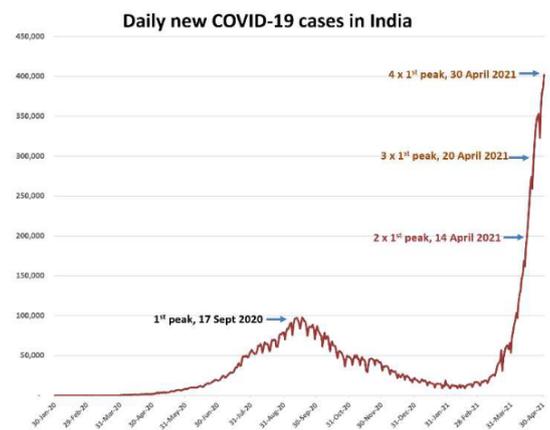


# UNICEF India: Racing to Increase Access to Oxygen and Testing to Combat COVID-19 Infections



India is being hit by a rapidly worsening, deadly second wave of coronavirus infections. Health and critical care facilities are overwhelmed, leaving people without the life-saving medical care that they so urgently need. Cases continue to surge at unprecedented rates: more than four new cases are being reported every second and more than two deaths every minute, on average. On 1 May, India again recorded the highest ever daily count of new cases, in any country at any stage of this global pandemic, exceeding 400,000 new cases.



This second wave of infections is larger and spreading more swiftly than the first. In just two months, the number of new recorded cases per day has shot up from just 15,510/day on 1 March to **401,993/day** on 1 May 2021, with **3,523 reported deaths**. India alone currently accounts for **more than half of global new cases and one third of deaths per day**. Hospitals and health centres across the country are increasingly unable to cope with the tsunami of new cases, with hospital beds, essential drugs and oxygen running out, even in large towns and cities. Friends and relatives are desperately battling to find medical care or source oxygen cylinders to help treat loved ones at home.



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The human cost is dire. As well as the devastating impact on children's lives and futures from the human, social and economic costs of the pandemic, this new surge in COVID-19 cases is seeing more young people including children fall ill. Grappling with the sudden rise in COVID-19 infections, India's health facilities are facing the horrifying prospect of not having enough oxygen for their patients. This life-saving gas helps patients breathe when they cannot do so on their own – whether patients with severe COVID-19, children with pneumonia or hypoxemia, or newborns and mothers with birth complications. Even before COVID, every year 4.2 million children in low/middle-income countries need medical oxygen to survive.

**A crisis for children:** Throughout the world, children have become the hidden victims of the pandemic – pushed further into poverty, losing their education, facing heightened risk of abuse or exploitation, or experiencing the terror of seeing caregivers fall ill or die. In India last year, children and families saw the collapse of livelihoods as an estimated 122 million workers – three quarters in the informal sector – lost their jobs during the first wave of COVID and associated lockdown measures, driving poverty and malnutrition. 286 million children were left out of school and in the first weeks of the pandemic reports of violence against children rose by 50 per cent.

UNICEF India has been working tirelessly throughout the pandemic to help tackle the devastating impact that the virus and the measures taken to control it have had on the country's children and families; and more recently to support the rollout of vaccines. As the country faces this dire second wave of infections, UNICEF continues to work alongside the Government, WHO and other partners to tackle this fresh crisis and the further impacts it will have on India's children and families.

**We urgently need your support to help save lives during this new deadly and devastating wave of COVID-19 infections, by boosting access to critical oxygen therapy & accurate testing:**

- **Increasing access to life-saving oxygen:** Oxygen therapy is a critical treatment for moderate and severe/critical COVID-19 patients. But just one severe/critically ill COVID-19 patient requires between 25-80,000 litres of pressurised oxygen per day for around 5 days. A new on-site **Oxygen Generation Plant (OGP)** costing US\$175,000 can provide enough oxygen for a 500 bed hospital. Hospitals treating severe/critical cases will be prioritized – but with a lifespan of 20 years, each OGP unit will continue to save lives of ill patients for years to come, including neonatal and obstetric care, surgery and intensive care. Portable **Oxygen Concentrators** (costing just \$785 each) provide lower pressure oxygen support for moderately ill patients.

**Target: 40 Oxygen Generation Plants and 3,000 Oxygen Concentrators**

- **Boosting testing capacity:** Rapid, accurate testing is an essential tool in the fight against COVID-19. But growing delays in the processing of 'gold standard' RT-PCR tests are jeopardising timely diagnosis and treatment. By procuring **additional RT-PCR machines** UNICEF can help boost test processing capacity in some of the worst affected districts. Costing US\$20,560 and lasting up to 10 years, each new testing unit will not only speed up identification and treatment of COVID-19 infections, but provide a legacy for testing for other deadly diseases such as TB, HIV, HPV and streptococcus, when COVID-19 declines. We are also procuring **100 RNA Extraction Machines** to support the accurate identification of COVID-19 infections.

**Target: 300 RT-PCR Machines and 100 RNA Extraction Machines**

**We need to act now.**

**With rate of new infections extremely high, support is urgently needed to save lives.**

Your generous financial support will enable UNICEF India to swiftly procure new oxygen generating plants and concentrators together with additional RT-PCR testing and RNA Extraction machines. This investment in much-needed equipment will help strengthen the country's health system as it struggles to cope with the huge rise in COVID-19 infections. By partnering together, we can help communities and essential workers to weather this storm and prevent further disruption to support and services for children, as well as numerous individual tragedies from the loss of loved ones and livelihoods. Thanks to our established supply chains and expertise, our teams in 14 field offices are ready to procure and distribute these life-saving essentials in 17+ states.

Beyond this current crisis, your investment will leave a lasting legacy that will strengthen India's health system over the coming 10+ years, improving disease diagnosis and access to life-saving oxygen that will benefit countless children and their families.

**We are urgently appealing for USD \$21 million to procure this essential, lifesaving equipment**

*During 2020, UNICEF India supported procurement of 3,014 portable oxygen concentrators (shown below) for various hospitals across the country, and the procurement and installation of Oxygen Generation Plants in 20 hospitals in four north-eastern states – but more are urgently needed.*  
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**Current needs and estimated costs**



This is a fast developing crisis. The table below details current needs and costs of critical oxygen and testing equipment needed (these may be subject to change at the situation develops).

Estimated costs	Quantity	Unit cost USD	Total USD
<b>Oxygen Concentrators</b> to provide swift and portable support for moderately ill COVID-19 patients. <i>Cost based on 10 Litres Per Minute single flow machines</i>	3,000	785	2,355,000
<b>Oxygen Generation Plant</b> to increase oxygen supply in hospitals treating severe/critically ill COVID-19 patients <i>Cost based on unit capable of producing 500 Litres Per Minute</i>	40	175,000	7,000,000
<b>RT-PCR Testing Machines</b> to speed up identification of new cases & treatment by boosting laboratory capacity	300	20,560	6,168,000
<b>RNA Extraction Machines</b> to speed up accurate identification of new COVID-19 infections	100	55,000	5,500,000
<b>Total estimated costs</b>			<b>21,023,000</b>

*“The COVID-19 pandemic has upended lives everywhere. It has particularly impacted the well-being of children. Nearly every aspect of children’s life and growth has been put on hold. It has threatened to roll back decades of progress.”*

*Dr Yasmin Ali Haque, UNICEF Representative in India*

These needs are just part of UNICEF India’s COVID-19 response which requires \$107 million for other lifesaving interventions and support for children and their families suffering from the impact of the pandemic. Your generous support will enable UNICEF India and partners to carry on our work in responding to the COVID-19 pandemic. Key results from 2020 include:



**898 million**  
children and their families across India have been reached with accurate information on how to stay safe from COVID-19 through a mix of innovative and traditional mechanisms



**2.8 million**  
health-care facility staff and community health workers have been trained in infection prevention and control



**34,700**  
health-care providers and frontline workers, including CHILDLINE, have been protected with PPE at the onset of the pandemic



**4.3 million**  
people have been reached with critical WASH supplies (including hygiene items) and services



**1.48 million**  
health-care providers have been trained in detection, referral and appropriate management of COVID-19 cases



**57.4 million**  
children have been reached through education initiatives such as online classrooms and radio programmes launched by UNICEF and partners across 17 states

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