

**Programmatic innovations to address  
challenges in tuberculosis prevention  
and care during the COVID-19  
pandemic**



Programmatic innovations to  
address challenges in tuberculosis  
prevention and care during the  
COVID-19 pandemic



Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19 pandemic

ISBN 978-92-4-002529-5 (electronic version)

ISBN 978-92-4-002530-1 (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.** Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19 pandemic. 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 <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

**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.

## Contents

|  |           |
|--|-----------|
| <b>Acknowledgements.....</b>   | <b>v</b>  |
| <b>Abbreviations and acronyms .....</b>  | <b>vi</b> |
| <b>Introduction.....</b>   | <b>1</b>  |
| <b>Compendium of resources on tuberculosis and COVID-19 .....</b>  | <b>1</b>  |
| <b>Country case studies on programmatic innovations for TB prevention and care .....</b>   | <b>3</b>  |
| Case study 1. Brazil: Telemonitoring of tuberculosis patients in Manaus during the COVID-19 pandemic.....  | 4         |
| Case study 2. Brazil: Video monitoring to ensure treatment support during the COVID-19 pandemic...   | 5         |
| Case study 3. Colombia: Tuberculosis prevention and control in Colombia during the COVID-19 emergency.....   | 6         |
| Case study 4. Dominican Republic: Improving TB treatment adherence during the COVID-19 pandemic .....  | 7         |
| Case study 5. Ethiopia: Safeguarding essential TB services by proactive COVID-19 impact mitigation in two remote areas .....   | 8         |
| Case study 6. Guatemala: Contingency plan for addressing and monitoring tuberculosis cases during the national COVID-19 emergency.....   | 9         |
| Case study 7. India: TB Reach – Engaging informal private health-care providers in enhanced tuberculosis detection.....  | 10        |
| Case study 8. India: Fighting the battle against tuberculosis amidst the COVID-19 pandemic: Experience from rural Bihar .....  | 11        |
| Case study 9. India: Roping informal private health-care providers for enhanced tuberculosis detection .....   | 12        |
| Case study 10. India: Using an active compliance and treatment strategy in a digital health approach to improve tuberculosis prevention and care among rural women in Mewat district during COVID-19 ..... | 14        |
| Case study 11. Kenya, Malawi and Zimbabwe: Impact of COVID-19 on tuberculosis and HIV services: a public health surveillance project .....   | 15        |
| Case study 12. Mozambique: Experience of using technology to tackle potential disruption of tuberculosis services due to COVID-19 in Maputo City, 2020 .....   | 16        |
| Case study 14. Nigeria: Early experience with an integrated community programme for active COVID-19 and tuberculosis case finding .....  | 18        |
| Case study 15. Pakistan: Multipronged approach to continue TB services during the pandemic .....   | 18        |
| Case study 16. Paraguay: Virtual training to strengthen implementation of the End TB strategy during COVID-19 .....  | 20        |
| Case study 17. Philippines: Standard short oral regimen for drug-resistant tuberculosis during the COVID-19 pandemic .....   | 20        |

|   |    |
|---|----|
| Case study 18. Russian Federation: Preventive therapy for drug-resistant tuberculosis contacts in high-risk populations: Experience from Vladimir oblast .....  | 21 |
| Case study 19. South Africa: Intensified shielding intervention package to help eliminate the ongoing pandemic in Khayelitsha “seCovid eKhayeltisha”: Multipronged approach to lessening the impact of COVID-19 on people living with and exposed to rifampicin-resistant tuberculosis in Khayelitsha ..... | 22 |
| Case study 20. Ukraine: Prevention of emotional burn-out among health-care staff in tuberculosis services .....   | 23 |
| Case study 21. Uruguay: Use of digital technologies for tuberculosis management during the COVID-19 pandemic .....  | 24 |
| Case study 22. Uruguay: Continuing training of health workers to tackle two pandemics: tuberculosis and COVID-19 .....  | 25 |
| Case study 23. Zambia: Sustaining tuberculosis interventions amidst COVID-19 .....  | 26 |
| <b>Way forward</b> .....  | 27 |
| <b>References</b> .....   | 28 |

## **Acknowledgements**

The report was written by Nebiat Gebreselassie, with contributions from Dennis Falzon and Matteo Zignol, under the overall guidance of Tereza Kasaeva, Director of the WHO Global TB Programme. WHO acknowledges with gratitude the many individuals and countries that contributed, including WHO Regional Staff. Dr Rafael López Olarte, tuberculosis advisor for the WHO Regional Office for the Americas/PAHO, coordinated the translation from Spanish of case studies from that Region.

WHO also gratefully acknowledges the financial support of the Global Fund to Fight AIDS, Tuberculosis and Malaria to complete this work.

## Abbreviations and acronyms

|             |   |
|-------------|---|
| DOT         | directly observed treatment <sup>1</sup>                  |
| DR-TB       | drug-resistant tuberculosis                               |
| Global Fund | Global Fund to Fight AIDS, Tuberculosis and Malaria       |
| NTP         | National Tuberculosis Programme                           |
| TB          | tuberculosis  |
| Union       | International Union against Tuberculosis and Lung Disease |
| VOT         | Video-supported TB treatment                              |

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\\_23900](https://www.yunbaogao.cn/report/index/report?reportId=5_23900)

