Food and Agriculture Organization of the United Nations





A key role for veterinary authorities and animal health practitioners in preventing and controlling neglected parasitic zoonoses

A handbook with focus on Taenia solium, Trichinella, Echinococcus and Fasciola

A key role for veterinary authorities and animal health practitioners in preventing and controlling neglected parasitic zoonoses

A handbook with focus on *Taenia solium, Trichinella, Echinococcus* and *Fasciola*



Published by

the Food and Agriculture Organization of the United Nations

the World Organisation for Animal Health

the World Health Organization

2021

FAO, OIE & WHO. 2021. A key role for veterinary authorities and animal health practitioners in preventing and controlling neglected parasitic zoonoses. A handbook with focus on *Taenia solium*, *Trichinella*, *Echinococcus* and *Fasciola*. FAO, Rome, OIE, Paris & WHO, Geneva.

©FAO, OIE and WHO, 2021.

ISBN: (FAO) 978-92-5-134833-8 ISBN: (OIE) 978-92-95115-91-0 ISBN: (WHO) 978-92-4-004003-8 (electronic version) ISBN: (WHO) 978-92-4-004004-5 (print version)

All rights reserved. WHO, FAO and the OIE encourage the reproduction and dissemination of material in this information product. Any proposed reproduction or dissemination for non-commercial purposes will be authorised 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.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be addressed to publications.unit@oie.int.

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 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 the 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 the 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 and the OIE.

Publications of the World Health Organization are available on the WHO website (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; email: bookorders@who.int).

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

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



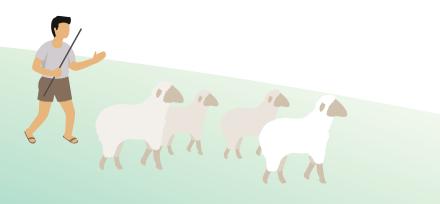
The Regional Offices of the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) in Asia and the Pacific region ("Regional Tripartite") have a longstanding and successful partnership in promoting and facilitating a One Health approach to address challenges at the human-animal-environment interface, including zoonotic influenza, rabies and antimicrobial resistance. In October 2020, the regional representatives from the Tripartite organisations in Asia and the Pacific region signed a Statement of Intent to Coordinate. The statement acknowledged the importance of close coordination and effective communication across sectors, and expressed a commitment to working together to partner with the Member States and regional organisations to strengthen coordinated efforts to fight existing and emerging health threats, and to protect lives and livelihoods today and in the future.

Neglected parasitic zoonoses, such as cysticercosis and echinococcosis, are a group of zoonoses that continue to impose a significant burden and affect the livelihoods of vulnerable populations that typically have limited access to adequate sanitation, basic living conditions, health and veterinary services and awareness.

Recognising the disease burden and importance of a multisectoral approach to controlling and eliminating neglected parasitic zoonoses, in 2018 the Regional Tripartite jointly organised a regional workshop on neglected foodborne parasitic zoonoses, gathering representatives from different sectors, namely human health, animal health, food safety and water, sanitation and hygiene, and facilitating a dialogue to initiate joint coordinated actions. Following the meeting, the organisations continue to collaborate to enhance multisectoral partnerships at country level, ensuring that necessary multisectoral interventions reach all the affected populations in need, including hard-to-reach vulnerable populations, and to accelerate control and elimination of neglected parasitic zoonoses across the Asia and the Pacific region.

To control zoonoses in an efficient, effective and sustainable way, it is important to understand the transmission cycle of each disease and to implement strategic interventions at key stages via multisectoral participation from public health, animal health, environmental health and food safety. Prevention and control of infection in animals is one of the critical means to reduce the burden of zoonoses in humans, therefore the animal health sector has a very important role to play. However, awareness and knowledge are often limited among veterinary authorities, public health practitioners, animal health practitioners and animal owners.

This handbook focuses on interventions that the animal health sector can implement to prevent human and animal disease caused by these parasites. It aims to provide up-to-date information in a concise form and is expected to encourage the relevant stakeholders to take actions to control and prevent neglected parasitic zoonoses. Although the handbook was written primarily for Asia and the Pacific region, the information is relevant in many other regions. We hope you find this handbook useful and practical.



ACKNOWLEDGEMENTS

The content of this handbook was developed by Meritxell Donadeu with the support of the technical officers of the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) regional offices in Asia and the Pacific – Sonevilay Nampanya and Scott Newman (FAO), Ashish Sutar (OIE) and Gyanendra Gongal and Aya Yajima (WHO) – under the coordination of Maho Urabe (OIE). Additional technical and editorial inputs were provided by the respective Headquarters and other regional colleagues.

The Regional Tripartite in Asia and the Pacific gratefully acknowledges the time and effort provided by Meritxell Donadeu.

This initiative was made possible by funding support from the people of Japan through the Ministry of Agriculture, Forestry and Fisheries, Japan, and Korea Disease Control and Prevention Agency, Republic of Korea.

Contents

PREFACE	V
ACKNOWLEDGEMENTS	VI
Introduction	1
1. Taenia solium	5
How is the parasite transmitted?	6
Geographical distribution	7
Why is the parasite important in humans?	7
How are animals affected?	8
How can porcine cysticercosis be diagnosed?	8
Tools for public health prevention and control	8
Key role of veterinary authorities and animal health practitioners	9
2. Trichinella spp	13
How is the parasite transmitted?	14
Geographical distribution	14
Why is the parasite important in humans?	15
How are animals affected?	15
How can <i>Trichinella</i> be diagnosed in animals?	15
Tools for public health prevention and control	15
Key role of veterinary authorities and animal health practitioners	15
3. Echinococcus granulosus	17
How is the parasite transmitted?	18
Geographical distribution	19
Why is the parasite important in humans?	19
How are animals affected?	19
How can the infection be diagnosed in animals?	19
Tools for public health prevention and control	20
Key role of veterinary authorities and animal health practitioners	

4. Echinococcus multilocularis	3
Geographical distribution	4
Key role of veterinary authorities and animal health practitioners24	4
5. Fasciola hepatica and Fasciola gigantica2	5
How are the parasites transmitted?	6
Geographical distribution	7
Why is the parasite important in humans?	7
How are animals affected?2	7
How can fasciolosis be diagnosed in animals?28	8
Tools for public health prevention and control	8
Key role of veterinary authorities and animal health practitioners	9
6. Practical recommendations for veterinary authorities and animal health practitioners	1
Additional resources	7
References	8

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_23475