Summary of the Thirty-First Meeting of the International Task Force for Disease Eradication (ITFDE) October 20and transmission dynamics. A set of general recommendations are offered, followed by discussions of the seven programs, with specific conclusions and recommendations for each program: Guinea Worm Eradication Program (dracunculiasis; GWEP); Global Polio Eradication Initiative (GPEI); elimination programs for measles and rubella (MR), malaria, river blindness (onchocerciasis; RB), and lymphatic filariasis (LF); and the program for the Global Elimination of Trachoma (GET). The conclusions and recommendations are intended to help national level decision makers with the difficult choices they face in 2021 to balance the need to continue or resume public health programs while mitigating the risks of exposing health workers and community members to COVID-19.

Participants considered the impact of the pandemic on the pillars of effective public health programs, including a competent and motivated workforce; sufficient infrastructure to administer interventions; political will at community, intermediate, and national levels; donors to help finance the effort; and a supply chain able to deliver the needed diagnostics, therapeutics, and vaccines in time. The pandemic threatens each of these pillars. The ITFDE noted the challenges that the COVID-19 pandemic presents by impeding delivery of needed and effective public health programs to many badly underserved populations, as well as the exceptional potential opportunities for national programs and donors to improve mutually beneficial cooperation between disease-specific programs and provision of broad health services. The critical importance of public health leadership was also noted.

COVID-19 manifests clinically with non-specific symptoms such as fever, cough, shortness of breath, and loss of taste or smell, with a wide-range of reported severity and numerous complications such as pneumonia, respiratory failure, multisystem organ failure, or inflammatory and neurologic manifestations, as well as asymptomatic infections, all of which may affect transmission of the virus. The incubation period is estimated at 2-14 days, but transmission can occur before symptoms begin, with a high viral load possible early in the course of infection. Severe illness is more likely in older persons or those with underlying health conditions, while "long COVID" where patients display drawn out effects, remains to be fully understood.

The public health response to COVID-19 has been influenced by previous experience with other coronaviruses, where the response also was based on symptom screening and contact tracing that **nepdEdetaybased** one quickly

Decisions about how, when, and where to continue, and even intensify, eradication/elimination and control programs must rely on ethical principles, in the face of priorities that some may see as competing. This is particularly true in considering the ethical value of community and stakeholder engagement and the importance of respect when engaging populations. Ethics in global health programming is a way of reasoning through complex interests at stake when multiple organizations and stakeholders with vastly In light of these epidemiologic and ethical considerations, and noting the desire to avoid compounding the harm from COVID-19 by withholding health services that may be continued if proper precautions are taken, the ITFDE offers the following general recommendations for programs in the current pandemic: (1) establish clear, quantifiable goals and use data to monitor progress; (2) work first in the most highly-endemic areas for targeted diseases; (3) continue comprehensive surveillance; (4) continue and deepen research and innovation activities, even in the late stages of an eradication program, and emphasize the role of social scientists; (5) recognize the tension between the universal health care (UHC) movement and disease-specific program

Polio Eradication

The major challenges facing the GPEI are the need to sustain progress and funding, and to meet the increasing problem of vaccine derived disease.² Five of WHO's six administrative regions are now free of wild polio virus, including Africa, which was certified as wild polio free in August 2020. Only two countries in the Eastern Mediterranean Region remain endemic for wild virus. All 21 high-risk countries have maintained polio surveillance despite the COVID-19 pandemic, but they suspended mass immunization activities for several months after February 2020, and began resuming them gradually in June-July, with precautions to protect all concerned. Shipment of laboratory specimens was disrupted, and some unused vaccine stocks expired. Modelers working with GPEI indicate that the program will have reductions in immunization coverage due to the impact of COVID-19, that may have been partially offset by reductions in polio transmission due to restrictions on travel and congregating, yet GPEI will still be off-track to achieve eradication after COVID-19.

Conclusions and Recommendations:

- Increased resources are needed to help the GPEI continue its progress toward polio eradication. Response to COVID-19 in the two countries still endemic for wild poliovirus has demonstrated that they possess good emergency mobilization and response capacity that should be applied to polio eradication also, as a public health emergency of international concern.
- Both endemic and outbreak countries will need to continue to assess how local COVID-19 transmission may impact polio field activities, particularly poliovirus surveillance and immunization, and adjust approaches to mitigate COVID-19 risk while optimizing polio program activities.
- The systems developed and used to deliver polio immunization may benefit provision of immunization against COVID-19 also, particularly reporting of adverse events and mechanisms to communicate with communities in need.
- The GPEI should seize opportunities for increased community engagement and collaboration (i)-2 (t)-2

Conclusions and Recommendations:

- The interest generated by countries that receive WHO certification of elimination helps maintain global momentum for malaria elimination and sustain support to high-burden countries. Malaria programs in high-burden countries will benefit from the lessons learned by eliminating countries to prepare for the challenges that they will face in the future.
- Routine provision of urgent malaria treatment and preventive services at community level, including bed net distribution and preventive chemotherapy campaigns, should be continued with proper precautions to prevent COVID-19 transmission, and these can complement measures to prevent COVID-19.
- Cross-border initiatives should include incentives for both sides and promote ownership of elimination.

River Blindness and Lymphatic Filariasis Elimination

The greatest challenge faced by those working to eliminate RB transmission and to eliminate LF as a public health problem is to maintain, and in some cases regain, the momentum toward elimination. Recent summaries illustrate that much progress has been made towards both elimination goals.^{5,6} Four of the six formerly endemic countries in the Americas have completed verification of elimination of river blindness (onchocerciasis) and many others worldwide have, based on transmission reductions achieved, stopped mass drug administration (MDA) for LF and for RB in some areas. Of 72 countries where LF was endemic, 17 have met criteria for verification of elimination as a public health problem through 2019. WHO issued interim guidance for Neglected Tropical Disease (NTD) programs related to COVID-19 in April 2020 and weighing the impact of the pandemic, called for cessation of community-based activities such as MDA.⁷ Initial mitigation measures delayed MDA campaigns, postponed surveys, and caused suspension of hydrocoele surgery and clinical care for persons affected by LF. WHO has since issued new guidance to NTD programs on continuing essential NTD services and community-based interventions while taking measures to mitigate the risk of COVID-19 transmission. The NTD Modeling Consortium has modelled the impact of the pandemic on RB and LF elimination and found that the impact of delayed MDAs can push back the timeline to achieve elimination targets, but certain measures can mitigate and even accelerate time to elimination. According to models, twice-yearly MDA with ivermectin can overcome the impact of delayed MDAs for RB. For LAFSRingplementing t (i)-2 (ga)7 Lsn ov tr6 (c)4 (d M)-1 (D)2 7-1 • National RB and LF programs should use this time of pause to plan modifications or redesign

- An operational definition of persistent active trachoma is needed urgently, as well as empirical data demonstrating how the A, F, and E components of the SAFE strategy can be enhanced for affected populations.
- Community-based health workers in the trachoma program are a potential resource for mutually beneficial cooperation with efforts to prevent COVID-19.