

## CONTENTS

- ✓ Gender and sex considerations
- ✓ Ebola and pregnancy
- ✓ Implications for fetus
- ✓ Program considerations
- ✓ Preparedness

### WHAT IS THE SRH NEWSLETTER?

This newsletter contains new information on SRH, including links to courses you can take, articles you can read, or interesting websites to explore.

CONTACT US: We'd like to hear from you if you have ideas on topics for this newsletter or if there is something you would like to share in a future newsletter. Contact Meghan Greeley at [mgreeley@InternationalMedicalCorps.org](mailto:mgreeley@InternationalMedicalCorps.org)

## GREETINGS!

Much of the world's attention is focused on the West Africa Ebola outbreak. International Medical Corps is currently responding in Liberia and Sierra Leone with teams on the ground. In this issue of the newsletter, we've chosen to focus on reproductive health and infectious disease epidemics. We explore important considerations and provide program recommendations.

Please pass this newsletter on to anyone in your team who you think would be interested, and let us know of anyone to add to the distribution list!

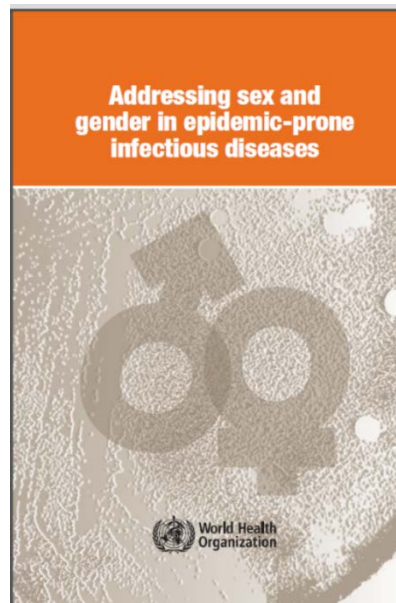
Your HQ SRH Team (Janet and Meghan)  
September 2014



## Gender and sex considerations in epidemic-prone infectious diseases

Sex-related considerations are related to the biological, anatomic, and hormonal differences between men and women. These differences may affect males or females differently. Pregnancy and lactation are two important time periods when body changes may impact interaction with a disease.

There are many gender-related norms that impact both exposure to illness and treatment as well. These range from division of labor (e.g. tending to livestock, work that takes people outside of their home community, or caring for the sick), which can impact exposure to care-seeking behavior (which family members have access to health care), which can impact treatment.



*"This paper presents a gender perspective on outbreaks of epidemic-prone infectious diseases. It discusses evidence of differences in the infectious disease process between males and females, and aims to show how, by taking such differences between men and women into account, it is possible to improve the understanding of the epidemiology and the clinical course and outcome of diseases, aid in their detection and treatment, and increase public participation in and the effectiveness of prevention and control activities."*

## General Resources on Infectious Disease

Epidemics - the Dynamics of Infectious Diseases (eLearning course)

This is a course about the dynamics of infectious diseases - how they emerge, how they spread around the globe, and how they can best be controlled.

[www.coursera.org/course/epidemics](http://www.coursera.org/course/epidemics)

## Special considerations for pregnant and lactating women:

Susceptibility and Immunity	Exposure	Treatment	Morbidity and mortality
Important changes in the immune system occur during pregnancy. Large knowledge gaps exist about the specific changes.	Exposure to some diseases may change during pregnancy. Pregnant women have more exposure to health care settings, so may be at greater risk for some hospital acquired / nosocomial infections.	Some treatments and control measures are harmful to pregnant women or to a fetus or breastfeeding baby. Pregnant women are excluded from research on treatment. Some treatments are not given to pregnant women because of insufficient evidence of their safety	Some diseases are particularly virulent during pregnancy. Some diseases adversely affect the fetus or breastfeeding baby.

## Ebola and Pregnancy

Ebola virus disease (EVD), formerly known as Ebola hemorrhagic fever, is a severe, often fatal illness, with a case fatality rate of up to 90%. The case fatality rate in the current outbreak in West Africa has been reported at approximately 53%, lower than previous epidemics.<sup>i</sup> However, recent estimates suggest that this might be an underestimation of the actual figure.<sup>ii</sup> EVD is one of the world's most virulent diseases. The infection is transmitted by direct contact with the blood, body fluids and tissues of infected animals or people. There is no known treatment other than supportive care, although there are some experimental treatments being tried. During an outbreak, those at higher risk of infection are health workers, care givers who are frequently women, family members and others in close contact with sick people and deceased patients.<sup>iii</sup> Unfortunately, official epidemiological data from the current outbreak is not sex and age disaggregated. Unofficial reports demonstrate that women are disproportionately affected by EBV. The Washington Post reported on August 14, 2014 that women account for 55 to 60% of the deceased, with Liberia reporting 75% of those in treatment centers being women.<sup>iv</sup>

In addition to the risk women face from acting as caregivers and involvement in burial rituals, pregnant women also have increased contact with the health services over non-pregnant women or other community members, through both antenatal care and for delivery. Therefore, like health care workers, these women can experience greater exposure to infections such as EVD that are amplified in health care settings. Prior to the current West Africa outbreak, two of the three largest outbreaks of EVD involved nosocomial transmission in maternity settings.<sup>v</sup>

Pregnant women not only can have increased exposure to the virus, cases in pregnant women early in an outbreak can be missed. EVD can cause spontaneous abortions with heavy bleeding. Spontaneous abortions are not uncommon among pregnant women seeking emergency admission to maternity clinics, so a woman presenting with such symptoms may not be suspected of having EVD, especially if the outbreak has not yet been identified.<sup>vi</sup>

Little is known about the course of EVD in pregnant women, because in most outbreaks clinical information has not been disaggregated by pregnancy status. In outbreaks that have explored this, the data suggest that pregnant women with EVD suffer more severe hemorrhagic and neurological complications.

## Implications for the fetus

Again, limited information is available in terms of pregnancy outcomes in women with EVD. However, EVD appears to have disastrous consequences for the fetus. In Yambuku, Zaire in 1976, the outbreak included 82 pregnant women. Of the 10 live-born infants, all died shortly after birth. In 1995 in Kikwit, Zaire, 15 pregnancies of women with EVD were studied. Of these, 10 ended in spontaneous abortion; four women died during their third trimester; and the only baby to be born died at age 3 days. In the Mayibout, Gabon outbreak in 1996, a single case in a pregnant woman resulted in a stillbirth.<sup>vii</sup>

Breastfeeding and Ebola: one study found Ebola virus present in samples of breast milk up to 40 days after onset of illness, suggesting that women may be able to transmit the virus through breastfeeding during the period of convalescence. The authors of the study suggest it prudent to advise mothers to provide alternative feeding methods to their children for several weeks after recovery.<sup>viii</sup> However, it is important to keep in mind that in many low-resource settings, breastfeeding remains the safest and most effective method for infant feeding. The Ministry of Health and Social Welfare in Liberia has developed Infant and Young Child Feeding Guidelines: “At the moment, insufficient evidence is available about the recommended duration of breastmilk cessation after the mother’s recovery from Ebola. It is therefore recommended to not resume breastfeeding unless testing of the milk has confirmed the absence of the virus in the milk.”<sup>ix</sup>

## Reproductive health programmatic considerations

- Ensure that pregnant women have clean delivery kits if they have no access to health centers for whatever reason (fear, health centers closed down because staff has died or left, etc.)
- Ensure that health care staff have sufficient personal protective equipment, including gloves (gynecological gloves to deal with miscarriages, cesarean sections and complicated deliveries), masks, goggles, aprons, boots and supplies to deal with reproductive health demands (basic and comprehensive emergency obstetric care, post-rape, family planning, post-abortion care).
- As able, continue to provide reproductive health services such as family planning, normal delivery, and emergency obstetric care, taking into consideration staff safety, infection control measures and the need for appropriate personal protective equipment. This is also important to consider for non-Ebola affected areas, where health workers may have been pulled into the Ebola response.
- Ensure that condoms are available, because the virus is also transmitted sexually (men who have recovered from the disease can still transmit the virus through their semen for up to 7 weeks after recovery from illness).<sup>x</sup> Men who have recovered from the disease should abstain from sex or use a condom for 3 months after being declared free of EVD.
- Tailor community outreach interventions based upon in-depth social anthropological research to address those most vulnerable to infection due to social norms.
- Research is needed to improve maternal and newborn outcomes for women with EVD.

## Preparedness

While the current EVD outbreak has been relatively isolated to a small region, it is important that countries and programs think about their own preparedness in terms of an Ebola response. General infection control and prevention using universal precautions is recommended for all settings. Programs must ensure that personal protection equipment is appropriately used for all emergency care. All health care providers should ask patients about recent travel to West Africa, should be aware of the signs and symptoms of EVD, and should have a plan in place of how to respond if they have a patient present with a compatible illness.<sup>xi</sup> Relevant International Medical Corps staff should be aware of National Ebola preparedness planning and contribute to implementation of Ebola preparedness activities as appropriate. This requires financial and human resources.

## Citations

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