Geographic Implementation Areas

Regions
• 3/13 (23%)—Centre, Centre-Est, and Est

Districts
• 5/70 (7%)—Baskuy, Manni, Pouytenga, Sig-Noghin, and Zabrè

Facilities
• 85/2,287 (4%)

Population
Country
• 20.9 million

MCSP-supported areas
• 1.29 million

Technical Areas

Program Dates
November 30, 2017–June 30, 2019

Total Funding through Life of Project (GHSA)
$1,000,000 (Ebola funds—Pillar IV)

Demographic and Health Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th># or %</th>
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</thead>
<tbody>
<tr>
<td>Children between 12–23 months completely vaccinated</td>
<td>81%</td>
</tr>
<tr>
<td>IMR (per 1,000 live births)</td>
<td>66</td>
</tr>
<tr>
<td>USMR (per 1,000 live births)</td>
<td>102</td>
</tr>
<tr>
<td>MMR (per 100,000 live births)</td>
<td>341</td>
</tr>
</tbody>
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Source: Burkina Faso DHS-MICS IV, 2012

Strategic Objectives through the Life of Project

• Scale up and strengthen case-based and community-based surveillance to improve meningitis detection and confirmation.
• Improve preparedness and response mechanisms for future meningitis outbreaks.
• Improve meningococcal group A, pneumococcal conjugate third dose, and Penta3 immunization coverage by strengthening the overall RI system in low-performing districts and maintaining high coverage in well-performing districts.
• Improve surveillance, coordination, communication, and case management for ongoing and future dengue fever outbreaks.

Highlights through the Life of Project

• Updated the MOH’s RED/REC training materials and improved health worker capacity to deliver immunization services in five districts.
• Supported MOH staff in implementation of immunization data quality and accuracy self-assessments in five districts.
• Trained 166 health staff in epidemiologic surveillance in five districts, resulting in increased preparedness for detecting diseases and strategically responding to outbreaks.
• Supported an interministerial pilot of the event-based surveillance system using the One Health approach in Pouytenga district.
• Supported MOH dengue, measles, and meningitis outbreak responses.

Figure 1. Coverage of meningitis A vaccine increased in four of the five MCSP-supported districts
Burkina Faso—Global Health Security Agenda

Background

In Burkina Faso, under a 1-year activity funded by USAID through the Global Health Security Agenda (GHSA), MCSP began providing technical and financial support to the MOH under the Preventing Epidemics through Surveillance and Immunization program. The goal of this program was to support the Burkina Faso MOH to strengthen its RI systems and disease surveillance, with a focus on meningitis and dengue prevention, preparedness for potential outbreak, and outbreak response.

MCSP’s work plan was approved in May 2018, and in July 2018, MCSP received approval from the Burkina Faso secretary general to support activities in three regions (Centre, Centre-Est, and Est) and five districts (Baskuy, Sig-Noghin, Zabré, Pouytenga, and Manni). In August 2018, MCSP organized a rapid assessment, during which MCSP established contacts with regional, district, and community authorities, service providers, and clients throughout its intervention area. Assessment findings identified areas needing improvement, including organization of immunization services, use of management and reporting tools, and quality of immunization and surveillance data. In response, MCSP began working hand in hand with the MOH and other development partners on a variety of immunization, surveillance, and disease outbreak response activities. Key accomplishments resulting from MCSP support are described below.

Key Accomplishments

Updated the MOH’s RED/REC Training Materials and Trained Health Workers in Five Districts

RED/REC is a global approach to strengthening national RI programs. The approach promotes preparation of immunization microplans, use of information to track program implementation progress, interventions (including supportive supervision of health workers) to improve the quality of immunization services, and linking of communities to immunization services. In Burkina Faso, MCSP supported a baseline rapid assessment that revealed RED/REC implementation was lacking in many districts/health facilities. For example:

- Some health facilities had not developed microplans.
- Populations that were at risk of not being vaccinated and/or hard-to-reach populations were not being identified for vaccination.
- Immunization program performance was not monitored regularly, and districts were not conducting supervision visits to health facilities consistently.
- Program data were not being used consistently to guide decision-making.

With MCSP support, the EPI updated its RED/REC approach training materials based on WHO reference documentation and used revised training tools to build capacity of three regional EPI focal points, 15 health district team members, and 128 health facility managers in Centre, Centre-Est, and Est regions. The MOH, with MCSP support, adapted a microplanning tool to aid participants in preparing and updating district/health facility catchment area maps, identifying health centers and locations of priority communities, identifying client barriers to accessing and using immunization services, identifying solutions to challenges, and preparing work plans and plans for immunization sessions. As of May 2019, 54% of health facilities had developed and shared microplans with their district management teams, with the remaining health facilities expected to develop their microplans in the coming months. In contrast, only 58% of all health facilities in the five districts had completed a microplan for all of 2018.

Trained Staff and Supported Implementation of Immunization Data Quality and Accuracy Self-Assessments in Five Districts

The baseline assessment also identified significant EPI data quality issues in almost all health facilities assessed, prompting MCSP support for training in and conducting detailed immunization data quality self-assessments in all 85 health facilities in the five districts. Assessment results revealed that data collection tools were consistently available to health workers, but the quality of the EPI data was poor. For example, some health facilities had inconsistencies in data among their various data reporting tools, such as data from tally sheets not conforming to summaries of the same

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1 Though originally included as a sixth district, Pama was removed from the list of MCSP support due to security concerns.
data included in monthly reports. Similar quality issues were observed in district monitoring, reporting, supervision, and data management practices. The MOH, with MCSP support, led more effective supervision visits and mentored facility staff in data quality and accuracy improvement activities. MCSP also built capacity of staff at all levels to use data more consistently and regularly for better programmatic decision-making.

**Improved Meningitis A, PCV3, and Penta3 immunization coverage through strengthening overall RI system in low-performing districts and maintaining high coverage in well-performing districts**

Despite high national administrative coverage rates, the MOH EPI still faced gaps related to vaccine service delivery; supportive supervision; data management and quality; and regional disparities in immunization coverage. To address these, the MOH EPI with MCSP’s support, developed a strategy to build the skills of staff responsible for planning, implementing, and monitoring the EPI in MCSP-supported regions, districts, and health facilities. The strategy included: updating national RED/REC training materials; conducting updated RED/REC training for regional/district-level trainers and cascading it to health workers; and providing technical and financial support for supportive supervision. Skills-building focused on improving participants’ ability to: effectively organize and deliver RI services in their catchment areas, optimize use of available EPI resources, and ensure equitable and sustainable immunization access for target beneficiaries in all communities. Consequently, coverage of meningitis A vaccine increased in four of the five MCSP districts. Although Baskuy achieved a 17% increase in coverage, it did not meet the 80% target. One reason may be the lack of community-based health workers (agents de santé a base communautaire) to provide complementary community mobilization on the immunization schedule and services (see Figure 1).

**Built Capacity of Health Staff in Epidemiologic Surveillance in Five Districts**

MCSP’s baseline assessment indicated the need for more surveillance training of epidemic-prone diseases for both health staff and CHWs. The MOH set capacity-building of personnel as a priority need, especially for compliance with the country’s IDSRI system. The MOH had revised IDSRI guidelines in the recent past and had already conducted a training of trainers (TOT) session using the revised guidelines but, due to insufficient resources, was unable to proceed with planned cascade trainings in all districts. In response, MCSP supported the MOH in training 166 district management team members and health facility officers (doctors, pharmacists, nurses, and midwives) from the five MCSP-supported districts. Trainees strengthened their skills in detecting diseases under surveillance (meningitis, dengue fever, yellow fever, measles, etc.), analyzing and interpreting data on disease conditions and priority events, and responding strategically to outbreaks.

**Implemented Event-Based Surveillance Using the One Health Approach in Pouytenga District**

In July 2017, the MOH began piloting an event-based surveillance system in three districts (Houndé, Kongoussi, and Boussè). In 2018, the MOH worked with the Ministry of Animal Resources, the Ministry of Environment, and development partners to integrate a multisectoral One Health approach to disease control within the system. The impetus for this interministerial One Health effort was the recognition that human, animal, and ecosystem health are interconnected, and that multidisciplinary approaches to preventing, detecting, and responding to emerging/infectious disease threats are more effective than uncoordinated, standalone responses. In December 2018, the three ministries, with support from the USAID-funded MEASURE Evaluation project, implemented event-based surveillance One Health activities in Po health district, Centre-Sud Region. Three months later, in March 2019, the three ministries, with MCSP support, extended the event-based surveillance One Health activities to Pouytenga health district in Kouritenga Province, Centre-Est Region. The MOH, with support from MCSP, trained a group of multisectoral stakeholders from Centre-Est Region (4), Pouytenga District (3), and Kouritenga Province (4), as well as 54 health, environmental, and veterinary technicians and 221 community workers in identification, early detection, and notification of “unusual events” that may threaten human, animal, and/or environmental health. Participants received job aids (e.g., awareness registry, notification forms, supervision matrix) to use post-training. MCSP subsequently supported the ministries in conducting post-training follow-up and joint supervision visits throughout the district to ensure that surveillance staff were able to implement the One Health approach event-based surveillance effectively in the field.

Signs that the surveillance system in Pouytenga improved include:

- Intersectoral information sharing, coordination, and monitoring are now occurring. The heads of district health, forestry, and veterinary departments recently met to share information on rabies and sanitary inspections, and
stakeholders from the three provincial departments planned a joint monitoring meeting for the second half of 2019.

- Surveillance staff from all three ministries are now notified of unusual event reports. Once an event report is confirmed, notification forms are sent within the appropriate ministerial reporting chain as well as to district officers from the other ministries for multisectoral investigation.
- There is greater community involvement in surveillance. Ministry staff are conducting communication, awareness-raising, and sensitization activities and home visits. Community-initiated surveillance is taking place, whereas surveillance was previously initiated mostly at the health facility level.

**Supported the MOH’s National Dengue, Measles, and Meningitis Outbreak Responses**

MCSP supported the MOH to respond to outbreaks of dengue, measles, and meningitis through the life of the project in Burkina Faso.

- **Dengue outbreak:** Burkina Faso had a dengue fever outbreak (grade 1 emergency) that began in September 2017. By the end of 2017, 15,074 suspected cases, 8,768 likely cases, and 36 deaths (case fatality rate of 0.2%) had been reported nationally. In 2018, 4,385 suspected cases, 1,676 likely cases, and 25 deaths (case fatality rate of 0.6%) were reported nationally. In response to the epidemic, the MOH activated the National Epidemic Management Committee and five dengue subcommittees, strengthened surveillance (daily notification in Ouagadougou and weekly notification in all other regions), provided free medical care and treatment for all severe cases, disseminated awareness messages through radio and television, and implemented vector control measures. During this time, MCSP supported the MOH’s Division for the Protection of Population Health in its response to the outbreak. MCSP’s participation in National Epidemic Management Committee meetings and the dengue case management, communication, and epidemiological/surveillance subcommittees helped ensure that the country had a strong and coordinated response and that USAID was kept abreast of important developments. MCSP also supported a household awareness campaign conducted by 2,500 CHWs and training on dengue case management for 1,529 health care providers in seven regions, and provided financial and technical assistance for a workshop to review data collection and reporting tools to improve the quality of dengue response monitoring data.

- **Measles outbreak:** Over the past 4 years, Burkina Faso has regularly experienced measles outbreaks despite good administrative coverage achieved by RI. From week 1 (January 1–7) to week 23 (June 4–10) of 2018, the measles surveillance system reported 3,741 suspected cases of measles with nine deaths (case fatality rate of 0.2%). To respond to this outbreak, the National Epidemic Management Committee organized a vaccination response campaign from July 27 to August 2, 2018. The campaign involved 26 health districts (including MCSP’s three intervention districts, Sig-Noghin, Zabré, and Manni) in 12 health regions and targeted children ages 6 to 59 months old. An active member of the National Epidemic Management Committee, MCSP provided technical support to the MOH in preparing, coordinating, and monitoring the measles response campaign.

- **Meningitis outbreak:** Burkina Faso is the only country that lies entirely within the meningitis belt and is at continued high risk of meningitis epidemics. In January 2019, Burkina Faso recorded a meningitis outbreak case in Est Region (Diapaga District) and Sud-Ouest region (health districts of Gaoua and Dano). At epidemiological week 10 (ending March 10, 2019), 818 suspected cases were reported nationwide with 49 deaths (case fatality rate of 6%). In response, from February 8 to 13, 2019, MCSP helped organize suspected case and reactive case vaccination campaigns in the Botou and Kantchari communes and health facility in Diapaga commune (Tapoa Djerma) with the tetravalent meningococcal vaccine. With earmarked outbreak funds from USAID, MCSP also provided technical support to the National Epidemic Management Committee.

**Recommendations for the Future**

Working within a limited timeframe, MCSP helped the MOH strengthen RI skills of district management team members, health facility staff, and CHWs (through support for the RED/REC approach and data quality self-assessments) and epidemiological surveillance (through IDSR, event-based surveillance/One Health approach, and dengue and meningitis surveillance training). To capitalize on this investment, MCSP recommends that the MOH; stakeholders within Baskuy, Sig-Noghin, Pouytenga, Zabré, and Manni districts; and development partners continue efforts to:
- Implement the RED/REC approach. This will help improve the organization of RI services, use of available resources, and equitable and sustainable access to vaccination for children and pregnant women.
- Provide supportive supervision to regional, district, and health facility staff to improve the quality and consistent use of EPI data.
- Provide supervision for IDSR and event-based surveillance implementation and expand the pilot of the event-based surveillance/One Health approach. Doing so will help improve disease detection, surveillance, and outbreak response throughout Burkina Faso.

<table>
<thead>
<tr>
<th>Select Performance Indicators</th>
<th>Achievement (Target)</th>
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<tbody>
<tr>
<td><strong>Global or Country Performance Monitoring Plan Indicators</strong></td>
<td></td>
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<tr>
<td>Number of CHWs trained on identifying meningitis as per protocol in Pouytenga district (2019)</td>
<td>175 (target: 129; target exceeded)</td>
</tr>
<tr>
<td>Number of health care workers trained on dengue case management in seven districts (2018)</td>
<td>1,529 (target not defined)</td>
</tr>
<tr>
<td>Number of health care workers trained in the five intervention districts (2018–2019)</td>
<td></td>
</tr>
<tr>
<td>Percentage of health facilities with microplans developed/updated in the five MCSP districts (as of May 2019)</td>
<td>54% (target: 100%; 54% achieved)</td>
</tr>
<tr>
<td>Percentage of children under 12 months who received Penta3 in the five MCSP districts (October–December 2018)</td>
<td>113% (target: 80%; target exceeded)</td>
</tr>
<tr>
<td>Percentage of children who received measles-containing-vaccine first-dose in the five MCSP districts (October–December 2018)</td>
<td>107% (target: 80%; target exceeded)</td>
</tr>
<tr>
<td>Percentage of children who received meningococcal group A in the five MCSP districts (October–December 2018)</td>
<td>99% (target: 80%; target exceeded)</td>
</tr>
</tbody>
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1 As of May 2019, health facilities were still developing microplans with guidance from the districts.

For a list of technical products developed by MCSP related to this country, please click [here](#).