Global Health



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# CDC in Liberia



The Centers for Disease Control and Prevention (CDC) first started working with the country of Liberia in 2007 under the U.S. President's Malaria Initiative (PMI). In 2014, CDC rapidly increased support in response to the West Africa Ebola outbreak that occurred from 2014-2016. Following Liberia's successful recovery from the Ebola epidemic, CDC Liberia expanded support in Global Health Security and for the COVID-19 response. CDC continues to help strengthen laboratory systems, disease surveillance, emergency management, and workforce capacities to respond to disease outbreaks in alignment with the Global Health Security Agenda (GHSA).

# **CDC Impact in Liberia**

#### Global Health Security

CDC's global health security work in Liberia increases the country's ability to prevent, detect, and respond to disease outbreaks before they become global epidemics. CDC provides expertise and support to the Ministry of Health (MOH), National Public Health Institute of Liberia (NPHIL), and other government institutions in 11 technical areas. These GHSA technical areas focus on strengthening core public health capacities in disease surveillance, laboratory systems, workforce development, emergency management, infection prevention and control, and points of entry. CDC has also established Emergency Operations Centers at the national level and in all 15 counties.



CDC provides operational, technical and partner support to the Public Health Emergency Operations Centers to strengthen coordination and communication during outbreaks. These outbreaks include Lassa fever, measles, shigellosis, and COVID-19.



CDC supports the establishment of County-level Rapid Response Teams (RRTs). This work has included training over 250 RRT members in three counties since 2022.



CDC supports the development and building of the NPHIL and National Public Health Reference Laboratory. CDC provides technical assistance for the planning, transition, and operationalization of these structures.



CDC established an event-based network unit within the NPHIL to detect small outbreaks and further strengthen early disease detection. In early 2023, public health officials investigated over 100 signals and classified approximately 40 signals as events.

### Field Epidemiology Training Program (FETP)

CDC helped launch Liberia's FETP in 2015 to strengthen the public health workforce capacity to investigate and respond to disease outbreaks. Two levels of FETP— frontline and intermediate— train entry-, mid-, and senior-level health professionals to identify and contain outbreaks before they become epidemics. Participants develop critical data collection and disease investigation skills that inform evidence-based action. FETP trainees and graduates support outbreak responses, including: Ebola Virus Disease (2015-2016), measles (2015 – 2021), Lassa fever (2017 – 2021), meningitis (2018), pertussis (2017), scabies (2018), and COVID-19 (2020 – present).

#### FETP graduates also:

- Sustain Liberia's Integrated Disease Surveillance and Response platform
- Increase data quality, timeliness, and completeness of surveillance reporting
- Expand scientific literature and promote scientific writing in Liberia
- Strengthen national, regional, and local capabilities to stop diseases at their source



As of June 2023, 292 Frontline and 95 Intermediate FETP graduates completed Liberia's FETP courses. 20 Liberians completed regional Advanced FETP courses in Ghana (18) and South Africa (2).



TEPHINET accredited Liberia's FETP Intermediate Program in September 2022.

#### COVID-19

Before the pandemic, CDC and the MOH collaborated to expand regional public health diagnostics and community-based surveillance. This work laid the foundation for Liberia's COVID-19 response. During the pandemic, CDC supported Liberia with epidemiology, laboratory functions, infection prevention and control, procurement of materials, and acceleration of COVID-19 vaccination. FETP graduates supported COVID-19 response activities, including case identification, contact tracing, homebased care, data management, surveillance, and case management activities.



In 2023, Liberia increased the vaccination coverage from 70% to 74%. CDC supported vaccination campaign activities to increase coverage in counties with low coverage rates. Grand Cape Mount County reached 92% vaccination coverage, and Bomi County reached 60% vaccination coverage.



COVID-19 testing is part of the Acute Febrille Illness (AFI) surveillance platform – in 2023, 124 samples were collected for COVID-19 testing.



CDC conducts infection prevention control assessments at health facilities, and enhances workforce capabilities in sample collection and specimen transport. Through CDC funding, Riders for Health has transported nearly 140,981 COVID-19 specimens to laboratories since March 2020. All COVID-19 samples reached a laboratory within 24 hours.



CDC has supported the MOH in developing and implementing a five-year national infection prevention control strategic plan.



In March 2023, CDC trained 18 technical and six support staff in bio-risk management.

#### Malaria

Malaria remains a leading cause of morbidity and mortality in Liberia. Since 2008, CDC has partnered with USAID to lead and implement PMI to control and eliminate malaria. CDC helps distribute insecticide treated nets, strengthen malaria surveillance activities, and strengthen workforce capacity.



With support from PMI, CDC distributed 2.5 million insecticide-treated bed nets in 2021.



In 2020, CDC supported trainings for over 450 healthcare workers on national malaria case management guidelines.



CDC helped strengthen routine malaria surveillance at public health facilities, resulting in an increase of malaria testing rates from 82% in 2015 to 94% in 2020.

#### **Ebola**

In March 2014, the largest known Ebola outbreak in history began in West Africa, primarily affecting Liberia, Guinea, and Sierra Leone. Liberia reported more than 10,600 cases and 4,800 deaths. During the outbreak, CDC and partners supported the response by:

- Strengthening health system surveillance and epidemiological capacities
- Strengthening laboratory systems to diagnose disease
- Identifying people sick with Ebola and monitoring contacts
- Implementing effective IPC measures
- Building a strong public health workforce
- Enhancing emergency management and response capabilities
- · Adapting and validating rapid response team training materials

Following the confirmation of Ebola in Guinea in February 2021, NPHIL enhanced Ebola preparedness in counties with higher risk of Ebola transmission. In April 2021, NPHIL and county health teams from Lofa, Bong, and Nimba participated in a simulation exercise to identify gaps in border health. NPHIL, county health teams, and partners addressed gaps within case identification, points of entry, rapid response teams, and vaccine campaign planning.

CDC also supported the MOH's Men's Health Screening Program, which provides screening and counseling services for male Ebola survivors. The program also educates men and women on how to reduce the risk of sexual transmission of the Ebola virus. Since research data suggests that the Ebola virus can stay in the body of a survivor for more than a year, the screening program is a valuable component to rapid identification of potential outbreaks.



CDC supported trainings at the National Public Health and Reference Laboratory to enhance serology and molecular testing techniques used in the Demographic Health Survey to characterize individuals' risk of exposure to Ebola.



In 2021, CDC and partners supported training for 114 county and district rapid responders to detect, respond, and control the spread of COVID-19 and Ebola.

#### Vaccine-Preventable Diseases

CDC works with partners to support Liberia's polio eradication and measles pre-elimination activities. When the 2014 measles vaccine campaign was suspended due to the 2014-2016 West Africa Ebola outbreak, the immunity gap led to the largest measles outbreak Liberia had seen in years. In response to this outbreak, Liberia began a systematic community outreach campaign to restore vaccination rates. CDC also partnered with NPHIL's Emergency Operation Center to conduct polio campaigns using the oral polio vaccine to stop polio virus transmission.



In 2021, clinical health workers engaged community health providers, community leaders, and disease surveillance officers in 15 districts to support polio vaccination and increase awareness and reporting of vaccine-preventable diseases.



Since 1999, 30 CDC experts have deployed to Liberia to support immunization activities under the Stop the Transmission of Polio program.



CDC partners are assisting Liberia's Expanded Program on Immunization (EPI) in developing an Electronic Immunization Registry to monitor and document vaccination coverage in Liberia, enhance EPI performance and efficiency, and provide reliable data.



CDC is funding development of a digital longitudinal vaccine registry that will provide Liberians with a nationalized electronic record of their vaccine history. This government-owned platform will absorb the commercial COVID-19 vaccination platform that was launched during the pandemic.

## **CDC Liberia Success Stories**

Motorcycles Help Speed Diagnosis in Liberia Liberia Workforce Development (FETP) in Action

## CDC Staff in Liberia

- 4 U.S. Assignees
- 8 Locally Employed

#### Liberia at a Glance

• Population: > 5 million

### Liberia Top 10 Causes of Death

- 1. Malaria
- 2. Diarrheal diseases
- 3. Neonatal disorders
- 4. Lower respiratory infections
- 5. Ischemic heart disease
- 6. HIV/AIDS

• Per capita income: \$1,250

• Life expectancy: F 66 / M 63 years

• Infant mortality rate: 63/1,000 live births

Sources: World Bank 2020, Liberia; Population Reference Bureau 2021,

Liberia

7. Stroke

8. Tuberculosis

9. Cirrhosis and other chronic liver diseases

10. Maternal disorders

Source: GBD Compare 2019, Liberia

# **Related Links**

Liberia | Travelers' Health | CDC Video: Liberia Laboratory Progress

Video: No Small Measure- NCHS Response to the Ebola Crisis (Anne Driscoll)

Video: Riders for Health

Last Reviewed: July 28, 2023