

**September 19th, 2014**

### **Infant feeding in the context of Ebola – Updated guidance**

Updated main points of the guidance document on infant feeding in the context of Ebola dated August 22nd 2014 are summarised below. This is based on discussion with experts and clinicians and reports from field practitioners. This version dated September 19th 2014 replaces the earlier guidance note.

#### **Key considerations and assumptions are:**

- In general, breastfeeding is the best way to feed infants under 6 months and should be continued, with adequate complementary feeding, up to 2 years or beyond.
- The Ebola virus is present in breastmilk, and in this and previous outbreaks, several infants of breastfeeding mothers have contracted Ebola and passed away, although there are some reports of breastfed children who did not become infected with Ebola.
- The transmission mechanism (whether via pregnancy and delivery, breastmilk or the close contact with mother with Ebola, which might include contact with other body fluids) is not clear.
- The evidence to date indicates that the mortality risk of Ebola infection in infants far outweighs the morbidity and mortality associated with not breastfeeding in the West African context.
- For breastfed infants of Ebola infected mothers who are asymptomatic, the risks of Ebola transmission via breastmilk are understood to outweigh the risks associated with replacement feeding.
- For breastfed infants of Ebola infected mothers who have developed Ebola or are suspected Ebola cases themselves, the benefits of maintaining breastfeeding outweigh any possible benefits of replacement feeding.
- Orphans under the age of 24 months need to be fed replacement feeding.
- The safest replacement feeding in the current context for infants under 6 months is Ready to Use Infant Formula (RUIF). For infants aged 6 months to 1 year, liquid whole fat pasteurised or UHT<sup>1</sup> animal milk or infant formula, preferably RUIF, may be used.
- Breastfeeding mothers with Ebola will be identified in different places including homes, community care centres or holding centres and Ebola treatment centres. The cadre first identifying the mother may vary from a community worker or social worker, to a nurse or a doctor. It is crucial that all workers who get in touch with Ebola patients and their families are trained on infant feeding in the context of Ebola; the level of training will vary by country.
- In identifying a breastfeeding mother as having Ebola, the national protocols need to be followed.

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<sup>1</sup> Ultra Heat Treatment

*Flow charts 1 and 2 adapted from a figure developed by the Ministry of Health and Social Welfare of Liberia with support from UNICEF, 19<sup>th</sup> September 2014. Use in conjunction with guidance note dated 19<sup>th</sup> September 2014. <http://www.enonline.net/infantfeedinginthecontextofebola2014>*

In light of the above, it is recommended that:

1. For the **breastfed infant of an Ebola infected mother** where *the infant is asymptomatic*, the risks of Ebola transmission via breastmilk outweigh the risks associated with replacement feeding. In this instance, it is recommended the infant is separated from the mother and is replacement fed (see point 7).
2. For the **breastfed infant of an Ebola infected mother** where *the infant has developed Ebola* or is a **suspected Ebola case**, the risks of not breastfeeding (considering community infection control and infant nutrition) outweigh any possible benefits of replacement feeding.

If the *mother is well enough to breastfeed*, she should be supported to continue to breastfeed.

If the *mother is too ill to breastfeed*, then replacement feeding is needed (see point 7).

- If the infant is symptomatic, a blood test should determine if the child has Ebola or not (refer to national protocols).
  - Where the infant is asymptomatic, the infant is a contact case and should be followed closely for 21 days. Caregivers do not risk becoming infected unless the infant starts having symptoms; the caregiver should be particularly alert for symptoms. Contact cases should try as much as possible to stay at home.
3. For the **newborn infant** of an **Ebola infected mother**, the mother should be supported to breastfeed if she is capable of doing so. If not, the infant should be replacement fed and closely monitored for 21 days for the development of symptoms.
  4. Nutrition support to Ebola infected mothers and their children who remain with them, is needed during treatment<sup>2</sup>. For **infants under 6 months** who remain with their mother, support the mother to exclusively breastfeed. For **infants over 6 months**, provision of complementary foods will be needed in addition to continued breastfeeding. For infants over 6 months who are Ebola infected and unwell, it is possible that they will revert to exclusive breastfeeding for a time.
  5. **Orphans** under the age of 24 months need replacement feeding and care (see point 10 regarding wet-nursing).
  6. Ebola infected mothers and their children who are identified as having acute malnutrition, need to be treated in line with national protocols.
  7. **Replacement feeding** considerations:
    - An acceptable breastmilk substitute for infants under 6 months is infant formula. For infants aged 6 months to 1 year, infant formula or liquid whole fat pasteurised or UHT animal milk may be used, together with adequate amounts of appropriate, hygienically prepared complementary foods.
    - **The safer option for infant formula in the West African context is Ready to Use Infant Formula (RUIF)**. RUIF has an advantage over powdered infant formula since it does not require reconstitution with water and is likely a safer option. Training and support on its use is needed.

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<sup>2</sup> See draft nutrition support guidance for adults and children in the context of Ebola and discussion regarding this at: <http://www.en-net.org/question/1465.aspx>

- For infants over 6 months, where animal milk is used, *liquid* whole pasteurized or UHT treated milk is preferable over powdered milk since it does not require reconstitution with water and is likely a safer option. Training and support on its use is needed.
  - Wet-nursing is not recommended (see point 10).
  - Therapeutic milks like F75 and F100 are not appropriate breastmilk substitutes if the infant is not malnourished.
  - A mother who abruptly stops breastfeeding will need help to express her breastmilk to alleviate pain and prevent inflammation. Her breastmilk is a contaminated product and should be treated as per infection control protocols<sup>3</sup>.
  - An infant whose mother is infected but is not symptomatic is considered a *contact*. *Ebola is only infectious when a person is symptomatic*. The infant should be closely monitored for 21 days for the development of symptoms. Carers do not risk becoming infected unless the child starts having symptoms.
  - Psychosocial support of a mother who is separated from her infant is important.
8. **Flowcharts 1 and 2** provide a **guide to decision making on a case-by-case basis**. This is based on a figure developed by the Ministry of Health and Social Welfare of Liberia with support from UNICEF.
9. Advice regarding **recovered mothers who have stopped breastfeeding**:  
Where a mother has recovered from Ebola and who stopped breastfeeding (under point 1), it is in the interest of the infant and mother to resume breastfeeding once safe to do so. Evidence indicates the virus remains in breastmilk after it is cleared from the blood; no one has followed up a lactating convalescent mother to see how long the virus persists.

On reflection, we recommend that:

- Ideally, breastmilk should be tested to see that it is PCR negative before counselling to resume breastfeeding. Breastmilk testing will depend on laboratory capacity and should be investigated at a local level.
- Where a mother has survived Ebola, has recovered (blood PCR negative) and has suspended breastfeeding, she should return for testing of her milk every 2-3 days (or however often is feasible) after her negative blood test. Ideally there should be 2 negative tests on different days to account for any variability in virus shedding.
- If testing of breastmilk is not feasible, then maternal breastfeeding should be avoided for 8 weeks post recovery.

10. Advice regarding **wet-nursing** in the context of Ebola and cultural practice:

There is a strong cultural practice of wet-nursing in West Africa. There is a risk of Ebola transmission from a wet-nurse to an infant and vice versa if either develops symptoms (a wet-nurse is likely to be a close family member and therefore an Ebola contact, whilst the infant has had particularly close contact with an infected case).

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<sup>3</sup> Latest WHO guidance is available at: <http://www.who.int/csr/disease/ebola/en/>  
Infection prevention and control guidance for care of patients with suspected or confirmed Filovirus haemorrhagic fever in health-care settings, with focus on Ebola, August 2014. [http://www.who.int/csr/bioriskreduction/filovirus\\_infection\\_control/en/](http://www.who.int/csr/bioriskreduction/filovirus_infection_control/en/)  
Clinical management of patients with viral haemorrhagic fever  
A pocket guide for the front-line health worker. WHO, April 2014.  
<http://www.who.int/csr/resources/publications/clinical-management-patients/en/>

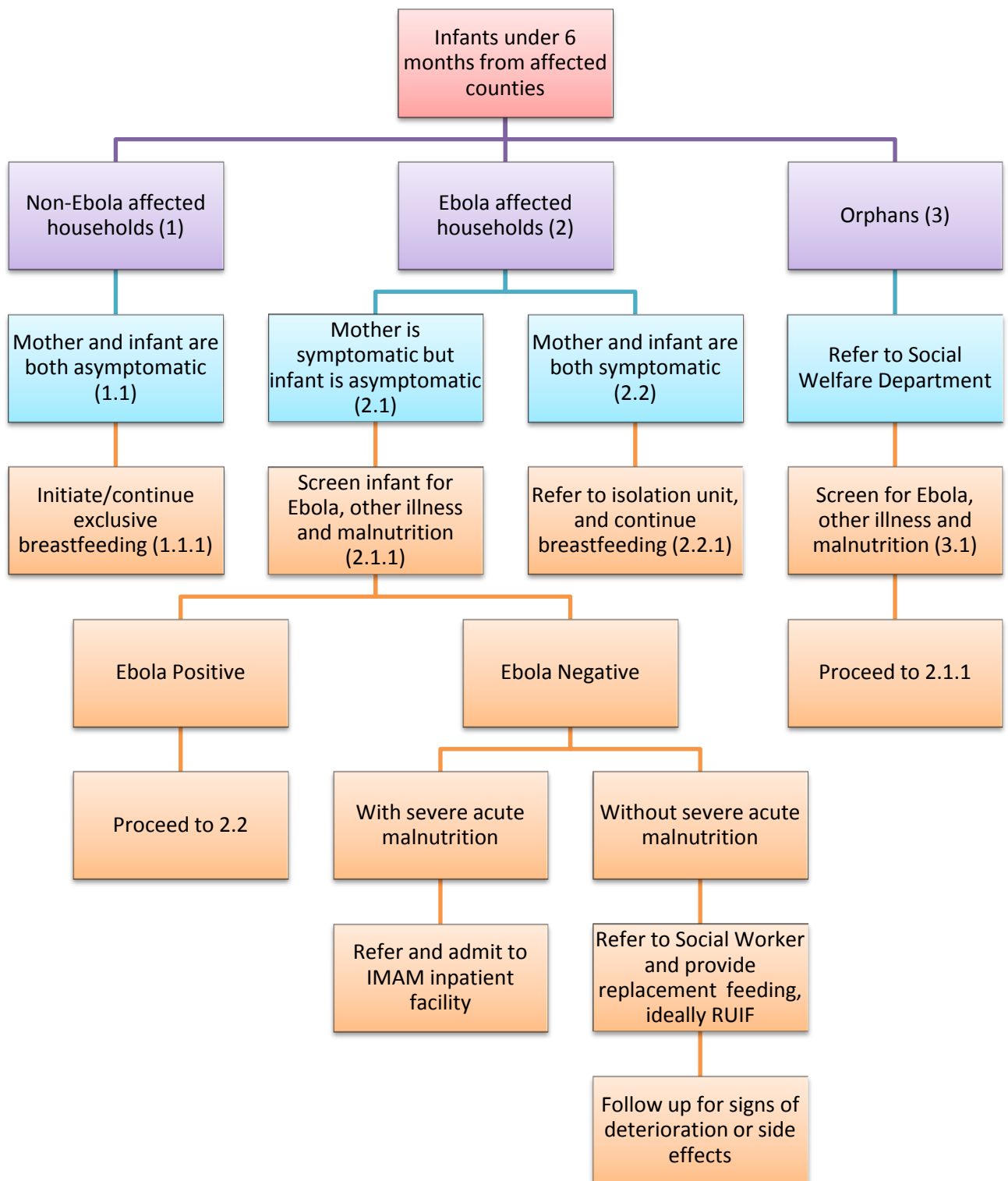
Considering this, we recommend that:

- For breastfed infants of Ebola infected mothers for whom the risk of Ebola transmission is considered high, and for orphans, *replacement feeding is preferred over wet-nursing*.
- If replacement feeding is not feasible, wet-nursing can be accepted as the *option of last resort*.
- The prospective wet-nurse needs to be informed of the *risk of Ebola transmission* from the infant to her and vice versa. She will need to monitor her own and the infant's health and *seek care and treatment when either develops symptoms* which could be related to Ebola.

**Source of this guidance note:** Guidance produced through informal consultation involving UNICEF technical advisors at HQ, regional & country levels; WHO Infant and Young Child Feeding and Ebola specialists; CDC Atlanta; Ministry of Health and Social Welfare Liberia; in-country staff working as part of the Ebola response; [en-net](#) technical forum respondents and the ENN.

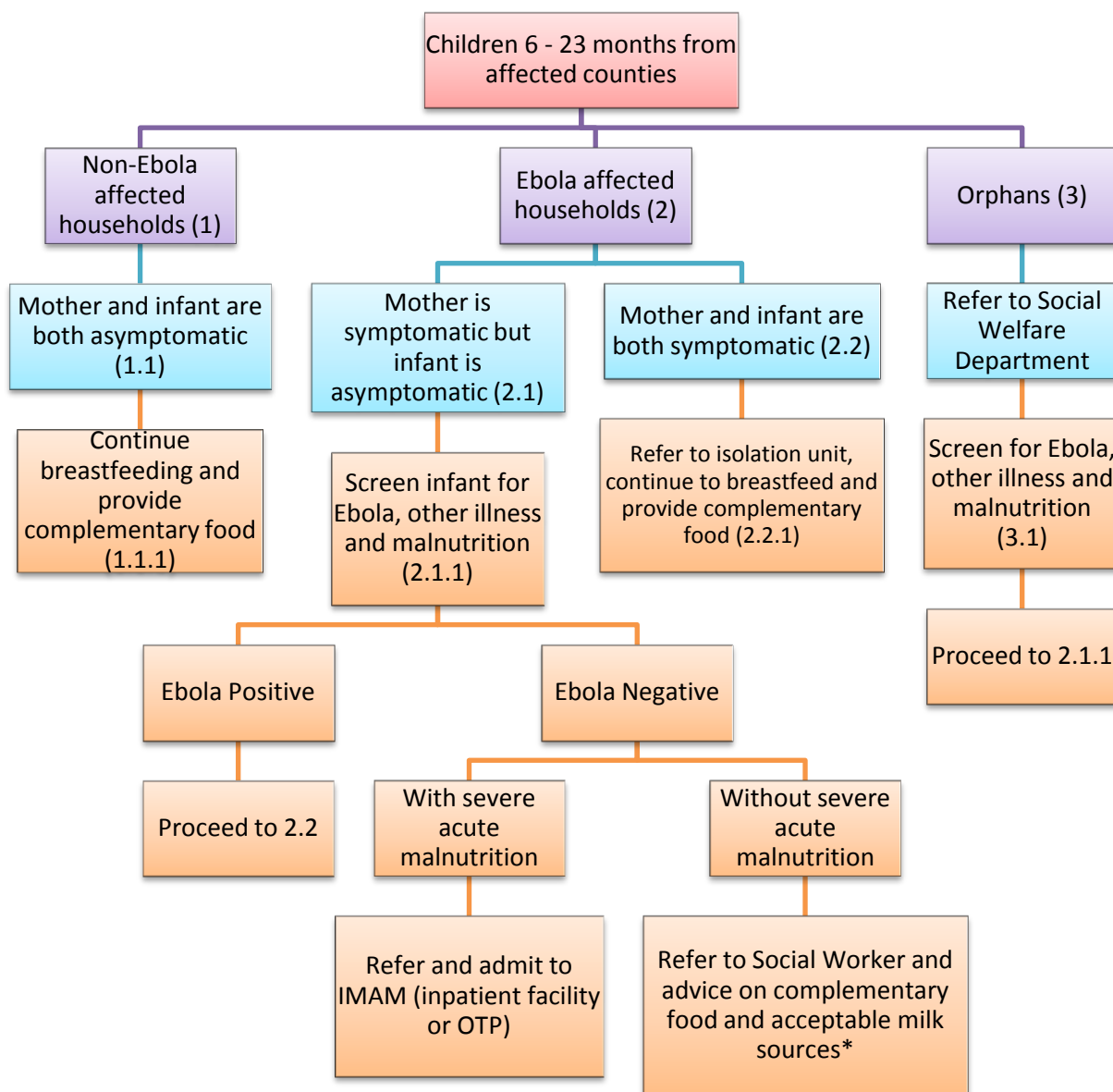
For feedback on this guidance or to share experiences in implementation, contribute to the **en-net technical forum**, at <http://www.en-net.org/question/1445.aspx>

## Flow chart 1: Feeding and care options for infants under 6 months



IMAM: integrated management of acute malnutrition; RUIF: Ready to Use Infant Formula; OTP: outpatient therapeutic programme.  
 Note that terms used for cadre like social worker and social welfare dept. need to be adapted to each setting.

**Flow chart 2: Feeding and care options for children 6 – 23 months**



\* For infants between 6-11 months: infant formula, whole pasteurized/UHT milk.  
 For children 12-23 months: whole pasteurized/UHT milk.

Flow charts 1 and 2 adapted from a figure developed by the Ministry of Health and Social Welfare of Liberia with support from UNICEF, 19<sup>th</sup> September 2014. Use in conjunction with guidance note dated 19<sup>th</sup> September 2014. <http://www.enonline.net/infantfeedinginthecontextofebola2014>