Advancing Partners & Communities
Ebola Transmission
Prevention & Survivor Services:
Country Program in Review
Guinea

October 2018
Advancing Partners & Communities

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Country Program in Review
Guinea

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Advancing Partners & Communities (APC) is a cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-12-00047, beginning October 1, 2012. APC is implemented by JSI Research & Training Institute, Inc., in collaboration with FHI 360. The project focuses on advancing and supporting community programs that seek to improve the overall health of communities and achieve other health-related impacts, especially in relationship to family planning. APC provides global leadership for community-based programming, executes and manages small- and medium-sized sub-awards, supports procurement reform by preparing awards for execution by USAID, and builds technical capacity of organizations to implement effective programs.

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Cover photo: Eidolon

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This publication was produced by Advancing Partners & Communities. The authors’ views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the United States Government.
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BACKGROUND

The 2014–2016 Ebola outbreak in Guinea, Liberia, and Sierra Leone devastated families, communities, and public health systems. In Guinea alone, 3,814 people died of Ebola virus disease (EVD), among them 109 health professionals. Despite the World Health Organization's December 2015 declaration that the epidemic in Guinea had ended, the virus re-emerged in March 2016 in the Koropara district. The World Health Organization again declared Guinea Ebola-free on June 1, 2016, but there was concern that the 1,270 survivors could continue to transmit the virus via infected body fluids. Close monitoring was imperative over the coming months and years.

DISTRIBUTION OF EBOLA SURVIVORS IN GUINEA

Minister of Health Édouard Niankoye Lamah describes the successful partnership between the Ministry of Health and APC during the project’s closing event.

1 U.S. Centers for Disease Control and Prevention.

PROGRAM OVERVIEW

From June 2016 to July 2018, the Ebola Transmission Prevention & Survivor Services (ETP&SS) program supported the Government of Guinea and other stakeholders in preventing the transmission of Ebola and improving health care services for survivors. ETP&SS, a program under the USAID-funded Advancing Partners & Communities (APC), was implemented by JSI Research & Training Institute, Inc. and partner FHI 360.

Through ETP&SS, APC assisted the National Agency for Health Security (NAHS), a division of the Ministry of Health (MOH) of Guinea, to implement the national active ring surveillance program to prevent the resurgence of Ebola; renovate and equip health facilities most frequented by Ebola survivors; improve health workers’ ability to manage survivors’ care; and reduce stigma and discrimination against survivors.

Initially, ETP&SS activities focused in Conakry, Kindia, and Nzérékoré, the three regions with the highest numbers of Ebola survivors, and selected activities were conducted nationally. Later, three additional regions that covered Ebola survivors—Boké, Faranah, and Kankan—were added.

RESULTS SUMMARY

ETP&SS and its grantee International Medical Corps supported the Guinea MOH in the surveillance of Ebola survivors and their immediate contacts. The program assisted the MOH in creating an early warning system for future EVD outbreaks by establishing 60 community-based sentinel sites in areas where survivors live. Ninety-eight percent of the sentinel sites reported weekly data on survivor health events by phone. ETP&SS also supported regular testing for viral persistence among male survivors through semen testing campaigns; 87 percent of eligible male survivors participated in quarterly semen collection and testing campaigns from October 2017 to April 2018.

ETP&SS worked with community leaders and members to reduce stigma and discrimination of survivors, and the sentinel sites held weekly committee meetings on survivor-related issues. Each committee included survivors, health workers, and community and religious leaders. ETP&SS and International Medical Corps trained 203 community and religious leaders on stigma reduction, reaching almost 26,000 people with messages on acceptance of Ebola survivors through sensitization campaigns. ETP&SS provided technical and financial support to the national network of Ebola survivors (RENASEG), which also works to end stigmatization of Ebola survivors.

ETP&SS strengthened the national health system by building capacity among health workers and improving health facilities that serve a high volume of Ebola survivors. The program trained 166 health workers in survivor care and stigma reduction. In communities where the majority of survivors live, ETP&SS provided equipment to 23 health facilities and medicines for Ebola survivors to 14 facilities. The program renovated eight health facilities, improving working conditions with electricity through solar panels and water supply.
“The goal is…to increase awareness among Ebola survivors, since there were some who refused to come to the health center. For those who are sick, we tell them to come. But those who are at home, we move to find them there. We’re visiting them at home.”

— Mrs. Dalloba Mara, head of the health center in Manéah and a member of Manéah’s Sentinel Site Committee

SURVEILLANCE

To prevent future EVD outbreaks through early detection and rapid response, ETP&SS and International Medical Corps supported the MOH in creating an early warning system for Ebola. The program established 60 sentinel sites in communities with five or more survivors in sub-districts and urban areas in the six regions most affected by Ebola. This “active-ring surveillance program” is designed to detect any sign of fever and other symptoms or illnesses in Ebola survivors and their immediate contacts. Potential cases are reported rapidly to local health authorities and the national office of the NAHS, triggering a rapid response based on an established protocol.

Each sentinel site has a committee consisting of health workers, survivors, and community members. Survivors make daily phone calls to a designated member of the committee to report on health events, which are recorded in a register, analyzed, and reviewed during the committee’s weekly meetings. Members also conduct follow-up on reported health conditions and outreach to survivors and their communities on stigmatization. The sentinel site surveillance program successfully reached nearly all Ebola survivors in the country and helped to make Guinea better prepared to face a potential future epidemic.

As part of the active ring surveillance program, ETP&SS also supported the NAHS in monitoring viral persistence in the semen of male survivors. In collaboration with laboratory agents from the National Laboratory of Hemorrhagic Fevers, ETP&SS supported the collection of samples of semen from male Ebola survivors age 15 and older and immediately transferred them to one of three reference laboratories where testing was conducted, recorded, and reported to NAHS leadership. ETP&SS provided reagents and commodities to the Laboratory of Hemorrhagic Fevers and, prior to the semen collection campaigns, the program trained laboratory agents on how to collect samples in a sensitive and appropriate way.
Before each semen testing campaign, ETP&SS coordinated with International Medical Corps and RE-NASEG—the Guinean national network of Ebola survivors—to educate eligible participants on the importance of testing for the health of survivors and their families, and to destigmatize semen collection. The results of the testing campaigns strengthened prevention efforts and contributed to the body of research on the largest Ebola outbreak ever recorded.
PROGRAM IMPACT
ETP&SS and Guinea’s National Agency for Health Security have demonstrated that the sentinel site approach to monitor Ebola survivors and their immediate contacts in Guinea is a best practice. This approach relied on a manageable number of carefully selected sites that can monitor a high percentage of Ebola survivors (or other post-epidemic individuals). Unlike routine health reporting, the sentinel sites’ actively monitored key indicators related to the health status of individuals and immediate contacts, and submitted these data weekly to the district and national levels and partners. As a result of the active ring surveillance program, Guinea is better prepared for the early detection of and rapid response to a future Ebola outbreak.

LESSONS
ETP&SS worked with the NAHS to design and implement the active-ring surveillance program. The program supported the operation of the sentinel sites and the semen testing campaigns, including community engagement, supervision, and training costs. After the program’s closure, the sentinel sites will require continued financial support. The NAHS has expressed interest in continuing the community-based surveillance program until 2020 or until scientific evidence shows a definite end to viral persistence. Ebola surveillance should be integrated into the general surveillance programs of the MOH to ensure sustainability of the program.

In Coyah prefecture, a laboratory technician uses the tools and skills obtained with support from APC’s ETP&SS program to collect semen samples from Ebola survivors.
Leaders of RENASEG participate in the Survivor Network Regional Workshop in Conakry, Guinea in March 2017. Dr. Seny Ivonne Loua, Vice President (left) and Dr. Mamadou Oury Diallo, President (right).
“In the past, Ebola survivors were ashamed to return home to their families, to work, and other places since they were viewed as contaminated members of society. But we’ve explained to them that they’re no longer contagious and should be viewed normally as before the outbreak.”

— M’mah Condé, leader of Maferinyah Sentinel site committee

SURVIVOR EXPERIENCE
Through the 60 sentinel sites established by ETP&SS, the program conducted surveillance and community outreach to combat stigma that prevents survivors from reintegrating into their communities and obtaining health care services.

ETP&SS and International Medical Corps trained 203 community leaders, including sentinel site facilitators, to reduce stigma through sensitization campaigns and meetings with influential people. These trained leaders reached almost 26,000 people with messages about the importance of accepting Ebola survivors. The program also trained 169 health workers in stigmatization reduction.

ETP&SS also provided technical and financial support to RENASEG, the national network that works to end stigmatization of Ebola survivors. Members of the network, who are survivors themselves, traveled to various regions to educate community leaders and the population on the acceptance of Ebola survivors. Leaders of local survivor associations became members of sentinel site committees, which further encouraged the acceptance and participation of Ebola survivors.

ETP&SS’s work helped to counteract the negative perceptions of Ebola survivors and overcome lingering fear of viral transmission from survivors. Among Ebola survivors surveyed in 2018 who sought care at a health facility during the prior three months, 7 percent reported experiencing some form of stigma, compared to 30 percent of surveyed survivors in 2017. It is likely that outreach through the sentinel sites and training health providers and community leaders on stigmatization contributed to this reduction.
PROGRAM IMPACT
In addition to supporting stigma reduction of Ebola survivors at the community level, ETP&SS and International Medical Corps transformed RENASEG from an informal association to an officially registered nongovernmental organization with an office and five-year strategy. ETP&SS conducted two organizational capacity assessments for RENASEG, in May 2017 and June 2018, and found that keys to increasing its capacity were strengthening its government and locating outside sources of funding. RENASEG has gone on to build the capacity of its member associations through trainings and monthly supervision visits and locating funding from other donors.

LESSONS
We observed that collaboration with local associations of Ebola survivors and the national network RENASEG was crucial to reaching individual survivors and ensuring their participation in surveillance programs. ETP&SS involved leaders of local associations in the community-based surveillance program and in awareness-raising before semen testing campaigns, which was key to gaining participants’ consent. The program also made great efforts to keep participation in the semen testing campaigns private and allowed participants to produce samples at the place of their choosing.

CAPACITY-BUILDING SUPPORT TO RENASEG

<table>
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<th>Baseline:</th>
<th>Endline:</th>
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<tr>
<td>30% experienced stigma</td>
<td>7% experienced stigma</td>
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- Organizational capacity assessments and development of workplans
- General assembly meetings
- Office space and equipment
- Strategic and operational plans
- Official legal recognition
- Identified new sources of funding and partnerships

STIGMA REDUCTION

Almost 26,000 community members reached through sensitization campaigns

203 community and religious leaders trained on reduction of stigma against Ebola survivors
STRENGTHENING GUINEA’S HEALTH SYSTEM

ETP&SS improved health service delivery for Ebola survivors and their communities through health facilities renovation, provision of equipment and medical supplies, and medical staff training. In December 2016, ETP&SS conducted a situational analysis of 18 health facilities at which a high volume of Ebola survivors sought care. The program found that the majority of facilities were unable to provide essential services to care for Ebola survivors due to lack of running water and air conditioning, and deficient electrical supply.

Based on the analysis, ETP&SS selected eight high-volume health facilities for renovation in three priority regions—four in Conakry, two in Kindia, and two in N’Zérékoré. These facilities included one health post, three health centers, three medical centers, and one ophthalmology department at a national hospital.

Renovations varied depending on the condition of the buildings. In most facilities, ETP&SS made repairs and/or renovations to doors, windows, ceilings, walls, floors, and roofing, including repainting interiors and exteriors. One facility received an exterior wall for security; other facilities had air conditioning equipment installed to enable proper storage of medicines. To ensure a steady supply of power for lighting and equipment critical for patient care, the program improved the electrical systems in six facilities by repairing or replacing wiring and installing solar panels and associated equipment.

At every health facility, infection prevention and control requires access to a continuous supply of water. ETP&SS improved water systems in seven facilities, including repair and/or replacement of internal and external pipes, toilets, and sinks. At one facility, the program improved the drinking water supply by installing a water tower. In another, the program resupplied the facility with water by repairing an existing borehole.

The situational analysis also found a lack of essential equipment in all the facilities. ETP&SS procured medical equipment, including hospital beds and delivery tables, for 14 of the 18 health facilities. Equipment included basic tools for diagnostic and patient care such as stethoscopes, resuscitation devices, surgery kits, thermometers, and umbilical clamps. The program also procured ophthalmology equipment—including slit lamps, ophthalmoscopes, vision testing charts, and lens kits—for six facilities. And at NAHS’ request, ETP&SS provided medical equipment to an additional nine health facilities in the hardest-hit regions.

ETP&SS developed clinical guidelines and a training curriculum to increase health workers’ capacity to diagnose and treat survivors’ complications from EVD. The program and International Medical Corps used the curriculum to train 166 health care providers from supported facilities on ophthalmologic, ear-nose-throat, neurological, psychiatric, and gynecological-obstetrical symptoms. Trainees were also taught to refer complicated cases to secondary and tertiary care facilities. ETP&SS activities have improved the
quality of health services available to survivors at program-supported facilities, and leave them in a better position to handle the current and future needs of Ebola survivors and their communities.

**PROGRAM IMPACT**

The program’s renovations of health facilities, provision of equipment, and training of health workers placed these high-volume sites in a better position to provide high-quality services to survivors and the population as a whole. The program has heard from health facility managers and community members that the renovations and new equipment enhanced working conditions and increased the comfort of patients. The supply of medical equipment and materials has increased their ability to provide high-quality care and has created an improved service environment for patients and staff. The donated equipment

**HEALTH FACILITIES SUPPORTED BY APC**

![Map of Guinea showing health facilities supported by APC](image-url)

**Legend**
- Renovation, Equipment, Medicine, Training of Health Workers
- Equipment Medicine Training of Health Workers
- Equipment Training of Health Workers

**INFRASTRUCTURE IMPROVEMENTS**

- 8 Health facilities renovated
- 23 Health facilities provided with medical equipment and supplies
- 14 High-volume health facilities received medicines to treat main pathologies of Ebola survivors
- 166 Health care providers trained on clinical care for Ebola survivors
has improved health workers’ ability to diagnose illnesses and treat patients, which will enable patients to use the facility’s services for follow-up and reduce unnecessary referrals to other health centers. This will encourage more patients to visit the facilities, leading to earlier and more effective treatment. Further, International Medical Corps’ training provided health care workers with the skills to manage Ebola survivors’ treatment without stigmatizing them, and to refer survivors to a higher level for specialized care if needed. As a result, health care workers and these facilities are better equipped to manage Ebola survivors’ sequelae and better prepared to manage any potential outbreaks of infectious disease in the future.

LESSONS

Parts of the infrastructure renovated by ETP&SS at three health facilities were damaged due to inappropriate operation by health staff and patients. In addition to repairing the damaged infrastructure, ETP&SS provided the head of each renovated health facility with a maintenance plan to keep the new infrastructure and equipment in good condition. The plan, approved by the MOH, included descriptions of how to assign each aspect of maintenance to someone working at the health facility or the district level. The head of each facility verbally agreed to maintain the improved facility and the donated equipment. The program has left the country capable of continuing to deliver health care and psychosocial support to survivors. The NAHS will need additional funding to continue surveillance to prevent a resurgence of Ebola.

“Thanks to the installation of the solar panels, my department has electricity. To give electricity is to give life. My consultation room has light now due to the solar panels and I am able to power my slit lamp to examine my patients. With light, I am able to measure my patients’ visual acuity using the vision testing charts [provided by the project] as well.”

— Dr. Mamadou Sow, ophthalmologist at CMC Flamboyants
CONCLUSIONS

The ETP&SS program has strengthened Guinea’s national surveillance program and district-level health systems in six key regions, better preparing the government to manage a future Ebola outbreak and respond to the health needs of survivors. ETP&SS provided multiple interventions to a group of targeted health facilities and communities, which ultimately increased their capacity more than if the program had provided unique improvements to many different facilities and health centers. To ensure sustainability of its efforts, ETP&SS collaborated with the NAHS and the national survivors’ network throughout the 18 months of implementation. The program has left the country capable of continuing to deliver health care and psychosocial support to survivors. The NAHS will need additional funding to continue surveillance to prevent a resurgence of Ebola.

Dr. Fatoumata Binta Diallo, director of the Flamboyants Community Medical Center

“These renovations, the solar panels, have helped us a lot because when there are water shortages, we use the panels to bring up water from the borehole so all of the hospital can have access to running water.”

— Dr. Fatoumata Binta Diallo, Director, Flamboyants Community Medical Center
### Acronyms

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<th><strong>Acronym</strong></th>
<th><strong>Description</strong></th>
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<tr>
<td><strong>APC</strong></td>
<td>Advancing Partners &amp; Communities</td>
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<td><strong>ETP&amp;SS</strong></td>
<td>Ebola Transmission Prevention and Survivor Services</td>
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<tr>
<td><strong>EVD</strong></td>
<td>Ebola virus disease</td>
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<tr>
<td><strong>MOH</strong></td>
<td>Ministry of Health</td>
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<tr>
<td><strong>NAHS</strong></td>
<td>National Agency for Health Security</td>
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<tr>
<td><strong>RENASEG</strong></td>
<td>National Ebola Survivors’ Network</td>
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