

## KEY MESSAGES

# NEW WHO RECOMMENDATIONS: Infant feeding in the context of HIV

The World Health Organization (WHO) is revising its guidelines on infant feeding and HIV.

At the same time, WHO is updating its guidelines on antiretroviral therapy (ART) for adults and adolescents and the use of antiretroviral drugs (ARVs) for the prevention of mother-to-child transmission of HIV (PMTCT). The three guidelines are closely linked and together provide comprehensive guidance on HIV-specific interventions to improve the health of mothers known to be HIV-infected, reduce the risk of HIV transmission to their children and improve the survival of HIV-exposed infants. Implemented effectively, they have the potential to significantly reduce maternal and child deaths due to HIV/AIDS. The three full guidelines are expected in early 2010.

Key principles and recommendations for each of the guidelines will be released on 30 November 2009 (see *Rapid advice* documents).

### The 2009 principles and recommendations on infant feeding in the context of HIV

ARV interventions can drastically reduce the risk of HIV transmission through breastfeeding. This new evidence transforms the landscape in which decisions on infant feeding practices should be made by individual HIV-infected mothers, national health authorities and international agencies and funders.

- **For individual mothers or infants who receive ARVs**, breastfeeding is made dramatically safer and the balance of risks between different infant feeding options, i.e. between breastfeeding and replacement feeding (infant formula), is fundamentally changed. The recommendations provide guidance on how mothers infected by HIV should feed their infants for their first two years of life.
- **For national health authorities**, the recommendations advocate that a single infant feeding practice should be principally promoted and supported across communities. Mothers should still receive information about other feeding practices.
- **For governments and donors**, because infant feeding is one of the most critical interfaces between HIV and child survival, the recommendations highlight the opportunity for investing in interventions that will improve infant feeding practices by both HIV-infected and uninfected mothers. Improving practices for all would reduce the risk of infant malnutrition, illness and death from causes other than HIV/AIDS and help countries achieve international development goals.

## BACKGROUND

Infant feeding in the context of HIV is complex because of the major influence that feeding practices and nutrition have on child survival. Depending on the availability of interventions to reduce HIV transmission during pregnancy and delivery, HIV transmission through breastfeeding is responsible for between 30-60% of all HIV infections in children. However, in many resource-limited settings, infants who do not breastfeed are up to six times more likely to die from malnutrition, pneumonia and diarrhoeal illnesses. The dilemma has been to balance the risk of infants being exposed to HIV through breastfeeding with the risk of death from causes other than HIV if infants are not breastfed.

In past years, there was a strong emphasis on preventing infants from becoming infected with HIV by counselling HIV-infected mothers to avoid all breastfeeding. Replacement feeding with infant formula unquestionably prevents all transmission of HIV through breastfeeding but in many settings can also increase the risk of death from other causes. Programme and research groups have reported the difficulties of implementing earlier United Nations recommendations on HIV and Infant feeding within health-care systems constrained by limited human resources.

## NEED FOR UPDATED PRINCIPLES AND RECOMMENDATIONS

WHO's recommendations on infant feeding and HIV were last revised in 2006 (See *HIV and infant feeding update*). In this revision, exclusive breastfeeding (the infant only receives breast milk without any additional food or drink, not even water) was identified as a safer option than mixed breastfeeding, that is, the infant also receives other milks, water or food. A large body of research evidence on HIV and infant feeding has accumulated since then. Since 2006, new evidence shows that giving ARVs to either the HIV-infected mother or HIV-exposed infant can significantly reduce the risk of transmitting HIV through breastfeeding. This research has major implications for how women living with HIV should feed their infants, and how health workers should support them.

## Main revisions

There are two main revisions from the 2006 *HIV and infant feeding update*. These are based on the WHO recommendation that mothers known to be HIV-infected should be provided with lifelong antiretroviral therapy or antiretroviral prophylaxis to reduce HIV transmission to infants.

### 1. Which breastfeeding practices and for how long

- *Mothers known to be HIV-infected (and whose infants are HIV uninfected or of unknown HIV status)* should exclusively breastfeed their infants for the first six months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life.  
  
Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast-milk can be provided.
- *If infants and young children are known to be already HIV-infected*, mothers are strongly encouraged to exclusively breastfeed for the first six months of life and continue breastfeeding as per the recommendations for the general population, that is, up to two years of age or beyond.

The 2009 recommendations propose that, in light of the effectiveness of ARV interventions, continued breastfeeding by HIV-infected mothers until the infant is 12 months of age capitalizes on the maximum benefit of breastfeeding to improve the infant's chances of survival while reducing the risk of HIV transmission. The 2006 recommendations, which were formulated in the absence of ARV interventions, suggested that breastfeeding should stop after the infant reached six months of age and when specific conditions were in place.

### National recommendations for infant feeding in the context of HIV

National health authorities should decide whether health services will principally counsel and support mothers known to be HIV-infected to either:

- *breastfeed and receive ARV interventions*

OR

- *avoid all breastfeeding*, as the strategy that will most likely give infants the greatest chance of remaining HIV uninfected and alive.

This decision should be based on international recommendations and consideration of the socio-economic and cultural contexts of the populations served by Maternal and Child Health services, the availability and quality of health services, the local epidemiology including HIV prevalence among pregnant women and main causes of infant and child mortality and maternal and child under-nutrition.

*WHO is developing guidance to assist countries in this decision-making process including guidance on steps to reach these standards of care.*

The **2009 recommendations** state that national health authorities should promote a single infant feeding practice as the standard of care. While information about other practices should be made available to mothers, health services would principally support one approach. The **2006 recommendations** suggested that health workers in clinics should individually counsel all mothers known to be HIV-infected, who would then each determine the most appropriate infant feeding strategy for their circumstances.

In addition, the 2009 recommendations reaffirm the call in the 2006 recommendations for agencies to invest in improved infant and young child nutrition.

### INVESTMENT TO IMPROVE INFANT FEEDING PRACTICES IN THE CONTEXT OF HIV

Governments and donors should greatly increase their commitment to and resources for improving infant feeding practices in HIV-affected populations. These investments should be targeted to effectively prevent infants becoming infected with HIV through breastfeeding, improve HIV-free survival of infants and achieve international development goals, such as the Millennium Development Goals (MDGs) and those set at the United Nations General Assembly Special Session on HIV/AIDS (UNGASS).

Despite strong evidence that infant feeding practices are one of the most significant determinants of child survival, national and international commitment to improve these in all populations has not been matched by funding and action. Improving infant feeding practices, especially in places where the rates of HIV infection are high, will significantly contribute to achieving the MDGs and UNGASS.

### BENEFITS

In countries not affected by HIV, it is estimated that improving infant feeding practices could reduce child mortality by up to 19%. In HIV-affected populations, the impact could be even greater if interventions that reduce HIV transmission through breastfeeding could be successfully linked with strategies that improve feeding practices not just for HIV-exposed infants but also the general population. However, achieving this linkage has been confounded by the complexity of identifying the most appropriate infant feeding practice according to the household and social circumstances of mothers.

WHO's new principles and recommendations on infant feeding in the context of HIV, combined with the new recommendations on adult and adolescent ART and the use of ARVs for PMTCT, provide simple, coherent and feasible guidance for promoting and supporting improved infant feeding by HIV-infected mothers. They reflect the most recent evidence from research and acknowledge the programmatic difficulties in the past. They highlight how prioritizing care for HIV-infected mothers will improve their own health and survival and that of their infants.

### CHALLENGES

The major challenges to delivering these HIV-specific interventions within maternal and child health services are the limited number of health workers in primary health facilities and the competing demands on their time. To achieve significant reductions in child (and maternal) mortality, these services need to reach all mothers and children living in places where there is a high prevalence of HIV and vulnerable mothers and infants in countries where there are concentrated HIV epidemics. Supporting optimal infant feeding practices has been a challenge for health systems even in countries where HIV is not a problem. Health services need to consistently identify these vulnerable mothers and reliably deliver the interventions that have been proven to work in research settings.

### THE REVIEW PROCESS

WHO has a guideline review committee which oversees the development, approval and updating of WHO recommendations, according to strict procedures specified by WHO's handbook for guideline development.

Summaries of the evidence reviewed in developing these recommendations were produced by the Africa Centre for Health and Population Studies, University of KwaZulu-Natal, South Africa with funding from the United Nations and the United States Centers for Disease Control and Prevention (CDC).

A multidisciplinary panel of experts, including civil society representatives, met 22-23 October 2009 to review, finalize and endorse the findings and recommendations; consider the balance of evidence for benefits and harms of these recommendations; and identify any uncertainties around the evidence, values and acceptability, as well as their implications.

The draft recommendations were subject to peer review from an additional group of international experts.

WHO is working with various partners to assess the cost and the best ways to implement the recommendations.

### DISSEMINATION AND IMPLEMENTATION

The summary principles and recommendations will be published 30 November 2009 and the full guidelines are expected in early 2010.

WHO, in collaboration with UNICEF and other key partners, will provide technical support to all regions and additional support to countries with a high burden of HIV/AIDS to adapt and implement the revised guidelines.

The full guidelines will be published in English, French and Spanish and may then be translated and published in other languages.