

2014-15 EBOLA VIRUS DISEASE (EVD) OUTBREAK

WEEKLY SUMMARY FOR BC HEALTH PROFESSIONALS

Information current as of January 7, 2015 16:00 hours

OVERVIEW

There has been an ongoing epidemic of Ebola Virus Disease (EVD) in West Africa since March 2014 which originated in Guinea and spread to Liberia and Sierra Leone. Reported incidence in Liberia continues to decline nationally, however, a slight increase was noted at the end of December. Data from Guinea suggest a slight decrease in new cases reported weekly, however, the World Health Organization (WHO) reports that incidence continues to fluctuate as transmission spreads to new regions and remains intense in certain districts. The number of new cases reported weekly in Sierra Leone remains high, especially in the west of the country, yet may have stabilized nationally; efforts by the Government of Sierra Leone, WHO and UN partners have intensified in the west of the country. The UK has reported its first case of EVD in a Scottish health care worker returning from Sierra Leone.

EVD CASES (as of January 4, 2015)

Overall: 20 747 cases, 8 235 deaths

COUNTRIES AFFECTED

| Countries with widespread and intense transmission (West Africa)* | | | | | Countries with no or limited local transmission | |
|--|-------|-------------------------------------|-------------------------------------|-----------------------------------|--|---|
| Cases** | | | | | Total cases | |
| | Total | week to 21 December ¹ | week to 28 December ² | week to 4 January ³ | | |
| Liberia*** | 7797 | 21 | 31 | 8 | USA ⁴ | 4 |
| Sierra Leone | 8356 | 315 | 337 | 248 | Mali ³ | 8 |
| Guinea | 2416 | 156 | 114 | 74 | UK (Scotland) ³ | 1 |

* For more details, including most recent epidemic curves, please see the WHO Situation Report – 7 January 2015 at:

<http://www.who.int/csr/disease/ebola/situation-reports/en/>; numbers are subject to change as data become available.

**Total includes confirmed, probable and suspected cases; weekly counts include confirmed cases only.

*** Data missing for December 21 for the week to 21 December; data available up to January 2 for the week to 4 January; an additional 40 probable cases were reported during the week to 4 January.

INTERNATIONAL CONTROL ACTIVITIES AND FINDINGS

- On December 29, 2014, WHO was notified of a [confirmed EVD case in the UK](#) (Glasgow, Scotland) in a returning healthcare worker from Sierra Leone who was isolated and is currently receiving treatment in London, England. Public health authorities have completed contact-tracing and risk assessments with [no high risk contacts identified](#).
- Analyses of patient data suggest that cases of EVD in West Africa were distributed evenly between males and females; individuals in the 15 to 44 age group and those over 45 were three and four times more likely to be affected compared with children, respectively.³ The cumulative case fatality rate of EVD in the three countries with widespread and intense transmission was estimated to be 71%;¹ among hospitalized patients with a reported definitive outcome, the case fatality is approximately 60%.³
- In Mali, the last confirmed case tested negative for a second time on December 6 and all contacts have completed their 21 day follow-up.³ Outbreaks of EVD are typically declared over 42 days from the date the last case tested negative for a second time.
- Forty two days have elapsed since the the last of four EVD cases in the U.S. tested negative for a second time on November 9, 2014.⁴

- The UNMEER target of isolating and treating 100% of EVD cases by January 1, 2015 was not met due to the uneven distribution of beds and cases, despite maintaining sufficient capacity within all affected countries.³ Similarly, sufficient capacity to bury 100% of people known to have died from EVD safely and with dignity is available in each affected country; however, this target was not met due to under-reporting of deaths.³ In addition, 90% of registered contacts are reportedly monitored in Guinea, Liberia and Sierra Leone.³
- The U.S. Centers for Disease Control and Prevention (CDC) has published [Questions and Answers about Ebola and Food Safety in the U.S.](#) which addresses concerns around food as a vehicle for transmission.⁵ U.S. CDC has published [Interim Guidance for Ebola Virus Cleaning, Disinfection, and Waste Disposal in Commercial Passenger Aircraft](#) which outlines management of travellers with symptoms consistent with Ebola while in flight as well as cleaning and disinfecting considerations during flight and after landing. In addition, [Guidance for Safe Handling of Human Remains of Ebola Patients in U.S. Hospitals and Mortuaries](#) has been published and highlights considerations for PPE, postmortem preparation, mortuary care, and disposition and transportation of remains.
- As of January 6, [travellers from Mali entering the U.S.](#) will no longer be subject to enhanced screening and monitoring. CDC has also removed the alert from the [travel notice](#) which advised travellers to practice enhanced precautions when visiting Mali.
- Public Health England has published [guidance for dental practice staff](#) who encounter patients with Ebola virus disease which includes risk assessment and subsequent delays of non-essential treatment until after 21-day incubation period
- The [Oxford Vaccine Group](#) and [Johnson & Johnson](#) have announced the initiation of a Phase I trial of a third candidate vaccine (under a prime-boost vaccine regimen) to assess safety and measure immune response. Currently, the cAd3-ZEBOV and rVSV-ZEBOV [vaccines](#) are in Phase I trials, as reported by WHO. The rVSV-ZEBOV [clinical trial has resumed](#) as of January 5, 2015 and will now implement a lower dose of the vaccine.

Articles of interest

- Successful administration of FX06 (a fibrin-derived peptide under clinical development for vascular leak syndrome) has been observed in a 38 year old male health care worker infected with EVD and treated in Germany.⁶
- Phase I trials of the EBO vaccine in 108 healthy Ugandan volunteers (beginning in 2009) have shown the vaccine to be well-tolerated and induced a measurable immune response. The results from this study have been used to inform the development of the GlaxoSmithKline/U.S. National Institute of Allergy and Infectious Diseases Ebola candidate vaccine currently in Phase I trials (cAd3-ZEBOV).⁷

BRITISH COLUMBIA AND CANADIAN RESPONSE

- The Provincial Ebola Preparedness Task Force and working groups continue to address clinical and public health issues, as well as manage communications. Guidelines are currently being developed in-line with provincial and national recommendations to inform emergency preparedness activities. The following policies and guidelines are now available on the [Provincial Health Officer's Ebola Web-Site for B.C. Health Care Providers](#):
 - Recommendations for Environmental Services, Biohazardous Waste Management, and Food and Linen Management for Persons under Investigation, Probable, and Confirmed cases of EVD
 - Provincial Emergency Department Ebola Virus Disease (EVD) Screening Questions and Risk Assessment Algorithm
 - Recommendations for Critical Care Management of Suspected and Confirmed EVD cases
 - Provincial EVD PPE Training Plan
 - British Columbia Ebola Virus Disease (EVD) Contact Investigation and Management Guidelines
 - Environmental Contamination in the Community Settings
- BC is conducting surveillance of EVD cases and contacts, including returning travelers. There have been no EVD cases in BC. As of January 7, 2015, there were six EVD contacts under public health monitoring.
- The Public Health Agency of Canada has released a [statement on Infection Prevention and Control \(IPC\) Measures for EVD](#) which highlights the importance of preparing for EVD in healthcare settings and provides guidance around initial screening and evaluation as well as point-of-care risk assessment. More [detailed advice on IPC measures for EVD in healthcare settings](#) has been provided and updated by the Infection Prevention and Control Expert Working Group.

GUIDANCE AND OTHER RESOURCES

National guidance including case definitions, care report form, and public health, clinical care and infection control guidelines: <http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-professionals-professionnels-eng.php>
Public Health Agency of Canada travel notices: <http://www.phac-aspc.gc.ca/tmp-pmv/notices-avis/index-eng.php>
BCCDC Ebola webpage: <http://www.bccdc.ca/dis-cond/a-z/e/Ebola/default.htm>
BC Provincial Health Office: <http://www.health.gov.bc.ca/pho/physician-resources-ebola.html>

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