Guidance for Screening and Caring for Pregnant Women with Ebola Virus Disease for Healthcare Providers in U.S. Hospitals

Page Summary

Who this is for: Healthcare providers working in emergency departments and labor and delivery units in U.S. hospitals.

What this is for: Guidance on how to screen pregnant women for Ebola virus disease (EVD) and how to care for pregnant women as patients under investigation (PUIs) for or with confirmed EVD, including considerations for pregnant healthcare workers.

How to use: This guidance is intended to help U.S. hospitals develop a plan for screening and treating pregnant PUIs or patients with confirmed EVD.

Key Points

- Healthcare providers caring for pregnant women in U.S. hospitals should be prepared to screen patients for EVD and have a plan in place to triage these patients.
- Obstetric management of pregnant women with EVD, particularly decisions about mode of delivery for women in labor, needs to consider risks to the woman, risks of exposure for healthcare providers, and potential benefits to the neonate.
- Healthcare workers who are pregnant should not care for patients with EVD.
- Pregnant PUIs or patients with confirmed EVD should be hospitalized, and CDC guidance for hospitalized PUIs or patients with confirmed EVD should be followed.

How EVD Affects Pregnant Women

No evidence currently exists to suggest that pregnant women are more susceptible to infection from Ebola than the general population. Unfortunately, limited evidence does suggest that pregnant women are likely to be at increased risk of severe illness and death when infected with Ebola virus.[1] Pregnant women with EVD also appear to be at an increased risk of fetal loss and pregnancy-associated hemorrhage.[1-2] In previous outbreaks in Africa, infants born to mothers with EVD have not survived, but whether Ebola virus was the cause of death has not always been known.[2]

Healthcare providers who care for pregnant women in U.S. hospitals should be prepared to screen patients for EVD and have a plan in place for how to triage these patients.[3] Specifically, U.S. healthcare providers who care for pregnant women should

- Know the signs and symptoms of Ebola.
- Ask patients about recent travel to a country with widespread Ebola transmission or cases in urban settings with uncertain control measures, or contact with a person with Ebola. Updates on countries with Ebola transmission can be found here.[4]

- Assess patients for fever and other signs and symptoms of Ebola if they have recent travel to a country with widespread Ebola transmission or cases in urban settings with uncertain control measures, or contact with a person with Ebola.

How to Screen Pregnant Women at Hospitals

Although incoming travelers are being screened when traveling from Guinea, Liberia, and Sierra Leone, it is good clinical practice to ask all pregnant women who arrive at a hospital for medical care about recent travel or contact with a person with EVD within the past 21 days—the longest known incubation period for Ebola—from any of these three countries[4] or contact with a person with Ebola. If a pregnant woman has a history of travel within 21 days from a country with widespread Ebola transmission or cases in urban settings with uncertain control measures, or recent contact (within 21 days) with a person with EVD, she should be screened for fever and symptoms of EVD.[5] If the patient has signs or symptoms of EVD, she should be immediately isolated, and appropriate personal protective equipment (PPE) should be worn by all healthcare workers in physical contact with the patient.[6-7] The hospital should activate its preparedness plan for Ebola, including notifying the local or state health department.[6] The decision about what type of PPE to use while triaging the patient should be based on CDC's Identify, Isolate, Inform: Emergency Department Evaluation and Management for Patients Under Investigation for Ebola Virus Disease which provides guidance on how emergency departments should handle PUIs.[8]

Pregnant women who have recently traveled from a country with widespread Ebola transmission or cases in urban settings with uncertain control measures but have no fever or symptoms of EVD should be assessed for the presence of other epidemiologic risk factors and their risk of exposure should be ascertained.[9] CDC has guidance for monitoring people with potential Ebola virus exposure and determining whether their movements should be restricted because of their level of exposure.[3] Asymptomatic pregnant women who have no other epidemiologic risk factors should receive routine obstetric care. Obstetric care for women with risk factors and movement restrictions should be determined on a case-by-case basis in consultation with public health authorities.

How to Treat Pregnant Women Diagnosed with EVD

The general medical management of pregnant women with EVD should be the same as for any other adult with EVD. Obstetric management should focus on the monitoring and early treatment of hemorrhagic complications.[10] Healthcare providers should be aware that spontaneous abortion and intrapartum hemorrhage appear to be common among women with EVD, and high perinatal mortality rates among infants of women infected with the Ebola virus have been reported.[1,11]

Restrictions for Pregnant Healthcare Workers

Pregnant healthcare workers should not provide care for patients with EVD because of the likely increased maternal and fetal risks. Furthermore, the recommended PPE for care of patients with EVD[7] may be particularly restrictive and uncomfortable for pregnant healthcare workers.

Infection Control Procedures for Labor and Delivery Units

Pregnant PUIs or patients with confirmed EVD should be hospitalized, and CDC guidance for hospitalized PUIs or patients with confirmed EVD should be followed.[6] Labor and delivery units are unique in that the birthing process presents a high likelihood of exposure to large amounts of blood and body fluids (such as amniotic fluid) in a setting that is less controlled than many other hospital settings. Recommendations for PPE use by healthcare workers caring for pregnant PUIs or patients with confirmed EVD are the same as those caring for other (nonpregnant) PUIs or patients with confirmed EVD.[7] Training, practice in using, and demonstrated competency with PPE is critical for protecting all healthcare workers against transmission of Ebola virus.

What Method of Delivery to Consider for Patients with EVD

No data exist to suggest that one method of delivery is preferred over others for pregnant women with EVD, with respect to maternal or neonatal outcomes or the safety of healthcare workers. The existing literature is confined to small case series in Africa, and details of these cases are sparse. Risk of spontaneous fetal loss is high, and there have been no known neonatal survivals.[1] Causes of neonatal death in these circumstances are not always clear. Whether perinatal deaths are consequences of transplacental viral passage or viral transmission through direct contact, or from other causes, is not known. No data on obstetric outcomes are available from settings with highly developed healthcare systems. As a result, the healthcare team caring for a pregnant patient with EVD will need to consider the likelihood of healthcare worker exposure to large amounts of blood and body fluids during labor and delivery regardless of vaginal or cesarean delivery; the overall physical condition of the patient, particularly the presence of coagulopathy;, and the likelihood of neonatal survival, especially at early gestational ages. The effectiveness of interventions that result in delivery for the purpose of improving maternal outcomes in patients with EVD is unknown.

How to Handle Visitors for Laboring Patients with EVD

Visitors for laboring patients with EVD should be severely restricted. Exceptions may be considered on a case-by-case basis—such as for the father of the baby or other "support person" to provide personal support to the laboring woman—after careful consideration of risks and benefits. Hospitals should develop procedures for monitoring, managing, and training visitors, and visits should be scheduled and controlled.[12] Consideration should be given to the use of videoconferencing instead of in-person visitation.

If visitors are allowed, their risk exposure should be evaluated,[9] and they should be monitored according to the risk category identified.[3] Such people could have the same or similar risk factors for EVD as the laboring patient. Visitors should be screened before entering the patient area and should have no direct contact with the patient. Visitors should be trained to safely put on (don) and take off (doff) PPE and should wear the same type of PPE recommended for healthcare workers. Visitors also should be observed at all times, including while taking off PPE, which must be done properly to prevent or reduce the risk of infection.[7]

Breastfeeding Restrictions for Women with Possible Ebola Exposure

Ebola virus has been detected in samples of breast milk,[13] but no data exist about when in the course of disease the virus appears in breast milk or when it is cleared. Therefore, women with EVD should not breastfeed.[14] Women with recent travel (within the last 21 days) from Guinea, Liberia, or Sierra Leone who had no known exposures to Ebola virus and have no signs or symptoms of Ebola or who otherwise meet the criteria for low (but not zero) risk based on epidemiologic risk factors[3] should be advised of the benefits of early initiation of breastfeeding.

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