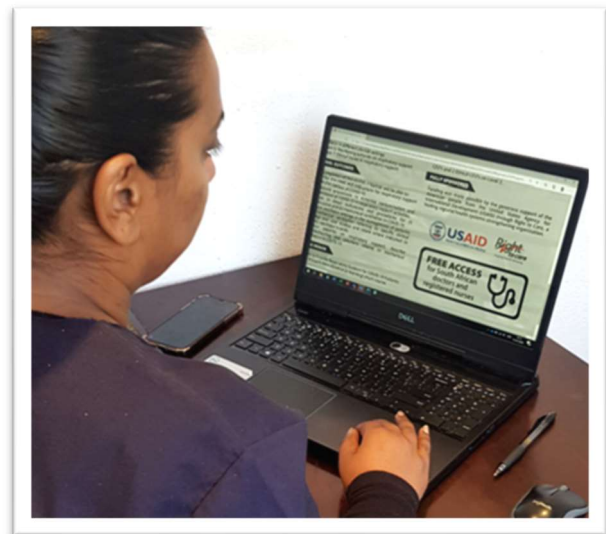


# Rapid Respiratory Support Training for COVID-19

**The Challenge:** In April and May 2020 there was considerable concern that COVID-19 would have a devastating impact across the African continent due to high HIV prevalence and latent TB rates. Modelling suggested that hospitals would be overwhelmed with patients requiring active respiratory support. These models predicted a massive shortage of ventilators and healthcare workers (HCWs) with the required skills. The challenge was to rapidly upskill HCWs to provide respiratory support.

**Solution:** USAID partnered with Right to Care and Foundation for Professional Development with the goal of supporting HCWs to develop the necessary skills to provide respiratory support to COVID-19 patients, including the initiation and management of ventilator-based treatment. Both Right to Care and Foundation for Professional Development are local South African partners, with Foundation for Professional Development specializing in clinical education. Together the team rapidly implemented an online learning program targeting doctors and nurses to develop the required competency around all aspects of respiratory support.

In May 2020, at the time of design of the training, international treatment protocols recommended intubation and ventilation as treatment for patients with COVID-19 in severe respiratory distress. The course is a comprehensive, highly interactive 12-hour online learning program. It includes video demonstrations on the use of ventilators and related equipment, recorded discussions with clinical experts, narrated presentations, reference materials, and individual evaluations. At the end of each module, participants are required to pass a multiple-choice assessment. Those completing the course received a certificate of completion and 12 continuing medical education (CME) credits. The online and remote approach caters to HCWs who faced lockdown restrictions limiting in-service training opportunities, and those with little or no experience initiating and managing ventilation therapy. HCWs needed distance or online training with flexible access (e.g. trainees could access the course from home in the evenings).



Although originally envisaged as a South African based training, the launch of this program in June 2020 resulted in numerous requests from HCWs across Africa for access to the training program. Other African countries received access to the training in July 2020 as a complementary activity to other programs designed to supplement capacity to respond to severe COVID-19 cases, including the U.S. government donation of ventilators.

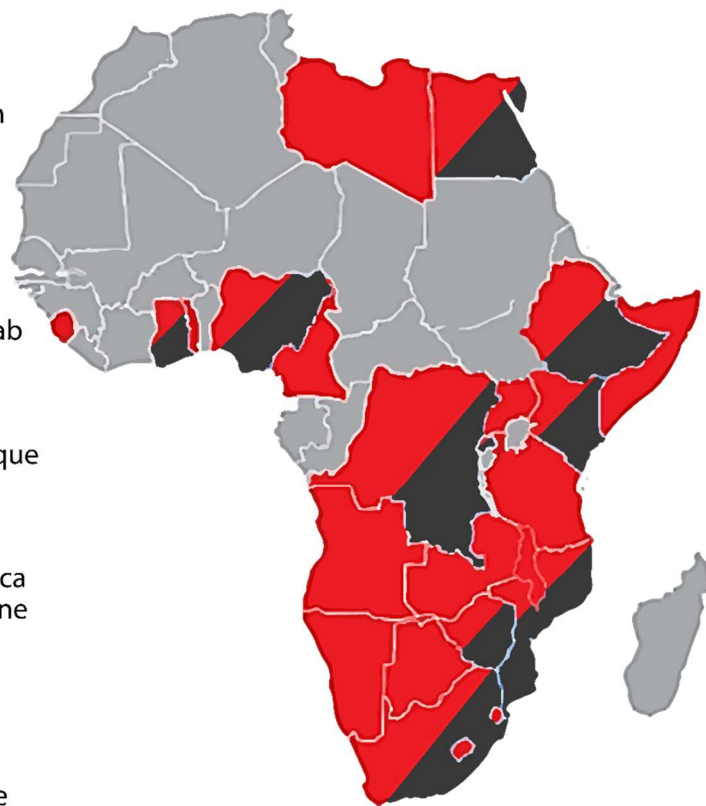
*“The course is assisting me in my daily care of patients with COVID-19 and it has refreshed my prior knowledge on respiratory therapy. Thank you again for the demanding online course at this unprecedented time.”*

Dr Hailemariam Mulugeta Kasim Lecturer Department of Anesthesiology, College of Health Sciences and Medicine, Dilla University, Ethiopia.

## 6,632 HCWs Completed the program

- Number of African countries with enrolled participants : 25
- African countries that received donated ventilators from the United States Government

- Angola
- Botswana
- Cameroon
- DRC
- Egypt
- Eswatini
- Ethiopia
- Ghana
- Kenya
- Libyan Arab
- Lesotho
- Malawi
- Mauritius
- Mozambique
- Namibia
- Nigeria
- Rwanda
- South Africa
- Sierra Leone
- Somalia
- Tanzania
- Togo
- Uganda
- Zambia
- Zimbabwe



**Results:** There was rapid uptake of the training program from onset, including requests to expand access to a broader range of HCWs. By October 2020 over 6,600 HCW completed the training. The course was also customized to meet the requirements of medical doctors and nurses working in intensive and high care contexts, nurses providing ward-based oxygen therapy, clinical associates, physiotherapists, and emergency responders. Doctors in pre-service training were also offered the course to support their development as they enter the workforce. The course was well received by participants and played a significant role in rapidly developing the required skills to provide respiratory support to severely ill COVID-19 patients.