**Ebola Virus Disease (EVD)**

**Frequently Asked Questions—Case Management and Clinical Management**

The following list covers some frequently asked questions about case management and clinical management of Ebola virus disease. These questions and answers are designed to supplement the guidance of the various documents and guidelines available at www.paho.org/Ebola.

1. **What are the initial manifestations of EVD?**

The initial manifestations of Ebola are nonspecific, and usually consist of fever, headache, fatigue, sore throat, and malaise. Therefore, it is essential to obtain a detailed travel history of each patient so as to evaluate the risk of EVD.

There is often some overlap between the initial symptoms and subsequent ones.

Patients do not always develop all signs and symptoms.

Thus, case-finding of suspected imported cases is absolutely dependent on investigation of the patient’s travel history and correlation of this information with the symptoms presented by the patient (even if the initial manifestations are nonspecific).

**2. What is the average period of sickness in this outbreak?**

There are still no data available on the average period of sickness during the current outbreak.

Studies conducted in other outbreaks have shown that the average time elapsed from symptom onset to death is 9 days (DRC, 1995) or 8 days (Uganda, 2000). In survivors, the average time from the onset of symptoms until the patient is no longer infectious is 10 days (DRC, 1995; Uganda, 2000).

Nevertheless, these figures are averages. This information will be updated as more information on the current outbreak becomes available.

Reference: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2870608/pdf/S0950268806007217a.pdf>

**3. Does EVD present differently in children?**

There are differences both in clinical manifestations and in clinical outcome. Regarding clinical manifestations, the most common symptoms are fever (100%), weakness (75%), loss of appetite (70%), nausea/vomiting (70%), cough (65%), diarrhea (60%), and headache (50%). Hemorrhagic manifestations are less common than in adults (16% of cases). Gastrointestinal and respiratory symptoms are frequent, while signs of effects on the central nervous system (disorientation, convulsions, etc.) are infrequent.

The case-fatality rate in pediatric patients (40%) is lower than in adults. However, case fatality is higher in children under 5 years old, probably due to the higher viral load transmitted through direct contact with parents.

Reference: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2141551/pdf/AFHS0102-0060.pdf

**4. Are there special considerations for pregnant women with EVD? What about infants of mothers with EVD?**

According to published case series, pregnant women infected with the Ebola virus are at greater risk of miscarriage and serious bleeding, which means that their EVD-related mortality is slightly higher than in the general population.

If a nursing mother develops EVD, the most important recommendation is to immediately stop breastfeeding and to try to keep the infant safe from infection by separating it from the mother, under the care of other people. The people who take care of the infant must be trained and prepared for the management of suspected cases, since the infant is regarded as a contact. If the infant develops symptoms, caregivers should proceed immediately as in any other suspected case.

**5. Designated establishments. What are the minimum requirements for an isolation room?**

The hospital management should designate an isolation area or room that meets the following requirements. These should preferably be individual rooms. Suspected and confirmed patients should never share the same room. If there are **several confirmed cases**, these patients may be placed in the same room, as long as the following requirements are met.

* The hospital should determine which healthcare providers and visitors will be allowed access to the isolation ward/unit/area/room.
* The isolation area should be clearly marked as such.
* The isolation area should contain the following elements:
* An anteroom for donning and doffing PPE, equipped with:
  + Sink and materials for hand hygiene
  + PPE in number sufficient for daily use and sufficient to ensure they are available when needed
  + Container for collection of hospital waste
  + Hamper for collection of patient clothing
  + Container for disposal of used PPE
  + Container for collection of devices/supplies used on the patient
* Bathroom for exclusive use by the patient
* Adequate ventilation (per international guidelines, this corresponds to 12 air changes per hour)

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**6. How should patients be transferred for X-rays/imaging?**

The patient should not be transferred within the hospital. If imaging is required (X-rays, ultrasonography, etc.), portable equipment should be brought to the isolation area.

Once the procedure is complete, all parts of the equipment that were in direct contact with the patient should be protected; if protection is not feasible, the equipment should be disinfected after use.

**References**

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* Legrand J, Grais R, Boelle P, Valleron A, and Flahault A. Understanding the dynamics of Ebola epidemics. Epidemiol Infect. 2007;135:610-621. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2870608/pdf/S0950268806007217a.pdf