

COVID-19 Respiratory Care Response Coordination project



Access to oxygen—critical to respiratory care

COVID-19 is an acute respiratory tract disease caused by infection with SARS-CoV-2 virus that often results in hypoxic respiratory failure and, in the most severe form, acute respiratory distress syndrome. Studies have shown that approximately 41 percent of confirmed COVID-19 patients—and in severe cases, more than 60 percent—received oxygen therapy to support breathing.

In many health facilities across low- and middle-income countries, oxygen therapy—including diagnosis, generation, and delivery equipment—is not reliably available. The biggest barriers to oxygen therapy access include supply, human resources, funding constraints, and the inability to deploy resources in countries rapidly in a way that ensures maximum impact while not overwhelming existing health care systems.

Many of the tools and capabilities needed to overcome these barriers already exist across different global health and implementing organizations, manufacturers and suppliers, and country governments. To ensure that those who need respiratory care support due to COVID-19, or beyond, receive it, immediate steps are necessary to coordinate the global response that prioritizes reliable access to oxygen.



Oxygen medical gas is available to health facilities in multiple formats, including cylinders, concentrators, and central pipeline systems. Photo: PATH/Zachary Clemence.

COVID-19 Respiratory Care Response Coordination project

PATH, together with a consortium of partners and with support from the Bill & Melinda Gates Foundation, is leading the COVID-19 Respiratory Care Response Coordination project to support country decision-makers in the development and execution of a comprehensive respiratory care plan to meet the demands of COVID-19. The project will also pursue strategies to help prioritize and improve access to oxygen therapy and other essential equipment involved in respiratory care as an integral part of health systems strengthening, beyond the pandemic response.

Project snapshot

Goal: Support targeted low- and middle-income countries in improving reliable access to a comprehensive respiratory care treatment package—both as part of the immediate COVID-19 response and to strengthen respiratory care systems in the long run.

Key objectives:

- Global respiratory care response coordination.
- Rapid respiratory care capacity assessments.
- Supplier landscaping and outreach.
- Support of informed country-specific decision-making on procurement and use of respiratory care products.

Partners: Clinton Health Access Initiative, the Every Breath Counts Coalition

Focus countries*: Cambodia, the Democratic Republic of the Congo, Ethiopia, India, Kenya, the Lao People's Democratic Republic, Liberia, Malawi, Nigeria, Senegal, Vietnam, Zambia

Duration: May 2020—October 2021

Key objectives and activities

Global respiratory care response coordination

Project partners will pursue integrated strategies to support country-level access, understanding, and implementation of global guidelines for COVID-19 response.

Immediate activities include:

- Development of a global road map for scale-up of oxygen (both in the context of the COVID-19 response and to outline long-term market considerations essential to sustaining improvements to oxygen access).
- Establishment of effective communication and advocacy mechanisms for stakeholder coordination and collaboration.
- Development and dissemination of a central repository of resources for COVID-19 response, including case management guidelines, needs assessment and forecasting tools, procurement and financing processes, and equipment guidelines, in close coordination with key global health authorities, partners, and implementers.

Rapid respiratory care capacity assessments

Respiratory care for COVID-19 is more complex than just supplying oxygen and other respiratory equipment. Supplies of this essential equipment are limited. To ensure equitable access, the current availability of equipment within countries will be gathered and compared to the forecasted need for equipment. The gap between current availability and estimated need will inform procurement and distribution of equipment.

Immediate activities include:

- Biomedical equipment survey.
- Rapid demand quantification.

Supplier landscaping and outreach

An outreach to suppliers to understand existing inventory, available manufacturing capacity, and current pricing can facilitate effective supply and demand matching. The project will connect with manufacturers and other global partners to pool available intelligence on capacity and lead times for equipment that is essential to respiratory care in the COVID-19 response. This will be done in collaboration with the key global coordinating bodies and procurers to assist with rapid supplier engagement and market landscaping, analytics, and other related support.

Immediate activities include:

- Supplier landscaping and outreach to firms, particularly those with available capacity to supply equipment.
- Centralized procurement and distribution support.
- Tracking respiratory care innovations.

Country-specific decision-making support

Leveraging existing partnerships with governments in low- and middle-income countries, the project consortium will provide direct support to key decision-makers as they work to meet the emergent need for respiratory support resulting from COVID-19 infections. The activities will help with information sharing, procurement, contract negotiation, supplier engagement, training, and maintenance support for respiratory care equipment. The project consortium will assist ministry partners to operationalize COVID-19 response plans, beginning with help navigating the processes to access relief funding.

Immediate activities include:

- Procurement coordination.
- Ordering and inventory management for consumables.
- Training in appropriate oxygen use.
- Equipment management support.

Beyond these immediate activities, the project partners will pursue a number of strategies aimed at long-term respiratory care support.

Additional resources

Increasing Access to Safe Oxygen web page:

<https://www.path.org/programs/market-dynamics/increasing-access-safe-oxygen/>.

The Every Breath Counts coalition:

<https://stoppneumonia.org/every-breath-counts/>.

For questions or additional information: oxygen@path.org.

* This project will be carried out in close coordination with separate initiatives led by Clinton Health Access Initiative, PATH, and other partners in additional countries, including Bangladesh, Burkina Faso, Cameroon, Guinea, Indonesia, Lesotho, Niger, Mali, Myanmar, South Africa, Tanzania, Uganda, and Zimbabwe.

Reference: Guan W-J, Ni Z-Y, Hu Y, et al. Clinical characteristics of Coronavirus Disease 2019 in China. *New England Journal of Medicine*. 2020;382:1708–1720. doi:10.1056/NEJMoa2002032.



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