



Food and Agriculture
Organization of the
United Nations



International instruments on the use of antimicrobials across the human, animal and plant sectors



International instruments on the use of antimicrobials across the human, animal and plant sectors

Published by

the Food and Agriculture Organization of the United Nations
and
the World Organisation for Animal Health
and
the World Health Organization

International instruments on the use of antimicrobials across the human, animal and plant sectors

ISBN (WHO) 978-92-4-001396-4 (electronic version)

ISBN (WHO) 978-92-4-001397-1 (print version)

ISBN (FAO) 978-92-5-133526-0

ISBN (OIE) 978-92-95115-87-3

© World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO) and World Organisation for Animal Health (OIE), 2020

All rights reserved. WHO, FAO and OIE encourage the reproduction and dissemination of material in this information product. Any proposed reproduction or dissemination for non-commercial purposes will be authorized free of charge upon request, provided the source is fully acknowledged. Any proposed reproduction or dissemination for resale or other commercial purposes, including educational purposes, is prohibited without the prior written permission of the copyright holders, and may incur fees.

Requests for permission to reproduce or translate WHO publications – whether for sale or for non-commercial distribution – should be addressed to WHO Press through the WHO web site http://www.who.int/about/licensing/copyright_form/en/index.html.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO) or of the World Organisation for Animal Health (OIE) 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 products of manufacturers, whether or not these have been patented, does not imply that these are or have been endorsed or recommended by WHO, FAO and OIE in preference to others of a similar nature that are not mentioned. 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, FAO and OIE be liable for damages arising from its use. The views expressed herein are those of the authors and do not necessarily represent those of WHO, FAO, OIE.

Publications of the World Health Organization are available on the WHO web site www.who.int or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland. Tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int.

FAO information products are available on the FAO website www.fao.org/publications and can be purchased through Publications-sales@fao.org

Publications of the World Organisation for Animal Health are available either on the OIE web site www.oie.int or can be purchased through the OIE online bookshop www.oie.int/boutique.

Design and layout by Phoenix Design Aid

Contents

| | |
|---|----|
| List of figures, tables and boxes | iv |
| Acknowledgements | v |
| List of abbreviations | vi |
| 1 Introduction | 1 |
| 1.1 Objective | 1 |
| 1.2 Background | 1 |
| 2 Scope and methodology | 3 |
| 2.1 Scope | 4 |
| 2.2 Methodology | 5 |
| 3 Compilation of instruments on antimicrobial use | 6 |
| 3.1 Overview and analysis of instruments on human use | 6 |
| 3.2 Overview and analysis of instruments on animal use | 12 |
| 3.3 Overview and analysis of instruments on plant use | 19 |
| 3.4 Overview and analysis of antimicrobial use and the environment | 22 |
| 4 Monitoring implementation of international standards on the use of antimicrobials | 26 |
| 4.1 Implementation at the national level | 26 |
| 4.2 Tripartite monitoring of standards implementation | 26 |
| 4.3 Monitoring implementation of standards for human use | 27 |
| 4.4 Monitoring implementation of standards for animal use | 27 |
| 4.5 Monitoring implementation of standards for plant use | 28 |
| 4.6 Monitoring implementation of standards for the environment | 28 |
| Annex I: List of international instruments on the use of antimicrobials across the human sector | 30 |
| Annex II: List of international instruments on the use of antimicrobials across the animal sector | 38 |
| Annex III: List of international instruments on the use of antimicrobials across the plant sector | 46 |
| Annex IV: Questions in TrACSS 4.0 (2019–2020) regarding standards on the use of antimicrobials | 50 |

List of figures, tables and boxes

| | | |
|----------|--|----|
| Fig. 1. | The antimicrobial life cycle: the series of stages through which antimicrobials pass, from production to disposal by the end user..... | 3 |
| Table 1. | Summary overview of instruments included and excluded from this compilation..... | 4 |
| Table 2. | Overview of instruments related to human use of antimicrobials across the antimicrobial life cycle | 6 |
| Table 3. | Overview of instruments related to the animal use of antimicrobials across the antimicrobial life cycle | 12 |
| Table 4. | Overview of instruments related to the plant use of antimicrobials across the antimicrobial life cycle | 19 |
| Table 5. | Overview of instruments per area of use with standards related to the environment..... | 22 |
| Box 1. | Summary of core standards for human use..... | 12 |
| Box 2. | The OIE Codes and Codex Alimentarius instruments as reference standards..... | 14 |
| Box 3. | Summary of core standards for animal use..... | 18 |
| Box 4. | AMR and plant use | 20 |
| Box 5. | Summary of core standards for plant use | 21 |
| Box 6. | Antimicrobial use and the environment | 24 |

Acknowledgements

This compilation was prepared by Maarten van der Heijden (WHO), Peter Beyer (WHO) and Sarah Paulin (WHO), with contributions from Carmen Bullón Caro (FAO), Yingjing Li (FAO), Junxia Song (FAO) and Jing Xu (FAO), Elisabeth Erlacher-Vindel (OIE), Jorge Pinto Ferreira (OIE) and Saija Kalenius (OIE) under the overall direction of Haileyesus Getahun (WHO), Director of the Tripartite Joint Secretariat on Antimicrobial Resistance. Administrative support was provided by Sandra Kotur Corliss.

Jacqueline Álvarez and Aitziber Echeverria from the United Nations Environment Programme (UNEP) reviewed the sections related to the environment.

We would also like to thank the following experts from the Tripartite organizations (FAO, OIE and WHO) for reviewing the document:

- Penelope Jane Andrea
- Anand Balachandran
- Amina Benyahia
- Sarah Cahill
- Marisa Caipo
- Emer Cooke
- Tim Corrigan
- Stephanie Croft
- Carmen Dolea
- Alejandro Dorado Garcia
- Valeria Gigante
- Mary Gordoncillo
- Johanna Gouws
- Alice Green
- Baogen Gu
- Zifeng Han
- Armando Hoet
- Eva Kohlschmid
- Sabine Kopp
- Francesca Latronico
- Jeffrey LeJeune
- Camille Loi
- Friederike Mayen
- Kate Medlicott
- Lorenzo Moja
- Arno Muller
- Clive Ondari
- Henk Jan Ormel
- Ponnu Padiyara
- Pravarsha Prakash
- Artur Shamilov
- Mária Szabó
- Elizabeth Tayler

This document was edited by Giselle Weiss.

Financial support

Funding for this report was kindly provided by the Government of Germany.

List of abbreviations

| | |
|---------|---|
| ADI | acceptable daily intake |
| AGISAR | Advisory Group on Integrated Surveillance of Antimicrobial Resistance |
| AMR | antimicrobial resistance |
| AMU | antimicrobial use |
| API | active pharmaceutical ingredient |
| CCPR | Codex Committee on Pesticide Residues |
| CCRVDF | Codex Committee on Residues of Veterinary Drugs in Foods |
| CIA | critically important antibiotic |
| ECSPP | Expert Committee on Specifications for Pharmaceutical Preparations |
| EIA | environmental impact assessment |
| EML | essential medicines list |
| FAO | Food and Agriculture Organization of the United Nations |
| FAO GBS | FAO Governing and Statutory Bodies |
| FIP | International Pharmaceutical Federation |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| GMP | good manufacturing practices |
| GRP | good regulatory practices |
| IACG | Interagency Coordination Group |
| ICH | International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use |
| ICoCPM | International Code of Conduct on Pesticide Management |
| IPC | infection prevention and control |
| IPPC | International Plant Protection Convention |
| MDR | multidrug-resistant |
| MRL | maximum residue limit |
| OIE | World Organisation for Animal Health |
| PAH | polycyclic aromatic hydrocarbon |
| RMR | risk management recommendation |
| SPS | Sanitary and Phytosanitary |
| TB | tuberculosis |
| TBT | Technical Barriers to Trade |
| TFAF | Task Force on Animal Feeding |

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_24248

