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The Task Force for Global Health
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Introduction

Thank you for this opportunity to testify on behalf of the Training Programs in Epidemiology and Public Health Interventions Network, known as TEPHINET, based at The Task Force for Global Health. TEPHINET received \$14.2 million this fiscal year from the Centers for Disease Control and Prevention (CDC).

The Task Force for Global Health, founded nearly 40 years ago to advance health equity, works with partners in more than 150 countries to eliminate diseases, ensure access to vaccines and essential medicines, and strengthen health systems to protect populations. Our expertise includes neglected tropical diseases and other infectious diseases; vaccine safety, distribution and access; and health systems strengthening. Our COVID-19 activities include: working with 50 countries to help vaccinate their populations, providing vaccine safety guidelines; advising on digital contact tracing; training epidemiologists on disease surveillance and response; distributing essential protection and treatment to hard-hit communities; using existing health programs to ensure protection for vulnerable groups, such as those afflicted with other diseases; overcoming vaccine hesitancy in the United States and leveraging our existing supply chains for ongoing response and to help countries deliver vaccines.

As the Director of TEPHINET, one of the Task Force's 16 global health programs, I seek to garner strong support for increased funding to build the global field epidemiology workforce needed to advance global health security by detecting and responding to disease outbreaks before they become pandemics with devastating human and economic consequences. I would also like to share with you the incredible impact that U.S. funding is already having on building a public health workforce of field epidemiologists worldwide.

TEPHINET, is the global network of Field Epidemiology Training Programs (FETPs) that is funded primarily through the Centers for Disease Control and Prevention (CDC). You might be wondering what a field epidemiologist does and why it is important to train more field epidemiologists around the world. Think of it this way: when there is a fire, we call upon trained and skilled firefighters to rush to the scene of the fire and put it out as soon as possible. Not only are field epidemiologists the firefighters of public health, but they set up the fire alarm systems by developing disease surveillance systems to catch cases early. When there is a disease outbreak, a natural disaster, or a humanitarian crisis unfolding that threatens people's health, field epidemiologists are deployed to the scene. Their task is to understand how and why the health threat is occurring, who is affected, and how to stop its spread at the source. For this reason, field epidemiologists are known as "Disease Detectives." They conduct outbreak investigations, perform contact tracing, monitor travelers at points of entry and attendees at mass gatherings, engage with communities on disease prevention measures, and much more. They are based at ministries of health, national public health institutes (like our CDC) and are in many ways the lynchpin of the overall public health system in a country.

TEPHINET consists of 75 Field Epidemiology Training Programs training field epidemiologists in more than 100 countries. To date, trainees and graduates of our member programs have investigated more than 12,000 outbreaks or acute health events and developed more than 5,000 disease surveillance systems to improve case detection. Worldwide, more than 19,000 FETP alumni have trained as the "boots on the ground" to detect and respond to public health threats.

The need for greater public health capacity to prevent, detect, and respond to public health threats and emerging infectious diseases is a matter of life or death for people around the world. Such capacity makes countries better able to sustain their own national systems, leading to economic growth and reducing the likelihood of political or economic instability.

Never has the need for increased field epidemiology capacity around the globe been more apparent than now, as the world has grappled socially and economically with COVID-19. The field epidemiologists in our network have been working around the clock to trace contacts, investigate and manage cases, analyze COVID-19 data, educate their communities, and much more. Without them, the governments of most countries, like my former home of South Africa, would not have access to reliable data on the spread of COVID-19 in their populations. In many countries, especially the poorest, there is simply no other workforce in place to conduct contact tracing or case investigations. Field Epidemiology Training Programs supported by TEPHINET fill that gap and have been steadily expanding since their founding by the CDC and other partners nearly 40 years ago.

As I mentioned, FETPs have trained an estimated 19,000 “Disease Detectives” so far, but the world needs more. COVID-19 and other emerging diseases are not the only threats—FETPs fight every health threat known to us, from well-known issues like Ebola, measles, and polio to lesser known but deadly and debilitating diseases like Lassa fever and monkeypox. While COVID-19 is clearly an emergent threat, there will always be a “disease X” that poses a grave threat to the health of Americans.

In Guinea, a resource-challenged country in West Africa, the FETP housed within the Ministry of Health is providing critical support to help control a recent Ebola outbreak. As of April 13, 2021, Guinea had 23 reported cases of Ebola. FETP trainees and graduates made vital contributions to slowing the outbreak, particularly in the areas of coordination and epidemiology surveillance. They led the development of a surveillance system to detect Ebola cases, as well as the country’s Ebola response plan, contact tracing guides, and case definitions for Ebola patients. FETP trainees and graduates consisted the leading Ministry of Health workforce deployed in the field to conduct Ebola-related surveillance. Thanks to the involvement of the FETP, the vast majority (83%) of reports of suspected cases are being investigated. Because of the Guinea FETP, established after the 2014-2016 Ebola outbreak in West Africa had claimed thousands of lives, today Guinea is seeing a dramatically different response compared to the 2014-2016

outbreak—including a significant increase in the known number of contacts traced: 95% of contacts have been traced in the current response.

Before coming to The Task Force, I was the director of the South African Field Epidemiology Training Program (SAFETP), which was started with CDC funding in partnership with the Ministry of Health and the University of Pretoria, which conferred the Master of Public Health degree to graduates. Over time, the program became owned by the National Institute of Communicable Disease, but CDC Pretoria continued to provide support in the form of a Resident Advisor, Scientific Writer, and Statistician. There was an outbreak of diarrheal disease in a small town in Free State province, and the FETP trainees or residents identified the root cause to be poor maintenance at the water treatment plant. Diarrheal disease from drinking unsafe water causes dehydration, which is a killer of children under five. As a result of the investigation done by the FETP residents, the town installed a new water reticulation plant that ultimately benefited residents of the town and improved their quality of life with fewer days of productivity lost due to gastrointestinal illness.

Without enough “Disease Detectives” or boots on the ground to detect and respond to public health emergencies, it will not be long before another outbreak becomes a pandemic with severe human and economic costs. There will be other outbreaks, and no single institution has all the capacity required to be adequately prepared to face future threats. We need to harness the resources and capacities of a wide range of partners and stakeholders and we need political leadership, whole-of-government and whole-of-society commitment. We need to continue the United States’ tradition of helping to build sustainable public health systems across the world that ultimately protect all people, including the American people.

In addition to supporting the development of Field Epidemiology Training Programs, TEPHINET and The Task Force for Global Health have been instrumental in developing the *Global Field Epidemiology*

Roadmap, a plan to advance field epidemiology training and capacity building worldwide. As we speak, we at TEPHINET are coordinating a Strategic Leadership Group of more than a dozen public health experts from around the world to lead the implementation of this Roadmap, so that all countries can develop the field epidemiology capacity needed to protect and promote the health of their own populations and collaborate with others to promote global health.

I thank you for your ongoing support of FETPs through the vital funding you provide. Because of this support, more than 100 countries now have a field epidemiology workforce that did not exist prior to the establishment of their FETPs. However, we are still working to achieve the International Health Regulations' target of having one trained field epidemiologist per 200,000 population in every country. The good news is that this goal is achievable with continued investment. A global commitment to improving global health security by investing in field epidemiology capacity building strengthens health systems by training our world's "Disease Detectives" to respond to public health emergencies, humanitarian crises and natural disasters, and in so doing, saving money, saving resources, and saving lives.