



India

The sudden and significant increase in demand for medical oxygen due to the COVID-19 pandemic placed a severe strain on the health system in India.

Since 2020, multiple initiatives were carried out to improve reliable oxygen supply as part of a COVID-19 response, under the leadership of the Ministry of Health and Family Welfare and Indian state health departments, and with support from PATH, Clinton Health Access Initiative, and other partners, including:

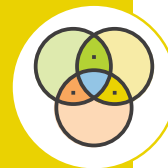
ASSESSMENT

- + Completed **facility readiness audits, infrastructure and biomedical equipment assessments, and oxygen production and demand quantification exercises** to determine the best options to expand medical oxygen access across high-risk states.



COORDINATION & STRATEGIC PLANNING

- + Established a **Program Management Unit** to coordinate state health leadership and partners for implementing oxygen supply and management initiatives and capacity-building programs.
- + Implemented state-level **audit committees and technical working groups** in Madhya Pradesh, Maharashtra, Karnataka, and Punjab to monitor oxygen supply and administration.
- + Through a PATH initiative, expanded **COVID-19 oxygen needs tracker** to include subnational data on India for localized planning and advocacy efforts.
- + Developed state-level **situational roadmaps** with recommendations for sustainable oxygen supply—expanding its use for critical care, pediatric care, intensive care, and beyond.



EQUIPMENT PROCUREMENT & REPAIR & CAPACITY-BUILDING

- + With funding from government initiatives and donors, installed and commissioned over **4,000 pressure swing absorption (PSA) plants** across 22+ states and procured over **127,000 cylinders** and **100,000 concentrators** to be delivered to states based on need.
- + Provided hands-on support to districts receiving oxygen equipment and consumables to ensure proper installation, use, and monitoring.
- + Developed a national **Management Information System** portal to track oxygen consumption and demand at the facility level, including targeted support for its rollout in numerous states to optimize their oxygen distribution systems.
- + Rolled out **three national capacity-building initiatives**: 1) two PSA repair and maintenance trainings to 12,000 technicians, 2) stewardship program on rational use of oxygen and effective hypoxemia treatment, and 3) state-level program for biomedical equipment staff in PSA, liquid oxygen, and other oxygen systems.
- + Trained over **9,390 health officials, health care providers, and oxygen equipment operators** across the country in maintenance of oxygen devices and clinical use of oxygen.
- + Developed **capacity-building resources**, including updated guidelines on pneumonia as well as oxygen safety and management, training and eLearning modules on oxygen delivery, and tools for the rational use of oxygen as well as demand calculation and oxygen audit.



These interventions helped pave the way for improved oxygen access to address COVID-19 and all other causes of hypoxemia over the long term.

Developing state costing plans for oxygen operations and maintenance, training health care workers and biomedical engineers on oxygen delivery and management, and supporting the institutionalization of an oxygen audit mechanism will be critical priorities to sustain progress to-date.