## **GUIDELINE**

# INFANT FEEDING IN AREAS OF ZIKA VIRUS TRANSMISSION



**Second edition** 





# Guideline: INFANT FEEDING IN AREAS OF ZIKA VIRUS TRANSMISSION

Second edition



Guideline: infant feeding in areas of Zika virus transmission, second edition

ISBN 978-92-4-002918-7 (electronic version) ISBN 978-92-4-002919-4 (print version)

### © World Health Organization 2021

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (http://www.wipo.int/amc/en/mediation/rules).

**Suggested citation**. Guideline: infant feeding in areas of Zika virus transmission, second edition. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

**Sales, rights and licensing.** To purchase WHO publications, see <a href="http://apps.who.int/bookorders">http://apps.who.int/bookorders</a>. To submit requests for commercial use and queries on rights and licensing, see <a href="http://www.who.int/about/licensing">http://www.who.int/about/licensing</a>.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Photo credit (front cover): WHO/Jim Holmes

Cover design: Chris Yuen and Alberto March

Layout: Alberto March

## **CONTENTS**

PUBLICATION HISTORY	V
ACKNOWLEDGEMENTS	vii
Financial support	vii
EXECUTIVE SUMMARY	viii
1. INTRODUCTION	1
Objectives	3
Scope	3
Population of interest	3
Priority questions	3
Target audience	4
2. EVIDENCE AND RECOMMENDATIONS	5
2.1 Breastfeeding or expressed breast-milk in areas with Zika virus transmission: among infants not infected with Zika virus, does breastfeeding (any or exclusive) or feeding of breast-milk from a lactating woman infected with Zika virus, compared with not breastfeeding, increase the risk of transmitting Zika virus to the infant?	5
2.2 Infant feeding among infants affected by complications associated with Zika virus: among infants (0–12 months old) affected by complications associated with Zika virus, what modifications in infant feeding practices compared with no modification or standard care can improve infant outcomes?	11
2.3 Support for primary caregivers of infants (0–12 months old) affected by complications associated with Zika virus	16
3. METHODS	20
Contributors to the guideline	21
Identifying critical outcomes	21
Identifying and retrieving evidence	21
Formulating recommendations	22
Managing conflicts of interest	23
Decision-making process	23
Document preparation	23
Peer review	23
4. DISSEMINATION AND IMPLEMENTATION OF THE RECOMMENDATIONS	24
5. RESEARCH GAPS	24
6. APPLICABILITY ISSUES	25
7. MONITORING AND EVALUATING THE IMPLEMENTATION OF THE GUIDELINE	25
8. UPDATING THE GUIDELINE	25

REFERENCES	26
ANNEX 1. Questions on infant feeding in areas of Zika virus transmission in population, intervention, control, outcomes (PICO) format	32
ANNEX 2. GRADE summary of findings tables	35
ANNEX 3. Review of congenital Zika syndrome — GRADE-CERQual evidence profiles	37
ANNEX 4. WHO Guideline Steering Committee	44
ANNEX 5. WHO Guideline Development Group	46
ANNEX 6. Systematic review teams	48
ANNEX 7. Peer reviewers	49
ANNEX 8. WHO Secretariat	50

### **PUBLICATION HISTORY**

This WHO guideline on infant feeding in areas of Zika virus transmission is an update of, and supersedes, previous WHO recommendations on infant feeding in areas of Zika virus transmission. WHO developed this guideline, first as interim advice on Breastfeeding in the context of Zika virus: interim guidance on 25 February 2016 and then as a rapid advice guideline WHO Infant feeding in areas of Zika virus transmission. This update expands the scope of the guideline to include an assessment of any potential risk of Zika virus infection through breastfeeding and feeding recommendations for infants presenting with congenital Zika virus syndrome or Guillain-Barré syndrome as well as support required by the mothers and caregivers of infants affected by these conditions. This guideline accompanies the WHO toolkit for the care and support of people affected by complications associated with Zika virus. To produce this guideline, the rigorous procedures for a standard guideline described in the WHO handbook for guideline development were followed. This document presents direct and indirect evidence as well as the evidence reviews that served to inform the recommendations herein.



https://www.yunbaogao.cn/report/index/report?reportId=5\_23796

