Report of the 20th Meeting of the
STRATEGIC AND
TECHNICAL ADVISORY
GROUP FOR TUBERCULOSIS
(STAG-TB)

9-11 NOVEMBER 2020
VIRTUAL MEETING
Report of the 20th Meeting

WHO STRATEGIC AND TECHNICAL ADVISORY GROUP FOR TUBERCULOSIS (STAG-TB)

9-11 November 2020

The World Health Organization (WHO) through its Global Tuberculosis Programme leads and guides the global effort to end the TB epidemic through universal access to people-centred prevention and care, multisectoral action and innovation. Its major functions include: Providing global leadership to end TB through strategy development, political and multisectoral engagement, strengthening review and accountability, advocacy and partnerships, including with civil society; Shaping the TB research and innovation agenda and stimulate the generation, translation and dissemination of knowledge; Developing policy options, norms and standards of TB prevention and care and facilitate their implementation; Providing specialized technical support for Member States and partners, working with WHO regional and country offices, to catalyse change and build sustainable capacity; and, Monitoring, evaluation and reporting on the status of the TB epidemic and progress in financing and implementation of the End TB Strategy.

The WHO Secretariat, at all its levels, requires regular scientific, technical and strategic advice from its Strategic and Technical Advisory Group for Tuberculosis (STAG-TB).

Mission and functions of STAG-TB:

The mission of STAG-TB is to contribute to ending the TB epidemic, and eventually eliminating the disease, by providing state-of-the-art scientific and technical guidance to WHO. The STAG-TB reports to the Director-General of WHO, and members are appointed by the Director-General. The Terms of Reference for STAG-TB are provided at https://www.who.int/groups/strategic-and-technical-advisory-group-for-tuberculosis.
It has the following functions:

1. To provide to the Director-General independent evaluation of the strategic, scientific and technical aspects of WHO’s Tuberculosis work;

2. To review, from a scientific and technical viewpoint, progress and challenges in WHO’s TB-related core functions, including:
   2.1 The content, scope and dimension of WHO’s development of TB policies, strategies and standards in TB prevention, care and control;
   2.2 The content, scope and dimension of WHO’s collaboration, and support of, countries’ efforts to control TB, including the provision of guidance and capacity-building on policies, strategies, standards and technical assistance;
   2.3 The content, scope and dimensions of WHO’s TB epidemiological surveillance, monitoring, evaluation and operational research activities, their relevance to countries’ efforts to end the TB epidemic and approaches to be adopted;
   2.4 The content, scope and dimensions of WHO’s promotion and support of partnerships, and of advocacy and communications for TB prevention, care and control worldwide;

3. To review and make recommendations on the establishment of committees, working groups, and other means through which scientific and technical matters are addressed; and

4. To advise on priorities between possible areas of WHO activities related to tuberculosis prevention, care and control.

The 20th meeting of the STAG-TB took place virtually from 9-11 November 2020. The meeting was organized by the WHO Global TB Programme (GTB), which provides the Secretariat for the advisory body.

Dr Ariel Pablos-Méndez, Professor of Medicine at Columbia University Medical Center, New York, has been appointed by the WHO Director-General as STAG-TB Chair for the period of 2020-2022. He worked with the Director of the WHO Global TB Programme and the STAG-TB Secretariat in the development of the 2020 meeting agenda. See Annex 1 for the agenda of the 20th Meeting.

For 2020, there were fifteen members of STAG-TB with attention to gender, geographical and expertise balance. Fourteen members, including the Chair, were in attendance for the meeting. See Annex 2 for the list of participants.
The STAG-TB members were joined by three key partners: UNITAID, The Global Fund and Stop TB Partnership, as well as WHO staff from Headquarters and representatives from its six Regional Offices.

This report provides a summary of the 20th meeting of STAG-TB, with a focus on the conclusions and recommendations provided by STAG-TB to WHO for the topics addressed.

Each STAG-TB meeting session began with an introductory presentation(s) by WHO staff. Comments and suggested recommendations were provided by one or two STAG-TB members serving as session discussants, followed by comments and recommendations offered by other STAG-TB members, and additional comments by other participants.

The STAG-TB members serving as session discussants developed draft written recommendations, with the assistance of WHO rapporteurs. The recommendations were consolidated by the WHO Secretariat in this report. The consolidated report was reviewed by the STAG-TB Chair and by STAG-TB Members. The report is submitted by the Chair of the STAG-TB Chair and the Director of the WHO Global TB Programme to the Assistant-Director General, the Deputy Director-General and the Director-General of WHO.

The report is posted on the WHO website:
https://www.who.int/groups/strategic-and-technical-advisory-group-for-tuberculosis

Twentieth meeting objectives:

At this 20th meeting, WHO requested STAG-TB to review and advise on a number of areas of WHO global TB work. The WHO STAG-TB Secretariat and the Chair of STAG-TB developed the agenda for the 20th meeting based on priorities of the WHO in its TB work in 2020, notably on the recommendations outlined in the UN Secretary General’s Progress Report on TB.
The agenda items are summarized below:

**Day 1:**
- Introduction and welcome remarks
- Accelerating to reach END TB Targets and implementing the recommendations of the 2020 UN Secretary General Progress Report on ending TB
- Regional and country focus on reaching the END TB Targets
- Civil society perspectives on progress and actions to end TB

**Day 2:**
- Impact and implications of the COVID-19 pandemic on the TB response
  - Overview of situation and response
  - Modelling

**Day 3:**
- Scaling up TB prevention
  - Overview of the guidelines and operational guide: Global, regional and national perspectives

**OPENING**

On behalf of the WHO Director-General, Dr Ren Minghui, Assistant Director-General, Universal Health Coverage/Communicable and Noncommunicable Diseases, welcomed STAG-TB members and all other participants to the meeting and delivered the keynote address. Dr Ren emphasized that in this difficult and unprecedented time for the world with the COVID-19 pandemic, that has had immense impact on global health and economies, it is critical that commitments made to end epidemics like TB and reach the triple billion targets are kept. These commitments offer hope to end death and suffering for millions worldwide struggling with preventable and treatable diseases like TB. He asked STAG-TB members for their strategic advice and guidance in enabling this. He also commended the leadership of Dr Ariel Pablos-Mendez, STAG-TB Chair.

Dr Ariel Pablos Mendez and Dr Tereza Kasaeva, Director, WHO Global TB Programme, welcomed all members and highlighted the focus of the meeting and main discussion areas. Ms Hannah Monica Dias presented the Terms of Reference of STAG-TB and meeting processes.
Dr Kasaeva provided a comprehensive presentation on "Accelerating to reach END TB Targets and implementing the recommendations of the 2020 UN Secretary General Progress Report on ending TB," highlighting the need to accelerate action to end TB to reach the 2022 targets in the UN political declaration on TB and WHO’s End TB Strategy. She emphasized the urgent need to implement the 10 priority recommendations outlined in the UN Secretary General’s Progress Report on TB to get back on track to reach targets. She reflected on the work done by WHO over the past year including in policy development, advancing multisectoral action and accountability, partnering with civil society and other stakeholders, as well as research and innovation. She presented highlights of the extensive work undertaken by WHO to support countries in maintain essential TB services during the COVID-19 pandemic.

WHO Regional Advisers for TB or representatives, from the six WHO regions - Dr Andre Ndongosieme (AFRO), Dr Rafael Lopez Olarte (PAHO), Dr Kenza Benani (EMRO), Dr Askar Yedilbayev (EURO), Ms Mukta Sharma (SEARO), and Dr Kalpesh Rahevar (WPRO) - presented on their efforts to support countries in pursuing commitments and targets in the UN political declaration on TB and the End TB Strategy, in alignment with regional plans of action and other regional strategies focused on advancing universal health coverage, multisectoral accountability and health-associated SDGs.

Ms Ingrid Schoeman and Ms Jamilya Isamoilova were the STAG-TB discussants for the session and presented civil society perspectives on progress and actions towards ending TB.

**STAG-TB CONCLUSIONS AND RECOMMENDATIONS BY SESSION**

**DAY I**

**SESSION 1: PROGRESS AND ACTIONS**

- Acknowledges and applauds WHO’s leadership across global, regional and country levels in strengthening efforts towards ending TB, including by supporting countries through guideline development and updates, strengthening multisectoral action and accountability, promoting research and innovation, and through the meaningful engagement of civil society, affected communities and other partners.
 Welcomes the development and launch of the UN Secretary General 2020 progress report on ending TB with WHO support, and underscores the importance of urgently implementing the key recommendations outlined in the report to reach global TB targets.

 Emphasizes that TB still remains the world’s top infectious killer, and that efforts to end TB need to be advanced with urgency with adequate resources.

 Recognizes the importance of the WHO Multisectoral Accountability Framework on TB and related checklists to drive country action and accountability, including through national review mechanisms, score cards and stronger monitoring.

 **STAG-TB recommends that:**

 1. The WHO Director-General prioritizes efforts to end TB including by calling for an emergency response and fully activating high level leadership to urgently reduce TB deaths and drive multisectoral action to end TB, as part of the universal health coverage agenda and support maintaining essential TB services during the COVID-19 pandemic. This will ensure rapid acceleration of efforts to save lives and end suffering from the world’s top infectious killer.

 2. WHO updates the implementation guide of the End TB Strategy especially reflecting new developments, policies and innovations, and taking into account the COVID-19 pandemic.

 3. WHO further supports countries in operationalizing the multisectoral accountability framework and checklist through country-level review mechanisms including score cards, through greater engagement with civil society and affected communities, and by helping ensure concrete multisectoral engagement and actions that will reduce costs faced by TB patients and their families. The impact of COVID-19 should also be featured in the checklist.

 4. WHO continues its work on synthesizing the results and lessons learned from national TB patient cost surveys implemented between 2015 to 2020, including to provide guidance for countries on how to enhance multisectoral efforts needed to achieve the target of zero catastrophic costs due to TB.
SESSION 2: Impact and implications of the COVID-19 pandemic on the TB response

As the COVID-19 pandemic unfolded this year, it presented countries worldwide with an unprecedented challenge to respond adequately to their health care needs. Public concerns were compounded by restrictions of movement imposed in a context of multiple uncertainties about the origin, clinical course, long-term consequences, immunity, and means to prevent the transmission of a previously unknown contagious, viral infection spreading rapidly across international borders. The natural consequence of the COVID-19 emergency, given its nature and scale, was a major reprioritization of health care needs in all countries.

Since January 2020, the WHO Global TB Programme, working with technical and funding partners and civil society, has been on the forefront of messaging to TB programmes in the context of the COVID-19 emergency. Communications were developed in close collaboration with the WHO Health Emergencies Programme and other WHO departments on various topics, including clinical management, laboratory biosafety, infection control, diagnostics, BCG vaccination, operational planning for essential services, and community engagement. COVID-19 was one of the main items on the agenda for the Strategic and Technical Advisory Group for Tuberculosis in November 2020. Dr Dennis Falzon and Dr Philippe Glaziou presented an overview of the impact of COVID-19 on TB based on observed and modelled effects, as well as the mitigation efforts put in place and required in the immediate and long-term at national and global level. Dr Chikwe Ihekweazu, Dr Denise Arakaki, and Dr Nim Arinaminpathy presented their perspectives as STAG-TB discussants.

STAG-TB:
- Welcomes WHO’s leadership since the start of the COVID-19 crisis to continue to accelerate global efforts to combat TB despite the impact of the pandemic.
- Emphasizes the importance for countries to invest in robust and responsive information systems to monitor COVID-19 related disruptions to TB services and activities to mitigate them now and into the post-pandemic phase.
- Acknowledges the continued importance to work towards the global targets of the End TB Strategy and the 2018 UN High Level Meeting on TB (UNHLM), and using the WHO Multisectoral Accountability Framework on TB to monitor country commitment towards this end.
Recognizes the need for WHO and communities to be supported in their ongoing efforts to champion the cause for TB as a key essential health service to maintain its high priority for support through to the post-pandemic recovery phase, mindful of the global economic contraction into the near future.

**STAG-TB recommends that:**

1. **WHO continues to provide guidance** on topical technical issues. These include, but are not limited to, how to monitor the impact of COVID-19 and TB in different country contexts; how to organize access to simultaneous testing for both conditions more equitably and other areas for integration; managing infection prevention and control including among health care providers, workers and communities; collecting information from communities about the impact of the pandemic on TB; promoting research on the effect of COVID-19 on TB through its effect on immunity, comorbidity, and undernourishment; how people and communities affected with TB could feature among priority groups targeted for eventual COVID-19 vaccination; and raising the profile of modelling as an aid to determining country-specific impact, costs and choice of best suited response.

2. **WHO continues to support countries in strengthening their programmatic monitoring systems** to allow them to generate valid, timely indicators on critical areas, including patient-centred care, social protection coverage and infection prevention and control measures for health workers and affected communities. This includes supporting the rapid **move from paper-based systems to electronic records** to improve decision-making, enabling TB notification data from different administrative levels to become rapidly available. While digital technologies, in their diversity can support health care workers and improve communication, investment in innovations should be matched with monitoring to safeguard the equity of the innovative action.

3. **WHO continues to work with countries to accelerate progress towards the targets of the End TB Strategy and UNHLM**, and review the operationalization of their national TB strategic plans in order to be able to achieve the expected objectives on time. ‘Back-on-track’ plans with appropriate resourcing will be needed for them to achieve this. Involving civil society in the work of national TB programmes will improve their resilience. Measures
to strengthen social protection for those who need it should focus also on preventing TB and not just on patient outcomes.

4. WHO **engages with top global leaders** and influential partners (e.g. TB caucus) to discuss how to reimagine action against TB during catch-up activities. There will be a need to mobilize resources even as they become more scarce, and as pressures to integrate communicable disease response potentially undermine funding for TB. These could include exploring how the corporate sector can play a bigger role at country level, documenting best practices, employing modelling more extensively to inform targeted action and the risks of falling behind on the TB response, considering concessionary loans with elements of co-funding, providing stimulus funding to the private healthcare sector, and also raising the Global Fund allocation for TB to the same level of each of the other two diseases.

**SESSION 3: Scaling up TB prevention**

Prevention is a major cornerstone of all three pillars of the End TB Strategy. The success of the first phase of the Strategy (2016-2025) hinges upon the optimal use of existing interventions, including programmatic action to prevent and treat infection – through TB preventive treatment (TPT) of people at risk and infection prevention and control in households and institutions - as well as efforts to address the social determinants of TB. The second 10 years of the Strategy require, in addition, the availability and wide use of new tools from the research and development pipeline, including amongst others large scale use of pre- and post-exposure vaccines, diagnostic tests for infection and shorter and longer acting TPT regimens. Providing universal health care will be an accessory to the attainment of these objectives along with mobilization of resources and efforts at all-government and all-society level, to maximize implementation of TB prevention interventions.

Dr Avinash Kanchar presented an overview of the global situation on TB prevention and outlined the main contents of the WHO TPT guidelines and operational handbook released in 2020. Dr Sharma presented about TPT achievements and population-level vulnerability assessment in the WHO South
East Asia Region. Dr Ariel Pablos Mendez and Dr Knut Lönnroth were STAG-TB discussants.

STAG-TB:

- Notes with concern that TPT expansion remains too slow globally.
- Recognizes that TPT should be considered a human right for individuals who are at increased risk for TB and that countries need continued support to expand TPT adequately.
- Acknowledges the efforts of WHO and partners to advocate for TPT and other TB preventive action, including the release of new guidelines and the multi-partner Call to Action issued in May 2020.
- Considers that while TPT is a critical intervention in TB prevention, the way forward to prevent TB should nonetheless continue on different fronts, including also infection control, addressing comorbidities and determinants of TB, poverty alleviation, social protection and universal health care, and the continued quest for a TB vaccine, which become more important in the wake of the COVID-19 pandemic.

STAG-TB recommends that:

1. WHO develops a new initiative to create demand for shorter TPT, new tests and emerging tools such as the long-acting formulations, involving major partners as a sequel to the Call to Action and should launch the initiative at a high level advocacy event.
2. WHO continues to advocate that all countries should implement TPT for those who need it Tools to improve country uptake, such as roadmaps, would be helpful to guide implementation and reduce stigma. In the context of COVID-19, TPT should feature among the essential components of TB services for national healthcare authorities to deliver and also included in post-pandemic catch-up plans by countries, thus quickening the pace with which countries can get back on track to achieve the commitments made at the UN High level meeting on TB in 2018.
3. WHO continues to track innovations in TB preventive pipelines in the next few years - especially the longer-acting injectable formulations of TPT and diagnostics of TB infection that are better at predicting progression to disease - for all possible technologies that could swiftly improve TPT
coverage. STAG also advises that any action to develop innovative ways to improve TPT delivery should not diminish the importance of developing an effective TB vaccine that can be scaled up globally.

4. WHO promotes original trials and assessments to strengthen the evidence for TB prevention among groups such as migrants, individuals with more remote infection, people with diabetes, smokers, undernourished and models of delivery of TPT, including lessons from other fields.

5. WHO actively monitors the coverage of TPT among risk groups should be monitored as a priority indicator given that the scale-up of TPT could have a profound effect on reducing TB incidence.

PLANNING OF THE 2021 STAG-TB MEETING

The WHO Secretariat announced that the 21st annual meeting of STAG-TB will be held at WHO Headquarters in Geneva Switzerland in June 2021. The face-to-face meeting would be dependent on the COVID-19 situation and travel restrictions. Proposed agenda items for the 2021 session were requested from STAG-TB members and a proposed agenda will be compiled and shared with STAG-TB members in advance.

CLOSING

The meeting was closed with final remarks and appreciation to all participants offered by Dr Tereza Kasaeva on behalf of the World Health Organization, and by Dr Ariel Pablos Mendez on behalf of the Strategic and Technical Advisory Group for Tuberculosis.
# Annex 1

## Strategic and Technical Advisory Group for Tuberculosis 2020

### 20th Meeting Provisional Agenda

9-11 November, Virtual

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| 13:30-14:00 | Opening and Objectives | Welcome and introductions | A Pablos Mendez, Chair, STAG-TB  
T. Kasaeva, Director, WHO Global Tuberculosis Programme (GTB) |
| | | Keynote Address | Ren Minghui, Assistant Director-General, Universal Health Coverage/Communicable and Noncommunicable Diseases |
| | | Opening video: Key achievements of the WHO Global Tuberculosis Programme | H.M. Dias, GTB |
| | | Objectives and agenda | |
| 14:00-15:00 | **SESSION 1: Progress and actions** | Accelerating to reach END TB Targets and implementing the recommendations of the 2020 UN Secretary General Progress Report on ending TB | T. Kasaeva, Director, GTB |
| | | Regional and country focus on reaching the END TB Targets | A. Ndongosime, AFRO  
R. Lopez, AMRO  
K. Benani, EMRO  
A. Yedilbayev, EURO  
M. Shama, SEARO  
K. Rahevar, WPRO |
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<th>Time</th>
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<td>15:00-15:30</td>
<td>Discussion and STAG recommendations on operationalizing the UN SG Progress report priority actions</td>
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<td>Overview of situation and response</td>
<td>P. Glaziou, GTB</td>
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<td>Discussion and STAG recommendations</td>
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<td>Day 3: November 11</td>
<td>SESSION 3. Scaling up TB prevention</td>
<td>A. Kanchar, GTB</td>
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<td>13:30-14:30</td>
<td>Overview of the guidelines and operational guide: Global, regional and national perspectives</td>
<td>M. Sharma</td>
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<td>CLOSING SESSION</td>
<td>Review of STAG-TB recommendations</td>
<td>Chair &amp; STAG-TB Members</td>
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<td>Conclusions &amp; planning for 2021 meeting. Closing remarks</td>
<td>A. Pablos Mendez and T. Kasaeva</td>
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Annex 2

Provisional List of Participants

**STAG-TB Members**

1. **Dr Ariel Pablos-Méndez**  
   Professor of Medicine  
   Columbia University Medical Center  
   New York, NY  
   United States of America

2. **Dr Denise Arakaki-Sanchez**  
   Deputy Director  
   Department of Chronic Communicable Diseases and Sexually-Transmitted Infections, Secretariat of Health Surveillance, Ministry of Health  
   Brasilia  
   Brazil

3. **Dr Nimalan Arinaminpathy**  
   Reader (Associate Professor) in Mathematical Epidemiology  
   Imperial College  
   London  
   United Kingdom of Great Britain and Northern Ireland

4. **Ms Grania Brigden**  
   Director  
   Department of TB at the International Union Against TB and Lung Disease (The Union)  
   Geneva  
   Switzerland

5. **Dr Glenda Gray (absent)**  
   President and CEO  
   South African Medical Research Council  
   Johannesburg  
   South Africa

6. **Dr Chikwe Ihekweazu**  
   Director General  
   Nigeria Centre for Disease Control (NCDC)  
   Abuja  
   Nigeria

7. **Dr Jamilya Ismoilova**  
   Independent Consultant  
   Dushanbe  
   Tajikistan

8. **Dr Seiya Kato**  
   Director  
   Research Institute of Tuberculosis  
   Tokyo  
   Japan

9. **Dr Knut Lönnroth**  
   Professor of Social Medicine  
   Department of Global Public Health, Karolinska Institutet  
   Stockholm  
   Sweden

10. **Dr Ya Diul Mukadi**  
    Senior Technical Advisor  
    Global Health Bureau, US Agency for International Development (USAID)  
    Washington, DC  
    United States of America

11. **Dr Anastasia Samoilova**  
    First Deputy Director  
    National Medical Research Center of Phthisiopulmonology and Infectious Diseases of the Russian Ministry of Health  
    Moscow  
    Russian Federation

12. **Ms Ingrid Schoeman**  
    TB Advocate, XDR-TB Survivor  
    TB Proof  
    Cape Town  
    South Africa

13. **Dr Moorine Sekadde**  
    Coordinator for Paediatric TB  
    National TB & Leprosy Program, Ministry of Health  
    Kampala  
    Uganda

14. **Dr Syed Karam Shah**  
    Adviser for Communicable Diseases Control  
    Ministry of National Health Services, Regulations and Coordination  
    Karachi  
    Pakistan

15. **Dr Chen Wang**  
    President  
    Chinese Academy of Medical Sciences and the Peking Union Medical College  
    Beijing  
    China (People’s Republic of)
Observers

Partners

16. Dr Lucica Ditiu
   Executive Director
   StopTB Partnership
   Geneva
   Switzerland

17. Suvanand Sahu
   StopTB Partnership
   Geneva
   Switzerland

18. Dr Eliud Wandwalo
   Head of TB
   The Global Fund to fight AIDS, TB and Malaria
   Geneva
   Switzerland

19. Mr Draurio Barreira
   Technical Manager
   UNITAID International drug purchase facility
   Geneva
   Switzerland

WHO Civil Society Task Force on TB Members

20. Mr Jeffry P. Acaba
    TB Advocate
    Philippines

21. Ms Yuliya Chorna
    Executive Director
    TB Europe Coalition
    Canada

22. Dr Esty Febriani
    TB Advisor
    Lembaga Kesehatan Nahdlatul Ulama
    Indonesia

23. Mr Harry Hausler
    Medical Director
    Project Integrate, TB Care Association
    Waterfront
    South Africa

24. Mr Bertrand Kampoer
    Coordinator For Impacts in Social Health
    Cameroon

25. Mr Roger Kamugasha
    Editor In Chief
    The Health Times Africa Limited
    Uganda

26. Ms Amir Khan
    Association for Social Development
    Pakistan

27. Ms Evaline Kibuchi
    Kenya AIDS NGO Consortium (KANCO)
    Kenya

28. Ms Blessina Kumar
    CEO
    Global Coalition of TB Activists
    India

29. Mr Tenzin Kunor
    Advocacy Coordinator
    We Are TB
    United States of America

30. Dr Nyan Win Phyo
    Coordinator, Health Technical, Monitorin and Evaluation
    World Vision Foundation of Thailand
    Thailand

31. Dr Ezio Tavares dos Santos Filho
    REDE-TB - Brazilian Network of Tuberculosis Research
    Brazil

32. Mr Anh Tuan Nguyen
    Professor
    Department of Tuberculosis and Lung Disease,
    Hanoi Medical University
    Viet Nam
WHO Regional and Country Staff
AFRICA REGION

33. Dr Andre Ndongosiem
   AFRO Regional Technical Focal Person for TB
   WHO Regional Office
   Brazzaville
   Congo

34. Dr Jean Louis Abena Foe
   Technical Officer
   WHO Regional Office
   Brazzaville
   Congo

35. Dr Michel Gasana
   MO/TB
   WHO Regional Office
   Brazzaville
   Congo

36. Mr Jean de Dieu Iragena
   Technical Officer Laboratory
   WHO Regional Office
   Brazzaville
   Congo

37. Dr Hugues Lago
   Team Leader AF/HTH HIV, Tuberculosis and Hepatitis
   WHO Regional Office
   Brazzaville
   Congo

38. Dr Richard Mbumba
   MO/UCN
   WHO Regional Office
   Brazzaville
   Congo

39. Dr Fabian Ndenzako
   Eastern and Southern African Sub-Regions Focal Person for TB
   WHO Regional Office
   Brazzaville
   Congo

40. Mr Hubert Wang
    WHO Country Office
    Yaounde
    Cameroon

41. Dr Nicolas Nkiere Masheni
    NPO TUB
    WHO Country Office
    Kinshasa
    Democratic Republic of the Congo

42. Dr Esther Aceng-Dokotum
    MO/ATM
    WHO Country Office
    Addis Ababa
    Ethiopia

43. Dr Ismael Hassen Endris
    NPO
    WHO Country Office
    Addis Ababa
    Ethiopia

44. Dr Kafui Senya
    MO/HIV/TB
    WHO Country Office
    Accra
    Ghana

45. Dr Nurbai Calu
    NPO/TB/HIV
    WHO Country Office
    Maputo
    Mozambique

46. Dr Ayodele Awe
    NPO/TUB
    WHO Country Office
    Abuja
    Nigeria

47. Dr Nkateko Mkhondo
    MO/TB
    WHO Country Office
    Pretoria
    South Africa

48. Dr Bhavin Jani
    NPO/TB
    WHO Country Office
    Dar es Salaam
    United Republic of Tanzania

49. Dr Muggaga Kaggwa
    NPO/HIV
    WHO Country Office
    Kampala
    Uganda

50. Dr Lastone Chitembo
    NPO/HIV/TB
    WHO Country Office
    Lusaka
    Zambia
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<th>61. Dr Kyaw Ko Ko Win</th>
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<tr>
<th>South-East Asia Region</th>
<th>62. Dr Partha Mandal</th>
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<th>63. Dr Vineet Bhatia</th>
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<th>64. Dr Askar Yedilbayev</th>
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<th>66. Dr Soudeh Ehsani</th>
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<th>68. Dr Ogtay Gozalov</th>
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<th>69. Mr Oleksandr Korotych</th>
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</table>
70. **Dr Giorgi Kuchukhidze**  
Surveillance and response monitoring, digital health  
WHO Regional Office, EURO  
Copenhagen  
Denmark

71. **Dr Viacheslav Grankov**  
NPO  
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Belarus

72. **Dr Saltanat Yegeubayeva**  
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Moscow  
Russian Federation

73. **Dr Jamshid Gadoev**  
NPO  
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Tashkent  
Uzbekistan

**EASTERN MEDITERRANEAN REGION**

74. **Dr Kenza Bennani**  
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76. **Dr Mohammad Aloudal**  
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77. **Dr Edie Alain Kemenang**  
Programme Officer  
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Djibouti

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79. **Dr Yassine Aqachmar**  
NPO  
WHO Country Office  
Rabat  
Morocco

80. **Dr Laeeq Ahmad Khawaja**  
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Islamabad  
Pakistan

81. **Dr Ireneaus Sebit Sindani**  
MO  
WHO Country Office  
Hargeisa  
Somalia

82. **Dr Mai Eltigany Mohammed**  
NPO  
WHO Country Office  
Kartum  
Sudan

83. **Dr Ziad Aljarad**  
NPO/HIV  
WHO Country Office  
Aleppo  
Syrian Arab Republic

84. **Dr Nejib Thabit**  
NPO  
WHO Country Office  
Aden  
Yemen

**WESTERN PACIFIC REGION**

85. **Dr Tauhid Islam**  
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Philippines

86. **Mr Fukushi Morishita**  
TO/ETB  
WHO Regional Office, WPRO  
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Philippines

87. **Dr Kyung Hyun Oh**  
TO/ETB  
WHO Regional Office, WPRO  
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Philippines

88. **Dr Kalpesh Rahevar**  
MO/ETB  
WHO Regional Office, WPRO  
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Philippines

89. **Dr Subhash Yadav**  
MO/TB  
WHO Country Office  
Suva  
Fiji
90. Dr Quang Hieu Vu  
NPO/TB  
WHO Country Office  
Hanoi  
Viet Nam

91. Dr Narantuya Jadambaa  
MO  
WHO Country Office  
Port Moresby  
Papua New Guinea

92. Mr Thomas Hiatt  
Technical Officer (Tuberculosis)  
WHO Country Office  
Manila  
Philippines

93. Mr Kiyohiko Izumi  
Technical Officer, HIV/AIDS  
WHO Country Office  
Manila  
Philippines

94. Dr Rajendra-Prasad Hubraj Yadav  
MO/TB  
WHO Country Office  
Manila  
Philippines
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<tr>
<th>Number</th>
<th>Name</th>
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<tr>
<td>95</td>
<td>Dr Ren Minghui</td>
<td>Assistant Director-General</td>
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<td>96</td>
<td>Dr Tereza Kasaeva</td>
<td>Director</td>
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<tr>
<td>97</td>
<td>Mrs Hannah Monica Dias</td>
<td>Cross-cutting Specialist, WHO Flagship Initiative, PPM &amp; TB Elimination</td>
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<td>98</td>
<td>Mrs Karina Halle</td>
<td>Cross-cutting Specialist, Enhanced TB Collaboration for Country Impact in high TB burden countries</td>
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<tr>
<td>99</td>
<td>Miss Yi Wang</td>
<td>Consultant</td>
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<tr>
<td>100</td>
<td>Mr Ivan Babovic</td>
<td>Team Assistant</td>
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<tr>
<td>101</td>
<td>Mr Michael McCullough</td>
<td>Unit Head</td>
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<tr>
<td>102</td>
<td>Ms Henriikka Weiss</td>
<td>Budget and Finance Officer</td>
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<td>Dr Matteo Zignol</td>
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<td>Dr Saskia Den Boon</td>
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<td>105</td>
<td>Dr Dennis Falzon</td>
<td>Team Lead, TB Prevention, Research &amp; Innovations</td>
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<td>106</td>
<td>Dr Nebiat Gebreselassie</td>
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<td>Ms Lice Gonzalez-Angulo</td>
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<td>109</td>
<td>Prof. Nazir Ismail</td>
<td>Team Lead, TB Screening and Diagnosis</td>
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<tr>
<td>110</td>
<td>Dr Ernesto Jaramillo</td>
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<td>Dr Avinash Kanchar</td>
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<td>Dr Fuad Mirzayev</td>
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<td>116</td>
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<td>118</td>
<td>Dr Keni Viney</td>
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<tr>
<td>119</td>
<td>Dr Katherine Floyd</td>
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<tr>
<td>120</td>
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<td>123</td>
<td>Dr Philippe Glaziou</td>
<td>Team Lead, Global Monitoring Estimates &amp; Projections</td>
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<td>Mr Marek Lalli</td>
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<td>Dr Charalampos Sismanidis</td>
<td>Team Lead, TB Surveillance &amp; Epidemiological Surveys</td>
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<td>129</td>
<td>Mr Hazim Timimi</td>
<td>Data Manager</td>
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<tr>
<td>130</td>
<td>Dr Farai Mahvunga</td>
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<td>131</td>
<td>Ms Annabel Baddeley</td>
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132. Ms Rachel Beanland
   Consultant

133. Ms Annemieke Brands
   Technical Officer

134. Ms Marzia Calvi
   Technical Officer

135. Dr Giuliano Gargioni
   Team Lead, People Centred Care & Community Engagement

136. Dr Christian Gunneberg
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137. Mrs Soleil Labelle
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138. Dr Tiziana Masini
   Consultant

139. Mrs Cicilia Parwati
   Technical Officer

140. Dr Elizaveta Safronova
    Programme Officer

141. Mrs Lana Syed
    Technical Officer

142. Mrs Eloise Valli
    Consultant

143. Dr Sabine Verkuijl
    Medical Officer

144. Ms Clarisse Veylon Hervet
    Consultant

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145. Dr Pedro Alonso
    Director

Global HIV, Hepatitis and STIs Programmes (HHS)
146. Dr Meg Doherty
    Director

Mental Health and Substance Use (MSD)
147. Dr Devora Kestel
    Director

Control of Neglected Tropical Diseases (NTD)
148. Dr Mwelecele Malecela
    Director

Noncommunicable Diseases (NCD)
149. Dr Ruitai Shao
    Programme Management Adviser

150. Mr Menno Van Hilten
    Senior External Relations Officer