Coordination Council on TB/HIV/AIDS, Communication Team
- National Scientific and Practical Center of Public Health Management
- National Scientific and Practical Center for Preventive Medicine
- State University of Medicine and Pharmacy
- NGOs working in the area of public health
- National and Local Mass-media

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

**Activity Geographic Area**

- National level
- Six-pilot sites: ...șinău, Balți, Edineț, Cahul, Ștefan Vodă, and Comrat

 **USAID**  
FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS  
and Hepatitis B&C  
Project

---

**Basic Indicators**

- Accurate knowledge about the ways of HIV transmission in the key populations at higher risk
- Accurate knowledge about the ways of viral hepatitis B&C transmission in the key-populations at higher risk
- Accurate knowledge about the ways of viral hepatitis B&C transmission in the general population
- Total number of persons trained in behavior change communication

USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

**Activities conducted to accomplish the objectives**

- KAP base-line research on viral hepatitis B&C and VCT Services conducted and disseminated at the national level.
- Project Communication Strategy designed and implemented.
- Manual on communication and adult learning teaching methods developed.
- National Communication Campaign in viral hepatitis and VCT implemented.

7

USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

**Activities conducted to accomplish the objectives**

- 760,000 information materials (calendars, booklets, leaflets, posters) distributed at national level
- 600 TV and radio spots disseminated by national and local TV and radio stations
- 14 TV broadcasts (600 minutes) and 29 radio broadcasts (1,100 minutes) developed and aired by local TV and radio stations
- 1,200 social events and outreach activities conducted by NGOs in the pilot regions (6 towns and 111 rural communities), involving more than 80,000 persons

8

USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

**Activities conducted to accomplish the objectives**

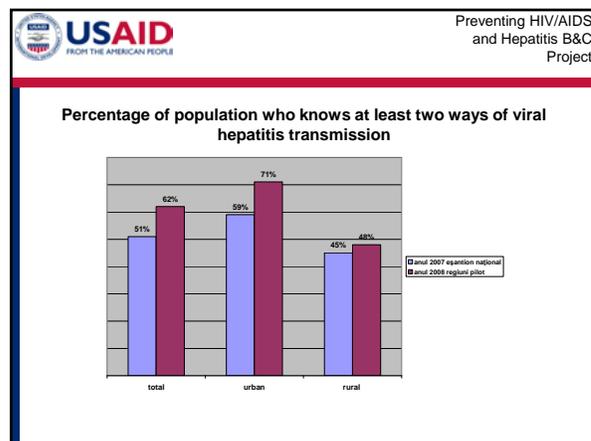
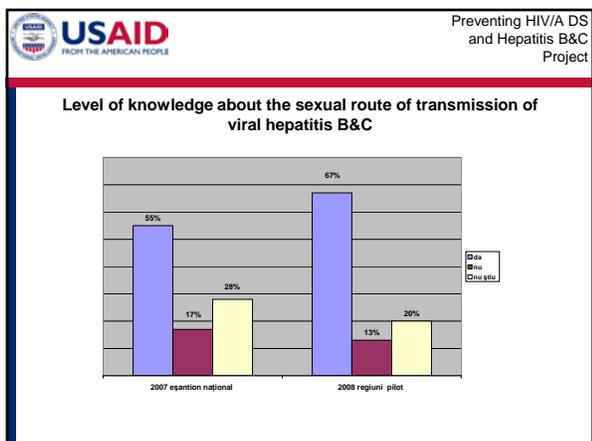
- 121 persons (TOT, Journalists, Outreach Workers, University Professors, NGO Representatives) capacitated in viral hepatitis and BCC methodologies
- Outreach activities implemented by NGOs for key populations at higher risk (IDUs, CSWs and inmates). Beneficiaries – 6,000 persons.
- BCC Curricula for medical students and post-graduate students designed and implemented at the SUMP.
- Contest for Journalists conducted. 57 information materials on viral hepatitis B&C published/disseminated.
- Communication Campaign Impact Study implemented, published and disseminated at national level

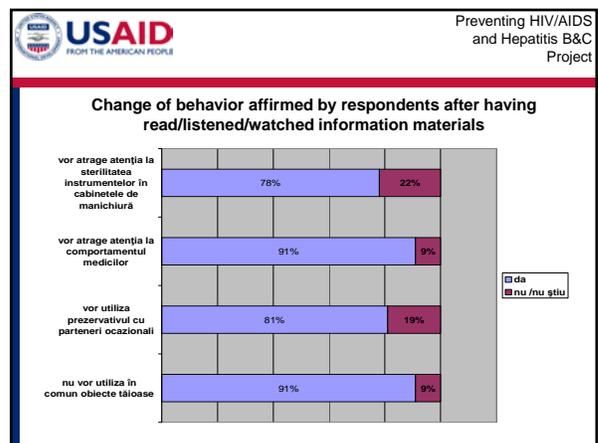
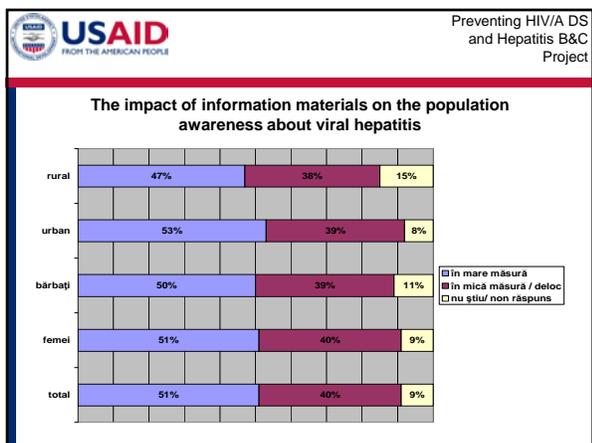
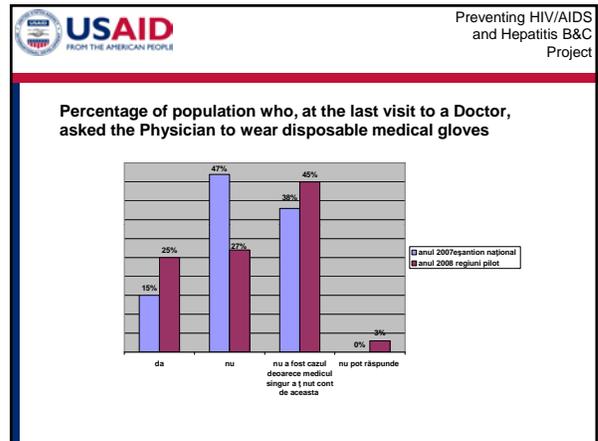
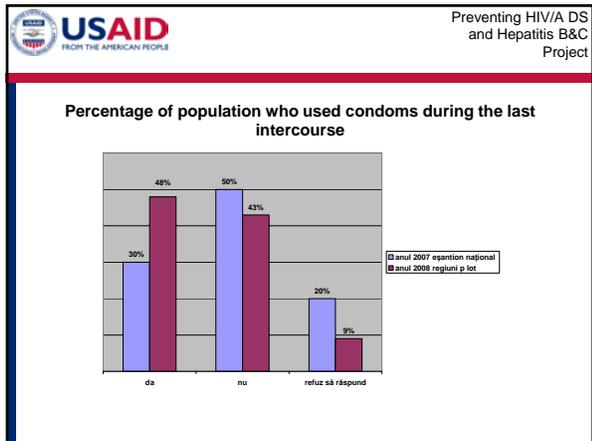
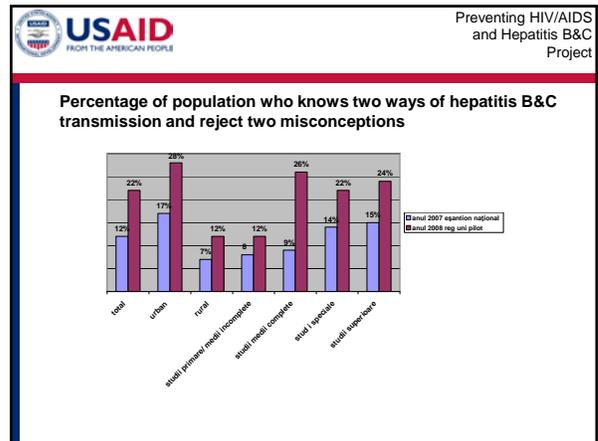
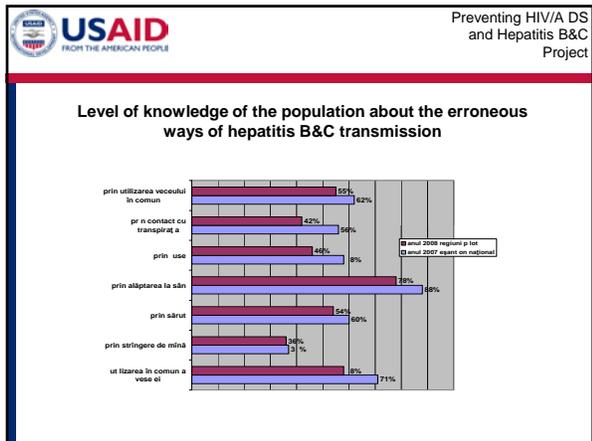
9

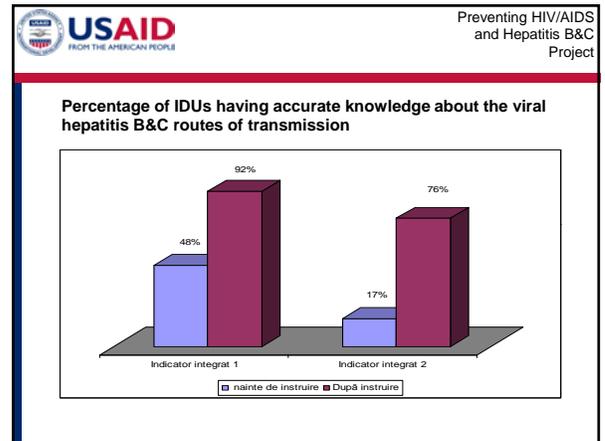
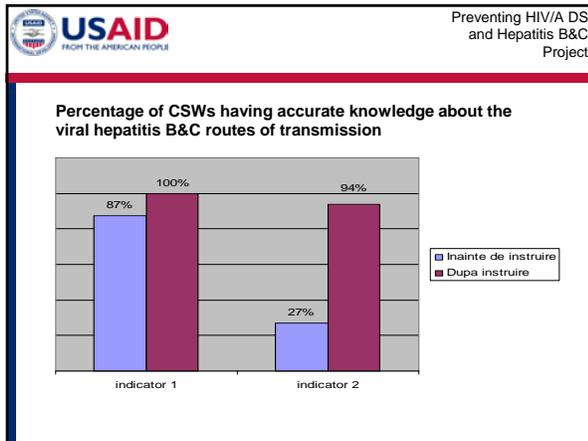
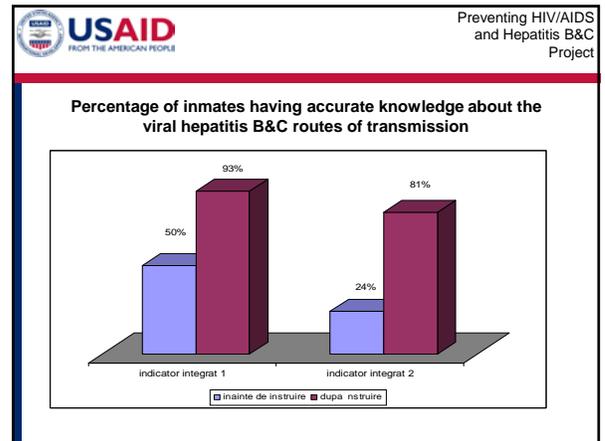
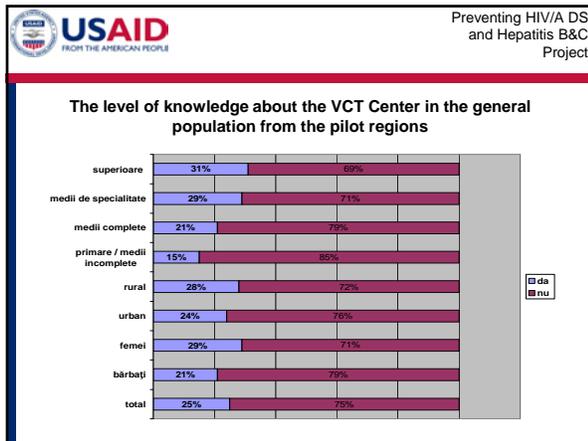
USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

**Key Outcomes**

10







USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

### Lessons Learned

- Given the shortage of certain local resources, the implementation partners (NGOs or other groups) capacity building is a crucial requirement for achieving the stated objectives.
- Combining Mass-media with the dissemination of information materials, organization of social events and outreach activities ensure effectiveness of a communication campaign.
- Theater-forum based on participants active involvement in the activities conducted is one of the most efficient methods aimed at enhancing the knowledge of youth about viral hepatitis B&C

USAID FROM THE AMERICAN PEOPLE Preventing HIV/AIDS and Hepatitis B&C Project

### Recommendations

- Conducting similar communication campaigns in the other districts of the RM.
- Communication campaigns shall be focused on two aspects: increase the level of knowledge about the viral hepatitis routes of transmission and promote the VCT services to motivate the population to benefit from these services.
- In order to ensure enhanced efficiency of campaigns, the emphasis will be placed also on the change of behavior and attitude in medical staff as well as on the abilities of the Counselors working in the VCT Centers.
- Communication campaigns shall be focused on the following target groups: rural population, youth, migrants and key-populations at higher risk.



### Recommendations

- Activities aimed at informing the population about the ways of viral hepatitis B&C transmission and VCT Centers will be continued within the pilot regions to strengthen the outcomes and promote further changes in terms of behavior and attitude.
- Conduct new communication campaigns focused on viral hepatitis risk infection preventing measures (condom use and vaccination of population against hepatitis B) and on educating tolerance and positive attitude towards the persons infected with viral hepatitis B&C.
- Based on the USAID/PHH Project successful practice, develop local partnerships among the public administration, NGOs, Centers for Preventive Medicine, and the VCT Centers with their active involvement in the implementation of the local communication campaign activities.


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

## Improve the safety of blood and blood products

Viorica Rotaru  
 Blood Safety Team Leader  
 December 11, 2008


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

### Context

- CEDB loan
  - Improving of infrastructure and using of up-to-date equipment in blood service
  - Project provided technical support to ensure high quality performances and institutionalization of new standards usage mechanisms.
- National Program
  - The project matched the national program and was adjusted to the program's objectives stated for 2007 – 2011


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

### Component Resources

- **National Partners**
  - Ministry of Health
  - National Blood Transfusion Center
  - Regional Blood Transfusion Centers
- **International Partners**
  - American Association of Blood Banks (AABB)
- **Implemented** in all Health System Blood Service Units across the Country, including Transnistria


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

### Main Objective

A High Quality Blood Transfusion System in compliance with the International Standards

- A well-organized Blood Transfusion System;
- Blood collected from regular voluntary non-paid donors – low risk group of population;
- Total screening of the collected blood;
- Effective clinical use of blood and blood products.


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

### Implementation Strategy

1. Development of a new quality management system
2. Promotion of voluntary non-paid blood donation
3. Development of a new law in line with European standards
4. Development of monitoring and evaluation system
5. Development of informational system for blood service
6. Clinical effective use of blood and blood products


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

### Indicators, baseline and expected results

Indicator	Baseline	Planned for 2010 (end of Project)
A quality system in line with international standards established (%)	0	100
Number of blood personnel trained	0	300
Units of blood discarded due to infectious markers of Hepatitis B, C and HIV (%)	6%	3%
Number of SOPs (standard operating procedures) developed and implemented.	0	125

USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Summary of Activities Year I Quality Management

- ✓ Current Status Report and Recommendations developed
- ✓ 5 persons trained in communication techniques and adult learning teaching methods;
- ✓ 16 persons trained in Quality Management and designing SOPs
- ✓ The format of SOP approved by the MOH
- ✓ 110 SOPs developed



USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Summary of Activities Year I Voluntary non-paid blood donation promotion

- KAP Survey in general population with respect to voluntary blood donation and relevant recommendations completed.
- Activities to promote World Blood Donor Day
  - Public event – national conference, mobile drives
  - 30 TOT prepared capable to provide training in voluntary donor recruiting and quality systems
  - SMS-es
  - Broadcasting a video-clip on the National TV to encourage youth to donate blood



USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Summary of Activities Year I (cont'd)

- **Legal framework**
  - ✓ First draft of the new Law on Blood Donation and Blood Transfusion submitted to the MoH
- **Informational Systems**
  - ✓ 107 persons training in basic IT;
  - ✓ Technical assistance to develop the TOR for an automated information system provided.
- **M&E**
  - ✓ The list of national indicators in line with international indicators drafted.

USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Summary of Activities Year II Quality Management

- ✓ 86 SOPs developed and validated
- ✓ 65 Process Documents (PDs) developed and validated
- ✓ 260 people trained in SOPs development and implementation
- ✓ 55 people trained in PDs development and implementation



USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Summary of Activities Year II Voluntary non-paid blood donation promotion

- ✓ KAP Survey in general population with respect to voluntary blood donation published and distributed;
- ✓ Technical assistance in development if the national program on donors recruitment for 2008 – 2011 provided;
- ✓ Informational materials to promote voluntary nonpaid blood donation developed and printed: posters, leaflets, flyers;
- ✓ Series of events, including a social event with mobile drives dedicated to WBDD organized;



USAID FROM THE AMERICAN PEOPLE

Preventing HIV/AIDS and Viral Hepatitis B&C Project

### Year II Outcomes

- **Clinical effective use of blood products**
  - ✓ 9 local experts trained in development of the national guidelines on clinical effective use of blood products
  - ✓ 11 transfusionists trained in modern practices of transfusionology
  - ✓ The first version of the national guidelines on clinical effective use developed by 6 local experts and reviewed by an international expert (AABB)
- **Legal Framework**
  - ✓ The new Law on Blood Donation and Blood Transfusion approved by the Parliament
- **Monitoring and Evaluation**
  - ✓ A new regulation for monitoring and evaluation and checklist for inter-institutional audit developed;
  - ✓ Primary data collection forms revised.
- **Guidelines developed**
  - ✓ Autologous donation guide
  - ✓ Mobile drives guide
  - ✓ Quality control of immunological blood products guide.


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

**Summary of expected results, end of 2008**

**Qualitative:**

- ✓ New quality system in compliance with the international standards developed
- ✓ New law on Blood Donation and Blood Transfusion approved by the Parliament
- ✓ New regulation for monitoring and evaluation and checklist for inter-institutional audit developed
- ✓ New automated informational system for the blood service implemented
- ✓ Guidelines developed
- ✓ National guidelines on clinical effective use of blood products developed


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

**Summary of expected results, end of 2008**

**• Qualitative**

- ✓ KAP Survey in general population with respect to voluntary blood donation and relevant recommendations completed, edited and distributed
- ✓ Informational materials to promote voluntary nonpaid blood donation developed, printed and distributed: posters, leaflets, flyers;
- ✓ National Plan on donors recruitment for 2008 – 2011 developed;
- ✓ Events dedicated to WBDD organized;
- ✓ Training materials on voluntary blood donor recruitment developed


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

**Summary of expected results, end of 2008**

Quantitative (PMEP)

Indicator	Baseline	Year I	Year II	Planned for 2010 (end of Project)
A quality system in line with international standards established (%)	0	0	60	100
Number of blood personnel trained	0	51	315	300
Units of blood discarded due to infectious markers of Hepatitis B, C and HIV (%)	6	5,4	4,0	3,0
Number of SOPs (standard operating procedures) developed and implemented.	0	110	196	125


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

**Lessons Learned**

- Adjusting project activities to the national counterparts needs and flexibility in matching the objectives to the rhythm required by the local context
- Creation of the local strong and enthusiastic team for objectives implementation
- Productive collaboration with other donors (CEDB and World Bank)
- Good performances attract new funds for future development (JSDF, Global Healing, AABB)


Preventing HIV/AIDS  
and Viral Hepatitis B&C  
Project

---

**Recommendations**

- Finalizing development of the **new quality system** - Quality manual
- Finalizing and approving of the **new guidelines** on clinical effective use of blood products
- Attraction of **new partners** in voluntary non-paid blood donation promotion in general population
- **Youth recruitment to become** voluntary non-paid and systematic (on a regular basis) blood donors
- **Efficient collaboration of key actors:** Blood Service, Ministry of Health, Ministry of Education, Local Public Administration and others in order to ensure voluntary non-paid blood donation promotion
- **Blood Banks** establishment within medical institutions in compliance with the international requirements.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Strengthening Laboratory Capacity & Improving Epidemiological Surveillance in Moldova**

Valeriu Crudu  
Lab Team Leader
Elena Romancenco  
Lab Specialist

11 December 2008


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

Through implementation of the Laboratory Component, PPHP worked to:

***Strengthen Moldova's laboratory capacity to diagnose hepatitis B&C and improve epidemiological surveillance***


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

In order to achieve the overall objective, PPHP worked to:

- Implement internationally recommended laboratory practices for diagnosis of viral hepatitis in medical laboratories throughout the country
- Create a Reference Laboratory for viral hepatitis in compliance with international standards for equipment, policies and procedures
- Achieve 95% accuracy in the lab diagnosis of hepatitis (RL)
- Improve quality and accuracy of tests in other labs throughout Moldova


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Key Counterparts & Partners in Implementation**

- Ministry of Health
- National Scientific and Practical Center for Preventative Medicine
- State Medical and Pharmaceutical University "N. Testemitanu"
- Republican Center of Medical Diagnostics
- GFTAM
- WHO


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Geographic Areas of Work**

- Chisinau – 4 labs
- Medical laboratories in all rayons – 12 labs


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Key Activities, Year 1**

- Baseline assessment of the lab network performed by international and local experts
- Guide for laboratory diagnostics of viral hepatitis developed and approved by MOH
- Members of the MOH working group for lab diagnosis selected
- 12 trainers for laboratory diagnostics in hepatitis selected and trained
- Algorithms for laboratory diagnostics of hepatitis developed
- National conference on diagnosis of viral hepatitis conducted
- Curriculum and schedule for training program on laboratory diagnosis developed and approved by SMPU.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Key Activities, Year 2**

- Created Reference Laboratory for HIV and Viral Hepatitis
  - order and regulation for establishing joint laboratory for hepatitis and HIV/AIDS approved by MOH
  - equipment for the laboratory procured and installed
  
- Quality Assurance/Quality Control activities
  - Manual on QA/QC in lab diagnostics developed, approved by MOH, printing and distributed
  - International training in ISO and quality management organize and conduct, 10 trainers for QA/QC selected and trained
  - Republican seminar on ISO and quality management conducted


Proiectul Prevenirea HIV/S DA, Hepatitelor B și C

---

**Key Activities, Year 2**

- Laboratory network strengthened
  - proposals for laboratory network of viral hepatitis diagnosis revised by specialists and submitted to MOH
  
- Laboratory diagnostics
  - The guide "Laboratory Diagnostic of viral hepatitis" elaborated approved by MOH, printing and distributed.
  - National Conference on Laboratory Diagnostics of viral hepatitis conducted
  
- Surveillance system for viral hepatitis
  - The recording/reporting system for surveillance of hepatitis with experts from Centers for Disease Control, in accordance with international standards revised. Recording-reporting form for surveillance system of viral hepatitis approved by CPM.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Key Results**

- 500 copies of the guide "Laboratory Diagnostic of viral hepatitis" printed and distributed.
- 15 trainings sessions for regional laboratory specialists in lab diagnostics of viral hepatitis conducted.
- 200 specialists in method of laboratory diagnosis trained
- 500 copies of the Manual on QA/QC in lab diagnostics of hepatitis printed.
- 30 main specialists of Laboratory Service trained in Quality Management and ISO.


Proiectul Prevenirea HIV/S DA, Hepatitelor B și C

---

**Recommendations for Future Action**

**Short term**

- Conduct sample external review of effectiveness of lab diagnosis of viral hepatitis.
- Implement the algorithm in laboratory diagnosis of viral hepatitis.
- Trained laboratory specialists in Management of Quality control in medical laboratories.

**Long term**

- Establish a functional network of Medical Laboratories in the country.
- Implement the ISO:15189 in medical laboratories.
- International accreditation of RL for viral hepatitis and other medical laboratories according the ISO:15189.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Surveillance and Control Nosocomial Infections, including HIV and viral hepatitis B & C**

Dr. Constantin Rimis
Vasile Andriuta  
Infection Control Team Leader
Infection Control Specialist  
11 December 2008


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Through implementation of the PHHP objectives / Infection Control Component worked to:**

*Improve guidelines and update medical practices to reduce nosocomial infections, including HIV and viral hepatitis, in health care facilities and support the implementation of those practices.*


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Critical Issues**

- Nosocomial infections is a significant public health problem all over the world, including the Republic of Moldova;
- Some improvements during 90's with the implementation of the directives regarding reusable needles and hospital hygiene guidelines has been done;
- The Guidelines of infection control according to the international standards were needed to be elaborated;
- Capacity building was needed.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**In order to achieve the overall PHHP objective:**

- Collaborated with international and national consultants to assess and improve infection control measures.
- Applied international standards of infection control to improve safe medical practices in health facilities, and tested in 3 pilot institutions.
- Ensured that medical safety practices were in accordance with internationally recognized standards and consistently implemented and monitored.


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Key counterparts and Partners in Implementation Infection Control Guideline**

1. Ministry of Health
2. Health Protection and Preventive Medicine Department
3. National Scientific and Practical Centre of Preventive Medicine
4. State Medical and Pharmaceutical University "Nicolae Testemitanu"
5. National Health Insurance Company

- World Health Organization  
 - Medical Academy from Sankt - Petersburg  
 - Centre for Disease Control (Atlanta, Georgia, USA)


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

**Geographic Areas of Work/Pilot Institutions**

- Chisinau – Municipal Hospital nr. 1
  - Obstetrical and gynecological and Intensive care units
- Edinet – Rayonal Hospital
  - General surgery and trauma units
- Cahul - State rayonal Dental Clinic
  - “Cavoris -Med” – units of surgery and therapy


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

### Key Activities, Year 1

- The comprehensive review of existing guidelines and protocols related to infection control in Moldovan healthcare facilities completed
- Working group members for the development of the guidelines selected and approved by the MOH (Disposition nr. 234 – d / 29.05.2007 and nr. 84 / 04.03.2008)
- The draft guideline for surveillance and control the nosocomial infections based on international standards completed (approved by MOH order nr. 401 from October 30, 2007).


Proiectul Prevenirea HIV/S DA, Hepatitelor B și C

---

### Key Activities, Year 2+

- Pilot test for the Guideline, designed and implemented
- Background research for pilot institutions completed
- The staff in the pilot test institutions trained
- Guideline approved by the MOH and distributed to the main counterparts
- Plan for nationwide implementation developed




Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

### Summary of Milestones

- Elaboration Infection Control Standards;
- Elaboration the indicators for monitoring the Infection Control System;
- Improve knowledge, attitudes, and practices on infection control of the health care personnel in pilot institutions through training seminars;
- Initiation of elaboration tool for needs of consumables and personal protective equipment


Proiectul Prevenirea HIV/S DA, Hepatitelor B și C

---

### Key Results

Indicators	Baseline Value	Results Year 1	Results Year 2 (December 2008)
Number of new guidelines drafted that meet international standards	0	1	1
Number of new guidelines approved and disseminated by relevant stakeholders	0	0	1
Number of staff trained in use of new guidelines	0	0	100


Proiectul Prevenirea HIV/SIDA, Hepatitelor B și C

---

### Lessons Learned

- PPHP was focused on the development of new guidelines for preventing transmission of HIV and Viral Hepatitis B & C in health care facilities of Moldova. But the Government also started a major new program to reduce nosocomial infections. And IC component changed its approach and reoriented PPH assistance to work closely with MOH on the broader government program.
- Locally available human and financial resources were limited, therefore to implement an efficient infection control system, capacity building is important. Provision of continuing education for health care personnel is critical. Important to provide consumables and personal protective equipment according to the risk assessment.


Proiectul Prevenirea HIV/S DA, Hepatitelor B și C

---

### Recommendations for Future Action

#### Short term

- Establish the infection control committee (with epidemiologist) in each health care institutions;
- Organize seminars for health care personnel training on infection control;
- Implement infection control standards (standard definitions, active surveillance, standard precautions, hand hygiene, personal protective equipment use)
- Put into action the recommended plan for nationwide implementation of ICS

### Recommendations for Future Action

#### Longer term

- Harmonize national policy on infection control according to international standards included in the National Guideline.
- Develop and optimize the National System for surveillance and control of nosocomial infections.
- Develop monitoring and evaluation system for nosocomial infections, including identifying circulating microorganism in the health care institutions, determine the resistance to antibiotics and disinfectants.)
- Organize continuing trainings of the health care providers in the medical schools, university and at the work places.
- Revise the policy and guidelines according to the health care institutions possibilities.
- Provide funds for consumables



---

## ANNEX 3: SELECT CASE STUDIES



**USAID**  
FROM THE AMERICAN PEOPLE

**MOLDOVA**

# CASE STUDY

## Voluntary Counseling and Testing

### Moldova's health community expands services for HIV/AIDS and viral hepatitis



[USAID/PHH Project]

*Demand for VCT services increased through launch events, mass media, collaboration with schools, churches, police, and family doctors, and partner/anonymous testing promotion.*

#### Challenge

Voluntary Counseling and Testing (VCT) is a powerful weapon against spread of HIV and hepatitis B&C. In order to be effective, VCT services require trained staff, confidential pre- and post-test counseling, reliable diagnostics, as well as complementary referral services to other prevention, care, and support programs. For clients who test negative for the viruses as well as those who test positive, VCT services are a catalyst for behavior change. In the process of receiving clinical tests, clients are counseled about HIV/Hepatitis B&C prevention, have the opportunity to develop risk-reduction plans, as well as receive referrals to post-test community groups that work to reinforce behavior change. Unfortunately, comprehensive VCT services have not been widely available in Moldova and often lacked reliability and consistency. Health workers themselves have not benefited from trainings on appropriate and effective methodologies for outreach and counseling.

#### Initiative

Beginning in 2006, the USAID-funded Preventing HIV/AIDS and Hepatitis B&C (PHH) Project worked with the Government of Moldova to implement an ambitious program to expand quality VCT services throughout the country. The PHH Project had a motivated team of VCT experts to provide technical assistance, monitoring and evaluation, and training support to health workers across Moldova. The Project also contributed to the Ministry of Health's nationwide plan to increase the number of operational VCT clinics, based on an official order issued in September 2007 that demanded standardized and high-quality services at all VCT sites. The nationwide plan was based on an innovative model for service provision in that VCT services are integrated into public health or consultative facilities. The PHH Project provided technical assistance to the MOH in the development of a national VCT curriculum for health workers which is the foundation of high quality care.

#### Results

The Project has been key to the successful rapid expansion of VCT services by supporting the MOH and key partner institutions to develop service models, standardize services, create quality assurance systems, develop a training curriculum for trainers, counselors, elaborating M&E forms, and promoting site services. 34 VCT centers have been established in less than two years in all districts of Moldova. Of these, the PHH-Project focused on six pilot sites where there was more intensive programming, community outreach, and behavior change communication activities. A total of 66 counselors and center supervisors were certified and are working at these sites. Training courses addressed counseling approaches, stigma and prevention messages and community education. Trainees engaged in participatory learning and had the opportunity to learn how to complete the MOH's VCT monitoring and evaluation forms, data entry and indicator reporting. The early success of the VCT program is reflected in the number of persons who sought services. Between January and September 2008, more than 9135 persons visited program sites and received VCT services.



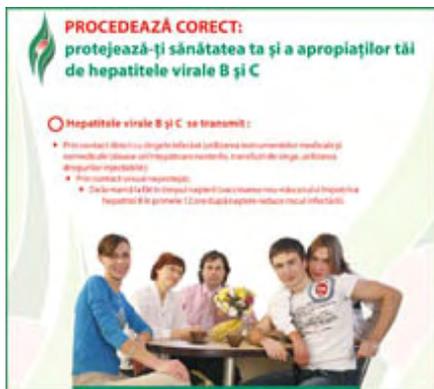
**USAID**  
FROM THE AMERICAN PEOPLE

**MOLDOVA**

# CASE STUDY

## Promoting Viral Hepatitis Awareness

**A national communications campaign increases knowledge in Moldova**



### Challenge

Viral hepatitis is the fifth leading cause of death in Moldova and mortality rates from the disease are seven times higher than the rest of Europe. In May 2007, the USAID-funded Preventing HIV/AIDS and Hepatitis B&C Project conducted a *Knowledge, Attitudes, and Practices* (KAP) survey of 1300 people across Moldova to ascertain people's knowledge about viral hepatitis and HIV/AIDS. Baseline KAP survey findings were alarming: only 12 percent of Moldovans knew how hepatitis B and C were transmitted and more than 40 percent were unaware of the diseases' asymptomatic characteristics. Behavior Change Communication (BCC)—the strategic use of communication to promote positive health outcomes—is not a new concept for Moldova's health professionals and has been a preferred strategy to reach people with important health messages. Yet, viral hepatitis has been neglected in most health communications to date.

### Initiative

From March to September 2008, the Preventing HIV/AIDS and Hepatitis B&C Project implemented a Communication Campaign across Moldova aimed to increase awareness of viral hepatitis prevention. Titled, "Act Wisely, Protect Yourself and Your Family from Viral Hepatitis B and C," the Campaign was the first of this kind in Moldova. It targeted the general population and "at-risk" groups such as youth, rural communities, migrant laborers, commercial sex workers, intravenous drug users, and people already diagnosed with the viral hepatitis. 760,000 printed informational materials were distributed in each of Moldova's *rayons* (districts). 14 television and 29 radio programs were aired about viral hepatitis; in addition to 600 brief "spots" broadcasted on media networks. The Project also collaborated with NGOs to provide more intense messaging in six pilot areas where the Project had previously established Voluntary Counseling and Testing (VCT) Centers for HIV and viral hepatitis. In the pilot areas, the Project and partners conducted 1200 outreach activities, seminars, and social theater forums, reaching 80,000 people with prevention messages.

### Results

In September 2008, the Project conducted a final KAP survey to assess the Campaign's impact in the six VCT pilot areas. Findings confirmed that the Campaign achieved its basic objective—that people's knowledge of viral hepatitis prevention methods and modes of transmission increased substantially. There was a 12 percent increase in the number of respondents from pilot regions that now knew at least two ways of transmitting viral hepatitis. There was also a reduction in the number of people who possessed erroneous knowledge about the disease. Results showed that although the VCT centers had been established less than one year prior, every fourth respondent knew about their services. At least 14 percent respondents had already directly benefited from voluntary counseling and testing and considered the new services to be "high quality." This is a significant result because VCT for both viral hepatitis and HIV is still a relatively new approach in Moldova.



## SUCCESS STORY

# Promoting Voluntary Blood Donation

### Moldova's Health Community Shifts from Replacement to Voluntary Donation



[USAID PHH Project]

*With assistance from the USAID-funded "Preventing HIV/AIDS and Hepatitis B&C Project," Moldova begins to hold annual celebrations of World Blood Donor Day. Events have sparked increases in voluntary blood donation by ordinary citizens.*

In the mid-1990s, Moldova's health experts began to reconsider the country's existing blood donation system. The system had operated on a partially remunerative basis, where donors were offered incentives such as cash, free meals, and extra vacation days from employers if they donated blood. Moldova was also reliant on family replacement donation—when family members donate blood to a relative during a health crisis. Purely voluntary blood donations have made up only about 13 percent of the Moldova's blood supply to date. Over the last five years Moldova's health community began fundamental reforms in the blood donation system and in overall blood safety. Since its launch in June 2006, the USAID-funded Preventing HIV/AIDS and Hepatitis B&C Project has provided valuable assistance in these efforts.

In 2007, the Project conducted a nationwide *Knowledge, Attitudes, and Practices (KAP)* survey to establish a baseline understanding of the populations' perceptions and practices of blood donation. Results were worrying. They showed that only one third of the population intended to donate blood in the future; that 60 percent of people favored donating blood directly to relatives in need or paid donations; and only 25 percent of respondents favored voluntary, non-remunerated blood donation. Survey findings were used by the Project and Moldova's National Blood Transfusion Center (NBTC) to design a national plan to promote voluntary non-remunerated blood donation, and to define target audiences for blood promotion and communication campaigns.

The Project's blood safety experts implemented several initiatives to assist the NBTC in raising voluntary donation awareness. The Project developed informational materials for distribution at medical clinics, blood centers, high schools, universities, and at mobile blood collection units deployed in various parts of the country.

Programming was intensified around "World Blood Donor Day," observed on June 14 2007 and 2008, highlighting how voluntary and regular blood donations save the lives of thousands of people around the world. To create wider public awareness of the importance of regular and voluntary blood donation, The Project partnered with a local telecommunications company in 2007. At no cost to USAID, the company sent instant SMS messages to 300,000 clients on World Blood Donor Day encouraging voluntary donation. The Project, in partnership with Moldova's Ministry of Health and NBTC, hosted a national awareness conference with 200 representatives from the medical community, local NGOs, patient associations, international health groups, and local high ranking officials. The officials voluntarily donated their blood at a mobile unit outside the conference hall, surrounded by cameras from seven local television channels. After the officials' voluntary actions, 32 additional conference participants were also prompted to donate blood on site. NBTC reported that 200 people arrived at their facility later in the day to donate blood. To celebrate World Blood Donor Day 2008, the Project organized a social event and a mobile blood drive in downtown Chisinau. Attendees not only enjoyed live celebrations, but the NBTC reported that 530 voluntary blood donations were made that day.

World Blood Donor Day events sponsored by the Project have promoted voluntary blood donation as a critical element of the national health resource pool, and mobilized Moldovans, the media, private sector, and NGOs to shift from remunerated to voluntary donation. In the last two years, Moldova has experienced a 20 percent increase in the number of voluntary blood donations. This is a significant result considering the long process of changing society's perceptions about blood donation in general, and voluntary donation in particular.



## CASE STUDY

# Improving Blood Safety in Moldova

### The National Blood Transfusion Center embarks on robust quality reforms



[USAID PHH Project]

*With assistance from the USAID-funded Preventing HIV/AIDS and Hepatitis B&C Project, Moldova's NBTC has made major efforts in establishing and launching robust quality control tools. These efforts will significantly increase both the safety and availability of blood and blood products throughout Moldova.*

#### Challenge

In 2005, 10 percent of blood screened at Moldova's national and regional blood transfusion centers tested positively for viral hepatitis B and/or C, HIV and/or syphilis. While the infected blood was discarded and did not enter the national supply, there was a serious need to improve the safety of the country's blood and blood products. Addressing blood safety is critically important as the country strives to lower prevalence rates for viral hepatitis and HIV. Moldova's Ministry of Health committed to the safety of blood transfusions and upgrading transfusion skills for health workers in the *National Program for the Development of Blood Services (2002-2006)*. As a result, blood banking practices are undergoing major reforms which include infrastructural renovation, introduction of state-of-the-art equipment, and establishment of modern blood collection and processing practices. This transformation has been supported by the USAID-funded "Preventing HIV/AIDS and Hepatitis B&C" Project and focused on developing a quality management system compatible with international standards.

#### Initiative

A country in transition since its independence in 1991, Moldova has welcomed international assistance in accomplishing blood safety goals. Since commencing in June 2006, the "Preventing HIV and Hepatitis B&C Project" has provided on-going technical assistance to Moldova's National Blood Transfusion Center (NBTC). The Project helped NBTC establish a new quality management system — the first of its kind in a government agency. The system was based on quality standards formulated by AABB (formerly the *American Association of Blood Banks*), a world leader in transfusion medicine. In collaboration with both NBTC and the Ministry of Health, the Project generated a comprehensive set of standard operating procedures (SOPs) for blood donations which are the first step in developing a modern quality system. NBTC staff was then trained in the new procedures and about general quality management for blood safety. Next, detailed blood collection and transfusion process documents were developed meeting international quality requirements. Standard operating procedures and process documents are essential to managing quality and are the foundation of quality management systems compatible with international standards.

#### Results

Over the last 24 months, the Project worked with the NBTC to successfully establish and roll-out these robust quality management tools. 196 essential SOPs for blood safety have been created and nearly 300 staff from blood transfusion facilities has been trained in SOP implementation and quality management. Moreover, NBTC has also generated process documents in accordance with AABB's Quality System Essentials (QSE) in 6 areas of 10 key areas (Organization; Resources; Equipment; Supplier and Customer; Process Control, and Documents and Records). 53 senior staff from blood facilities were trained in QSE and how to develop and implement process documents. Through these actions led by the Preventing HIV/AIDS and Hepatitis B&C Project, Moldova's blood services took major steps in ensuring quality blood products and services to blood donors and patients.



## SUCCESS STORY

# Reference Lab for Hepatitis & HIV

**New integrated reference laboratory will improve testing & diagnosis of dangerous diseases**



*Test results for HIV and Hepatitis in Moldova will now be more accurate and reliable, thanks to the reorganization of the laboratory network, new equipment and training provided under the USAID-funded Preventing HIV/AIDS and Hepatitis B&C project.*

On December 9, 2008 the Deputy Prime Minister of Moldova, Victor Stepaniuc, and USAID Country Program Officer, Gary Linden, jointly inaugurated the Reference Laboratory for Diagnosing Viral Hepatitis and HIV, the first laboratory of this caliber in Moldova. Its establishment was supported by the U.S. Government through the Preventing HIV/AIDS and Hepatitis B&C in Moldova (PHH) Project.

The Project sought to decrease the transmission of HIV/AIDS and viral hepatitis B and C, critical health threats in Moldova, through cost-effective preventive measures. Since 2006, the PHH project has worked closely with the Ministry of Health and the Center for Preventive Medicine to strengthen national capacity to accurately diagnose HIV and hepatitis B&C and improve overall epidemiological surveillance in Moldova. The majority of people infected with HIV or hepatitis B and C may not be aware of their conditions because these diseases can have no symptoms. Infected persons can, however, infect others even though they do not feel ill themselves. The only way to establish whether or not there is an infection is through a blood test. The new Reference Laboratory can greatly improve accuracy of such tests and the epidemiological surveillance in the country overall.

For the Reference Laboratory the PHH project procured high quality viral hepatitis and HIV diagnostic equipment, valued at \$271,000 USD. The equipment was installed and staff members were trained in its use. Additionally, since November 2007, the PHH project has trained more than 200 laboratory specialists from across the country in diagnosis of viral hepatitis and in quality assurance and quality control according to both the international accreditation criteria and the European Quality Management System. With technical assistance, the Reference Laboratory will be the first public laboratory in Moldova to achieve ISO accreditation. Ultimately, the Reference Laboratory will have the authority to accredit and certify other laboratories and can thus rationalize the lab network in Moldova.

The Reference Laboratory assures cohesion in the laboratory system and quality management of testing. It also collects, analyzes, and stores disease-related data from the network so that health specialists and public policy makers can make better informed decisions about the health of their patients. In addition to providing equipment and training, the Project developed two new guides on modern methods of viral hepatitis diagnosis. Using these guides Moldova's laboratory service can implement international standards and quality management systems. The Reference Laboratory will also be cost effective because it is combined with HIV and AIDS which has many donor resources to provide sustainability.



**USAID**  
FROM THE AMERICAN PEOPLE

**MOLDOVA**

## SUCCESS STORY

# Hygiene Improved in Health Settings

**Moldova improves infection control through the implementation of hand hygiene standards**



[USAID/PHH Project]

*Doctors, nurses and auxiliary personnel from the surgical, obstetrical and dental units were selected as a pilot group for implementing the new guidelines through training and follow-on technical assistance*

While guidelines for infection control have existed in many Moldovan health facilities, they have been inconsistent with international standards and providers are lax in their application. Lack of adherence to guidelines—and guidelines that themselves have not measured up to international standards—has contributed to an increase in the number of patients and providers who have become infected with HIV and Hepatitis B and C in healthcare settings. To mitigate the pervasive practices of health professionals and lay a solid foundation for nosocomial (in-hospital) infection control, the USAID-funded Preventing HIV/AIDS and Hepatitis B&C (PHH) Project implemented a series of activities with the support of the Ministry of Health.

Internationally recognized standards on infection control emphasize the importance of hand hygiene for medical staff as one of the most important measures for preventing the spread of infections within the healthcare facilities. Medical data estimate that up to 40 percent of nosocomial infections are caused by medical personnel with unclean or ungloved hands. Experts speculate as to the reasons for why some health workers fail to observe good hand hygiene practices. Some state a shortage of time, others are worried about increased risk for professional dermatitis, and still other facilities lack sufficient financial resources to purchase supplies for hand washing or gloves. Underlying all of these factors is the fundamental fact that many practitioners lack knowledge and practical skills for hand hygiene and nosocomial infection control.

PHH Project experts, in collaboration with Ministry of Health officials, created *National Guidelines for Nosocomial Infection Control and Surveillance*. The guidelines were implemented in three pilot institutions which included a main hospital in Moldova's capital city Chisinau, a smaller hospital in an outlying district, as well as a dental clinic. Apart from more general recommendations which called for the establishment of a special infection control system that incorporated all health facilities, the Guidelines included practical descriptions of international standards for medical personnel hygiene.

To operationalize the new infection control and hand hygiene standards, the PHH Project collaborated with the Ministry of Health in 2008 to conduct a series of training seminars for the pilot-institutions medical staff. Theoretical topics were coupled with practical presentations to maximize learning. In addition to the training, new hand washing spaces were established at the sites—complete with liquid soap dispensers, antiseptic materials, disposable towel devices, trash bins for regular refuse, and safe boxes for medical waste. As a result of PHH Project support, Moldovan health personnel have begun to implement one of the most important components of internationally recognized standards for infection control. Project assessments have shown that medical personnel are now more confident in fulfilling their duties and patients benefit from more protection. Because of such immediate impact and visible results, the lead staff at the pilot facilities have continued to purchase (without continued Project financial support) materials to continue healthy hygiene practices.