CASE REPORT: According to WHO's 16 DEC situation report, no new confirmed Ebola virus disease (EVD) cases were reported in West Africa during the week ending 13 DEC. The last confirmed cases were identified on 20 NOV when Liberia reported a cluster of three EVD cases in one family in Monrovia. One family member, a 15-year-old boy, died on 23 NOV. His father and 8-year-old brother were released from the hospital on 3 DEC. WHO says the "cluster of cases in Liberia is now understood..." None of 165 case contacts became ill, and all have completed their 21-day monitoring period. As of 11 DEC, 210 eligible recipients associated with the cluster had received the rVSV-ZEBOV Ebola vaccine as part of the Partnership for Research on Ebola Vaccines in Liberia (PREVAIL study).

As of 16 DEC, 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. Liberia began its latest 42-day countdown to becoming Ebola transmission-free on 16 NOV after its last case tested negative for the infection. Liberia began its latest 42-day countdown to transmission-free status on 3 DEC.

A growing volume of data from clinical observation and testing of recovered EVD patients indicates that Ebola virus can persist at various sites in the body for many months in some people, according to WHO. CDC posted information on persistent medical conditions after recovery from EVD. A study by CDC researchers published in the New England Journal of Medicine on 17 DEC showed that eight survivors treated in the U.S. have symptoms weeks to months after recovery that can range from mild to severe.

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 that 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 1, Practice Usual Precautions, and its advisory for Sierra Leone to 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.
# Latest Available Ebola Case Counts in or Related to West Africa, 2014-2015

<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 (13 DEC 2015)</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 2015)</td>
<td>14,122 / 8,704</td>
<td>3,955 / 3,589</td>
<td>307 / 221</td>
<td>0</td>
</tr>
<tr>
<td>Liberia (13 DEC 2015)</td>
<td>10,675 / 3,160</td>
<td>4,809 / NA</td>
<td>378 / 192</td>
<td>0</td>
</tr>
<tr>
<td>Italy (20 JUL 2015)</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 (13 DEC 2015)</strong></td>
<td>28,637 / 15,249</td>
<td>11,315 / 5,685†</td>
<td>900 / 520</td>
<td>0</td>
</tr>
</tbody>
</table>

†Excluding Liberia / *Imported from Liberia / **1 imported from Guinea / ***1 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 (10 DEC 2015).

All information has been verified unless noted otherwise. Sources include NCMI, WHO, CDC, and health agencies in the listed countries.

Approved for Public Release
All information has been verified unless noted otherwise. Sources include WHO and the Liberia Ministry of Health.

Reporting period: 23 NOV - 13 DEC

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

Guinea and Liberia are expected to be declared Ebola virus transmission-free on 28 DEC 2015 and 14 JAN 2016, respectively.
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 - 16 December 2015 (WHO, 16 DEC)
- Post-Ebola Signs and Symptoms in U.S. Survivors (NEJM, 17 DEC)
- Genomic Analysis Sheds Light on Ebola Virus Disease Outbreak in Liberia (USAMRIID Press Release, 9 DEC)
- Duration of Ebola virus RNA persistence in semen of survivors: population-level estimates and projections (Eurosurveillance, 3 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)
- 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)
- 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)