

Guidance for Immunization Programmes in the African Region in the Context of Ebola

Revised 30 March 2015*

As a public health emergency of international concern (PHEIC), the Ebola outbreak in West Africa has drawn huge global attention and response. Numerous queries about immunization services and the risks they present have been raised. Tragically in some areas, there are reports of increased vaccine-preventable deaths, such as measles. In this context, practical guidance on immunization is needed.

The specific purpose of this document is to assist countries to:

- Maintain and/or restart immunization services;
- Continue to disseminate educational and social mobilization messages and contribute to Ebola surveillance;
- Provide guidance on infection prevention and control during vaccination;

As the situation evolves, this guidance will be revised if necessary.

Ebola is spread through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people (faeces, urine, vomit, saliva, tears, semen, sweat) and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids¹. There is no airborne transmission of the virus. The incubation period of Ebola virus disease (EVD) (the interval from infection to the onset of symptoms) ranges from 2 to 21 days. People are not infective during the incubation period, but become infective with the onset of symptoms. Health-care workers have frequently been infected while treating patients with suspected or confirmed EVD. This has occurred through close contact with patients when infection control precautions are not strictly practiced.

Community engagement is essential for the successful response to outbreaks. Good outbreak control relies on applying a package of interventions², namely case management with use of appropriate personal protective equipment (PPE), surveillance and contact tracing, a good laboratory service, safe burials, social mobilization and behavioural change communication.

*This guidance replaces WHO Information Notes of October 24, 2014 and March 18, 2015.

¹ Ebola is killed with hospital-grade disinfectants (such as household bleach). Ebola dried on surfaces such as doorknobs and countertops can survive for several hours; however, virus in body fluids (such as blood) can survive up to several days at room temperature.

² See WHO technical guidance on Ebola virus disease preparedness and response available online at <http://www.who.int/csr/resources/publications/ebola/en/>

Countries with widespread and intense transmission (Guinea, Liberia, and Sierra Leone)

As a result of the Ebola crisis, regular health services, including immunization, have been greatly reduced or stopped for periods of time due to suspension of services, shortage of healthcare workers, fear, and the massive disruption of daily life. Rumours and misinformation about the origin and transmission of Ebola disease have spread through society in certain areas, leaving the public unsure about the safety of routine immunization. This has resulted in an increase in the number of susceptible individuals and likelihood of vaccine-preventable disease outbreaks. Cases of measles³ are being reported in the Ebola affected countries and there is a significant growing risk of measles outbreaks. Such outbreaks would further overload the health services and inevitably result in child deaths. Consequently, in light of the decline in Ebola cases, it is urgent to focus efforts on restarting and intensifying immunization activities.

- Based on a risk assessment indicating that risk of vaccine-preventable disease outbreaks (i.e. polio, measles, etc.) outweighs the risk of increased Ebola virus transmission, intensified routine vaccination activities and/or vaccination campaigns are required. These should be conducted as long as: (i) the planning and human resources are adequate to ensure a successful campaign achieving high coverage; and (ii) the recommended infection prevention and control precautions can be effectively implemented at all times. These include:
 - Establish measures for crowd control;
 - Ensure effective triage for EVD, including temperature monitoring, prior to vaccination and use of the case definitions for EVD⁴ screening by asking if the child to be vaccinated has experienced any of the signs or symptoms (most frequently: fever with lethargy and loss of appetite, followed by vomiting and/or diarrhoea), or if he/she has had contact with persons infected with EVD (e.g. family members, etc).
 - **Do not vaccinate anyone suspected of EVD or exposed to EVD⁵.**
 - In the event that a suspected or EVD case is identified, ensure that the case is isolated and “no touch” approach is used, and the local authorities and team trained and equipped to provide care to suspected EVD cases are immediately notified;
 - Perform hand hygiene (rubbing with an alcohol-based formulation (hand sanitizer) or if not available, hand washing with soap and water) before and after each vaccine administration (one action between two vaccinations is sufficient);
 - Although gloves are not routinely required for administering injectable vaccinations in normal conditions, in areas where Ebola virus transmission is still occurring, vaccinators should wear gloves and change them and perform hand hygiene between each vaccination.
 - Use “one-time/one-person only” auto-disable syringes;
 - Observe strict safe injection and waste disposal practices (e.g. no recapping, immediate disposal of needle and syringe into safety boxes that meet the WHO prequalification standards⁶; disposal by high-temperature incineration or burying).
 - For the administration of oral vaccines (e.g. OPV) ensure that the vaccine dropper does not at any time come in contact with the child’s mouth. If it does, complete the dosing and discard the vial (e.g. do not use the remaining doses).
 - Very good communication and social mobilization efforts are needed to explain the need for vaccination, and to reassure the population that vaccination protects against the traditional vaccine-preventable diseases and not Ebola. Routine vaccination is in no way related to vaccine trials or any type of experimental prevention activities for Ebola or any other disease.

³ Vitamin A supplementation for the treatment of measles cases is essential to reduce severity of illness and deaths. For more information see ‘Treating Measles in Children’, WHO, 2004. Available online at

http://www.who.int/immunization/programmes_systems/interventions/TreatingMeaslesENG300.pdf?ua=1

⁴ Most common symptoms experienced by persons infected with EVD are the sudden onset of fever, intense weakness, muscle pain, headache and sore throat. This is followed by vomiting, diarrhoea, rash, impaired kidney and liver function, and, at an advanced stage, may include both internal and external bleeding. See ‘Case definition recommendations for Ebola or Marburg virus diseases’, WHO, 2004. Available online at <http://www.who.int/csr/resources/publications/ebola/case-definition/en/>

⁵ Immediately isolate the person and follow established reporting and handling procedures.

⁶ See information on category E010 waste management equipment for immunization. Available online at http://apps.who.int/immunization_standards/vaccine_quality/pqs_catalogue/categorypage.aspx?id_cat=39

- The planning and implementation of any campaigns should not detract from efforts to resume routine vaccination services both fixed site and outreach. Special consideration should be given to catching up older children who may have missed their scheduled vaccination. This may require planning for extra supplies. Strategies such as Periodic Intensification of Routine Immunization Services (PIRI⁷) or mini-campaigns may be particularly effective in order to quickly scale up vaccination coverage in high-risk areas. The same infection prevention and control precautions outlined above should be observed.
- In the context of vaccine preventable disease (VPD) surveillance, strict adherence to the established Infection Prevention and Control guidelines for specimen collection and transportation is recommended. All samples must first be tested locally for EVD prior to submission for serological/virological testing for vaccine preventable diseases and prior to shipment to the corresponding regional reference laboratories.
- The much reduced immunization activities are likely to have an impact on stock management. Vaccine supply orders coming into the country should be reviewed and adjusted to ensure that cold chain capacity is not exceeded.

Prioritized Countries at Risk⁸

(Cote d'Ivoire, Guinea Bissau, Mali, Senegal, Benin, Cameroon, Central African Republic, Democratic Republic of Congo, Gambia, Ghana, Mauritania, Nigeria, South Sudan, and Togo)

- Implement WHO guidelines for preparedness⁹ to respond to a possible outbreak of Ebola.
- Routine immunization services, vaccination campaigns (NIDs, SIAs) and vaccine-preventable disease surveillance should continue as planned using the normal safe injection and waste disposal practices.
- Instruct healthcare workers and vaccinators to be vigilant for anyone exhibiting signs or symptoms of EVD⁴ and immediately isolate and report any suspected cases.
- Given the rumours and misinformation about Ebola which have circulated in certain areas, the public need reassurance through appropriate communication messages which highlight that (a) immunization services do not pose any special risk with respect to Ebola and (b) it is important that they bring children on time to receive their vaccinations against other diseases so that they remain healthy.
- As part of preparedness for a possible Ebola outbreak, areas with low immunization coverage should be identified and activities to increase immunization coverage in these areas should be planned and implemented.
- No changes to the collection, shipment and processing at the laboratories of specimens collected for vaccine-preventable disease surveillance are required.

Countries Not Affected by Ebola Outbreak

- No special measures are needed. Routine immunization services, vaccination campaigns (NIDs, SIAs) and vaccine-preventable disease surveillance should continue as planned using the normal safe injection and waste disposal practices.
- If needed, communication messages should highlight that immunization services do not pose any special risk with respect to Ebola.
- Collection and shipment of specimens collected for vaccine-preventable disease surveillance can continue per usual procedures.

⁷ WHO. 2009. Periodic Intensification of Routine Immunization Services: Lessons Learned and Implications for Action. http://www.who.int/immunization/programmes_systems/policies_strategies/piri_020909.pdf?ua=1

⁸ Criteria used to prioritize countries include geographical proximity to affected countries, trade and migration patterns and strength of health systems.

⁹ See 'Consolidated Ebola virus disease preparedness checklist', WHO, January 2015. Available online at <http://www.who.int/csr/resources/publications/ebola/ebola-preparedness-checklist/en/>