CASE REPORT: As of 3 DEC, Liberia has reported no additional Ebola virus disease (EVD) cases since reporting three confirmed cases in one family of six in Paynesville, Monrovia, on 20 NOV. The first family member diagnosed was a 15-year-old boy (originally reported as 10 years old) who became ill on 14 NOV and died on 23 NOV. The boy’s father and 8-year-old brother tested Ebola virus positive on 20 NOV. Investigations to establish the origin of infection are ongoing. Liberia has identified 165 contacts, including 34 high-risk contacts. Liberia had been declared EVD-free on 3 SEP and was at day 78 of its 90-day period of heightened surveillance.

According to WHO on 2 DEC, as of 29 NOV, there have been 28,637 confirmed, suspected, and probable cases (11,315 deaths) in Guinea, Sierra Leone, Liberia, Italy, Senegal, Nigeria, United Kingdom, Spain, Mali, and the United States. WHO considers the West Africa epidemic to be in a phase 3 response, which implements specific actions to achieve and maintain zero virus transmission. WHO declared Sierra Leone Ebola transmission-free on 7 NOV after 42 days had passed with no new cases and it is in a 90-day period of heightened surveillance. Guinea started its 42-day countdown to becoming Ebola transmission-free on 16 NOV after its last case tested negative for the infection.

A growing volume of data from clinical observation and testing of recovered EVD patients indicates that the Ebola virus can persist at various sites in the body for many months in some people, according to WHO. CDC has posted information on persistent medical conditions after recovery from EVD.

On 1 OCT, WHO’s seventh Emergency Committee meeting on the EVD outbreak agreed that the outbreak continued to constitute a Public Health Emergency of International Concern (PHEIC) and proposed new temporary recommendations that would supersede those previously issued.

DoD RESPONSE: On 10 AUG, the Deputy Secretary of Defense signed a memorandum declaring that DoD needs to maintain the capability to operate in an infectious disease environment in the future. The memorandum extends for at least one year following the 30 JUN 2015 end of OUA selected DoD policies and EVD-related responsibilities, including those related to health surveillance, personal protective equipment, medical treatment for deployed DoD personnel, and transport of exposed or infected DoD personnel. DoD personnel continue to provide support to the Liberian Institute of Biomedical Research.

DIAGNOSTICS AND MEDICAL COUNTERMEASURES: CDC's Laboratory Response Network (LRN) is deploying CDC's Ebola Virus NP and VP40 Real Time RT-PCR assays. These Emergency Use Authorization assays will replace DoD's Ebola Virus EZ1 Real Time RT-PCR assay. DoD's LRN labs will transition to the CDC assays. Additional information on vaccines, therapies, and diagnostics is available from WHO.

TRAVEL ADVISORY: On 25 NOV, CDC lowered its travel advisory for Guinea to Alert - Level 2, Practice Enhanced Precautions, and its advisory for Sierra Leone to Watch - Level 1, Practice Usual Precautions. Liberia remains at Watch - Level 1, Practice Usual Precautions. As of 10 NOV, enhanced entry screening was discontinued for travelers to the U.S. from Liberia and Sierra Leone, but remains in place for travelers from Guinea. Travelers from Liberia are no longer being funneled through the five U.S. airports conducting enhanced entry screening (JFK, Newark Liberty, Washington Dulles, Chicago O'Hare, and Atlanta Hartsfield-Jackson). According to CDC, travelers from Liberia and Sierra Leone should self-monitor for fever or other symptoms of Ebola for 21 days after departure. Recommendations and procedures have not changed for travelers entering the United States from Guinea; CDC recommends that state public health departments implement active post-arrival monitoring for 21 days along with other movement restrictions based on a traveler’s exposure risk category using CDC definitions for travelers from Guinea. CDC updated its guidance for the Assessment of Persons Under Investigation Having Low (But not Zero) Risk of Exposure to Ebola on 1 DEC.

<table>
<thead>
<tr>
<th>Country (as of date)</th>
<th>EVD Cases All / Lab Confirmed</th>
<th>Deaths All / Lab Confirmed</th>
<th>EVD Cases in HCW / Deaths</th>
<th>Contacts Being Followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea (29 NOV)</td>
<td>3,804 / 3,351</td>
<td>2,536 / 2,083</td>
<td>196 / 100</td>
<td>0</td>
</tr>
<tr>
<td>Sierra Leone (8 NOV)</td>
<td>14,122 / 8,704</td>
<td>3,955 / 3,589</td>
<td>307 / 221</td>
<td>0</td>
</tr>
<tr>
<td>Liberia (29 NOV)</td>
<td>10,675 / 3,160</td>
<td>4,809 / NA</td>
<td>378 / 192</td>
<td>165</td>
</tr>
<tr>
<td>Italy (20 JUL)</td>
<td>1 / 1***</td>
<td>0 / 0</td>
<td>1 / 0***</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom (22 JAN 2015)</td>
<td>1 / 1***</td>
<td>0 / 0</td>
<td>1 / 0***</td>
<td>0</td>
</tr>
<tr>
<td>United States (4 DEC 2014)</td>
<td>4 / 4**</td>
<td>1 / 1</td>
<td>3 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Mali (21 DEC 2014)</td>
<td>8 / 7</td>
<td>6 / 5</td>
<td>2 / 2</td>
<td>0</td>
</tr>
<tr>
<td>Nigeria (17 SEP 2014)</td>
<td>20 / 19</td>
<td>8 / 7</td>
<td>11 / 5</td>
<td>0</td>
</tr>
<tr>
<td>Senegal (20 SEP 2014)</td>
<td>1 / 1*</td>
<td>0 / 0</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Spain (2 DEC 2014)</td>
<td>1 / 1</td>
<td>0 / 0</td>
<td>1 / 0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total (29 NOV)</strong></td>
<td><strong>28,637 / 15,249</strong></td>
<td><strong>11,315 / 5,685</strong></td>
<td><strong>900 / 520</strong></td>
<td><strong>165</strong></td>
</tr>
</tbody>
</table>

1Excluding Liberia / *Imported from Liberia / **1 imported from Guinea / ***Imported from Sierra Leone / NA = Not Available.

Shaded rows represent countries which have been declared Ebola transmission-free by WHO.

The total number of cases, which includes suspect, probable, and confirmed cases, is subject to change due to reclassification, retrospective investigation, consolidation of cases and laboratory data, and enhanced surveillance.

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSB summary (25 NOV 2015).

All information has been verified unless noted otherwise. Sources include WHO, CDC, and health agencies in Guinea, Liberia, Sierra Leone, Mali, and the UK.

Approved for Public Release
DEPARTMENT OF DEFENSE (AFHSB)
West Africa Ebola Surveillance Summary #128
3 DEC 2015

New confirmed Ebola virus disease cases by district in West Africa, during the most recently reported three-week period

New Confirmed Cases

0
3

Reporting period: 9 NOV - 29 NOV

Sierra Leone was declared Ebola virus transmission free on 7 NOV.

All information has been verified unless noted otherwise. Sources include WHO, and the Guinea, Liberia, and Sierra Leone Ministries of Health.
Additional Resources and Media Reports

Ebola Web Sites
- WHO
- CDC
- Liberia MOH
- Sierra Leone MOH
- Humanitarian Response (West Africa)
  Access to MOH, WHO, UN, and other reports
- AFHSB Guidelines for Detecting and Reporting DoD Cases of Ebola Virus
- USAMRIID
- State Department Travel Site
- USAID Ebola Site
- DoD News

Information and News
- Ebola Situation Report - 2 December 2015 (WHO, 2 DEC)
- Ebola crisis passes, but questions on quarantine persist (NY Times, 2 DEC)
- Assessment of Persons Under Investigation Having Low (But not Zero) Risk of Exposure to Ebola (CDC, 1 DEC)
- Puzzling Ebola death shows how little we know about the virus (NPR, 24 NOV)
- Amid failure and chaos, an Ebola vaccine (NY Times, 24 NOV)
- An indictment of Ebola response (Harvard Gazette, 22 NOV)
- Guinea counts down to end of Ebola (VOA, 18 NOV)
- Ebola Survivors (CDC, 9 NOV)
- Surveillance strategy during Phase 3 of the Ebola response (WHO, 5 NOV)
- Use of ChAd3-EBO-Z Ebola virus vaccine in Malian and US adults… (Lancet Infectious Disease, 3 NOV)
- Effectiveness of ring vaccination as control strategy for Ebola virus disease (EID, 2 NOV)
- Ebola virus disease complicated by late-onset encephalitis and polyarthritis, Sierra Leone (EID, 27 OCT)
- Persistent virus in people recovering from Ebola virus disease (WHO, 14 OCT)
- Ebola response phase 3 (WHO, SEP 2015)
- Termination of Operation United Assistance and maintaining certain DoD Ebola virus disease-related guidance and authorities (U.S. DoD, 10 AUG)
- Report of the Ebola Interim Assessment Panel (WHO, 7 JUL)