## Summary of the Thirty-Fifth Meeting of the International Task Force for Disease Eradication (ITFDE) May 2-3, 2023

The ITFDE members are Dr. Kashef Ijaz, The Carter Center (Chair); Dr. Fatima Barry, The World Bank; Mr. Simon Bland, Global Institute for Disease Elimination (GLIDE); Dr. Ibrahima Soce Fall, World Health Organization (WHO); Dr. Peter Figueroa, The University of the West Indies, Jamaica; Dr. Donald Hopkins, The Carter Center; Dr. Patrick Lammie, The Task Force for Global

The 35<sup>th</sup> meeting of the International Task Force for Disease Eradication (ITFDE) was convened in a hybrid, virtual and in-person format on May 2-3, 2023, at The Carter Center in Atlanta, GA, USA, The Impact of COVID-19 Pandemic on Eradication/Elimination Programs. The topic was in follow-up to the October 2020 ITFDE meeting focused on the potential effects the COVID-19 pandemic may have on

The WHO *Global Report on Neglected Tropical Diseases 2023* shows that the number of people receiving interventions against NTDs dropped significantly from 2019 to 2020, with a small amount of additional recovery in 2021. Notably, fewer rounds of MDA were implemented overall than before the pandemic, while several MDA rounds failed to achieve their target coverage. Data from 83 countries show that 250 MDA campaigns were implemented in 2019. In 2020, only 180 MDA campaigns were implemented in 72 countries, a decrease of 28%. In 2021, data reported from 66 countries show that the number of MDA campaigns implemented (187) increased slightly compared with 2020.<sup>7</sup> Major disruptions were also observed in health-facility-based services for NTDs, such as prevention, treatment, and care.

Nevertheless, reductions in cases detected and treated for diseases requiring individual management (e.gs., VL, HAT, and Leprosy) were observed in 2020 compared with 2019. Although for some of these diseases, a decreasing trend in the detection of new cases had occurred for several years, it is unclear whether the accelerated reduction in numbers detected and treated in 2020 was real or should

restore coverage to at least 2019 levels and the trajectory needed to achieve the goals of IA2030, the umbrella global strategy for immunization 2021-2030.<sup>18</sup> Early estimates for 2022 suggest that some countries are progressing in returning to or exceeding 2019 immunization coverage.<sup>19</sup> In addition, most countries have reinstated vaccination campaigns delayed by the COVID-19 pandemic, with only 17 countries still reporting pandemic-related delays as of 8 June 2023 and 19 countries implementing integrated multi-antigen campaigns. Complete data on 2022 coverage across countries are anticipated in July 2023.

Although the COVID-19 pandemic disrupted the delivery of routine childhood vaccines, it also demonstrated the reach of immunization programs and the value of vaccination. Over 13 billion doses of COVID-19 vaccines were delivered mainly to adults in over 190 countries during 2020-2022;<sup>13</sup> modeling estimates that the first year of COVID-19 vaccination alone averted 14-20 million deaths globally.<sup>20</sup> goal of interrupting WPV transmission appears within reach, continued risk mitigation and tailored subnational approaches in the remaining two endemic countries (Afghanistan and Pakistan) are needed. Challenges remain in interrupting cVDPV transmission across diverse geographies, particularly in the WHO African Region; increasing supply availability during 2023 of novel oral polio vaccine (nOPV2, a more genetically stable version of type 2 monovalent OPV that is less likely to seed cVDPV2 emergencies) and improving timeliness and quality of vaccination campaigns will be critical towards this goal. For measles, adequate, timely resources, and effective strategies for measles vaccination through intensified routine immunization and supplemental immunization activities are critical to close immunity gaps in countries experiencing and at risk of outbreaks.

## Accuracy of Malaria Control Disruption and Extension Modeling during the COVID-19 Pandemic

At the start of the COVID-19 pandemic, the malaria community quickly realized the negative potential impact of the pandemic on malaria intervention delivery. There were concerns that mass campaigns (long-lasting insecticidal nets [LLINs], seasonal malaria chemoprevention [SMC] to children, spraying houses with insecticides) could be disrupted; that there could be challenges maintaining supply chains for critical commodities including antimalarials and diagnostics, and that treatment-seeking behavior of febrile individuals might change or health facilities might become overburdened. To better understand the magnitude of these concerns, WHO engaged several malaria modelling groups to provide estimates of the impact of different disruption scenarios. Now that the initial COVID-19 waves have passed, we can compare the modelled estimates against what transpired.

<sup>&</sup>lt;sup>18</sup> World Health Organization. (2020). Immunization Agenda 2030: A Global Strategy to Leave No One Behind. Retrieved from https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030

<sup>&</sup>lt;sup>19</sup> World Health Organization. (2023, June 2). Meeting of the Strategic Advisory Group of Experts on

Immunization, March 2023: Conclusions and recommendations. Weekly Epidemiological Record, 98(22), 239-256. <sup>20</sup> Watson, O. J., Barnsley, G., Toor, J., Hogan, A. B., Winskill, P., & Ghani, A. C. (2022). Global impact of the first year of COVID-19 vaccination: a mathematical modelling study. The Lancet Infectious Diseases, 22, 1293–1302. https://doi.org/10.1016/S1473-3099(22)00320-6

Models used to explore the potential impact of severely disrupted or totally interrupted mass LLIN distribution campaigns estimated that a 50% reduction in delivery would result in over 18 million additional malaria cases globally in 2020,<sup>21</sup> while totally interrupted campaigns considered alongside interrupted SMC would result in approximately 300,000 additional malaria deaths in sub-Saharan Africa.<sup>22</sup> However, most countries could maintain their LLIN distribution campaigns of all the nets scheduled for distribution globally in 2020, an estimated 74% were successfully distributed.<sup>23</sup> SMC successfully went ahead in all 13 West African countries where it was planned and indoor insecticide spraying was completed in 25 of the 37 countries where it was intended.<sup>5</sup>

The modelled impact of disruptions to diagnosis and treatment was significant. One study estimated that a 75% reduction in diagnosis and treatment resulted in a 13% increase in malaria incidence.<sup>3</sup> Another study estimated that if treatment and diagnosis were completely suspended for the duration of the first COVID-19 wave (six months), there could be an additional 164,000 malaria deaths in a year.<sup>4</sup> In reality, there were significant reductions in the number of malaria tests conducted in 2020 compared to 2019 potentially a result of changes to treatment-seeking behavior and the availability of diagnostics.<sup>5</sup> Despite reductions in testing, there were also increases in malaria cases reported globally between 2019 and 2021, an estimated 13.4 million cases and 63,000 deaths were attributed to the service disruptions caused by COVID-19.<sup>24</sup> Due to malaria data quality issues for both interventions delivered and malaria cases detected, it is difficult to accurately determine the impact of service disruptions on malaria burden at a more granular level, with many variations in impact observed in different settings. Also (before this malaria conclusion), the COVID-19 pandemic had the most significant adverse impact on immunization services and the second-greatest impact on MDA services for NTDs, among the three public health systems/categories considered at this ITFDE meeting.

Global malaria stakeholders used the modeling outputs generated during these exercises to emphasize the essential need to maintain malaria control interventions. Many national malaria programs used these outputs to justify continuing with planned interventions, and many national malaria programs used these outputs to justify continuing with planned interventions. Even though

provide a valuable advocacy tool to highlight a potentially devastating situation and bring together malaria stakeholders around a common aim.

<sup>23</sup> World Health Organization. (2021). World malaria report 2021. World Health Organization. Retrieved from https://apps.who.int/iris/handle/10665/350147

<sup>24</sup> World Health Organization. (2022). World malaria report 2022. World Health Organization. https://apps.who.int/iris/handle/10665/365169. License: CC BY-NC-SA 3.0 IGO

<sup>&</sup>lt;sup>21</sup> Weiss, E. J., Bertozzi-Villa, A., Rumisha, S. F., et al. (2021). Indirect effects of the COVID-19 pandemic on malaria intervention coverage, morbidity, and mortality in Africa: a geospatial modelling analysis. The Lancet Infectious Diseases, 21(1), 59-69. https://doi.org/10.1016/S1473-3099(20)30700-3

<sup>&</sup>lt;sup>22</sup> Sherrard-Smith, E., Hogan, A. B., Hamlet, A., et al. (2020). The potential public health consequences of COVID-19 on malaria in Africa. Nature Medicine, 26(9), 1411 1416. https://doi.org/10.1038/s41591-020-1025-y

## Conclusions and Recommendations

1. The ITFDE underscored the need to be cautious when interpreting the actual impact of the COVID-19 Pandemic. It is critical to communicate that modelled estimates often consider to drive advocacy and planning efforts. The ITFDE recommends presenting more realistic intermediate scenarios to maintain public trust in modeling and informing national health planning. Misinformation can

influencing behaviors such as vaccine hesitancy and drug acceptance during MDAs.

- 2. The ITFDE recommends that National immunization programs in 2023 should focus on making the policy, system, and program adjustments needed to rapidly deliver integrated catch-up strategies to reach children missed during the COVID-19 pandemic, mitigate overlapping disease outbreaks, and regain and sustain progress toward disease elimination and eradication goals.
- 3. The ITFDE recognizes that novel tools, such as microneedle array patch (MAP) vaccine technology and rapid diagnostic tests, hold promise for accelerating progress toward measles elimination. For rubella, the introduction of rubella-containing vaccine in the remaining 19 countries is a critical first step towards elimination efforts.