



COMMISSION ON MEDICAL OXYGEN SECURITY

MEDIA STATEMENT

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GLOBAL LAUNCH

Wide gaps in access to medical oxygen continue to cause widespread suffering and death

Six out of every ten people in the world lack access to safe, quality, affordable medical oxygen which is contributing to hundreds of thousands of preventable deaths each year from a large number of acute medical conditions, and reducing quality of life for millions more with chronic diseases, according to the report released by *The Lancet Global Health Commission on Medical Oxygen Security*.

The report, ***Reducing global inequities in medical oxygen access***, provides the world's first estimates of the large scale and inequitable distribution of medical oxygen coverage gaps and the cost of closing the gaps. It contains specific recommendations for how governments, industry, global health agencies, academic institutions, and civil society can work together to strengthen health systems to guarantee medical oxygen access for all.

The Commission concludes that medical oxygen is a highly cost-effective investment to advance global public health that will not only accelerate achievement of most of the Sustainable Development Goals (SDGs) for health by 2030, but will also help countries prepare for the next pandemic to prevent a repeat of the COVID-19 oxygen shortages and the mass fatalities that resulted.

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The Commission's work culminates in key findings (attached) and 52 recommendations targeted to major stakeholders including governments, industry, global health agencies, donors, civil society, academic and research institutions, and more. Recommendations are measurable and time bound (usually 2030), and an independent body should assess progress in 2027 and ensure that the results are publicly available.

As we enter the final five years of the SDG era, multiple forces are rapidly reshaping population health. Poor diet, smoking, and aging are increasing the burden of non-communicable diseases, while rising temperatures and air pollution, exacerbated by climate change, are slowing progress in reducing infectious disease and respiratory-related deaths. At the same time, slow economic recovery from COVID-19 and rising debt levels are putting pressure on national LMIC budgets, and competing domestic priorities are reducing donor financing for health. An **independent SDG progress report** concluded that, at current rates of progress, not one of the health SDGs will be achieved by 2030.

In response, the Commission adds its voice to the many calling for a total transformation of the field of "global health," including **The Lusaka Agenda** and **Global Health 2050**, and argues that medical oxygen can be a pathfinder investment for a new era. With national medical oxygen plans at the heart of the effort, governments firmly in the driver's seat, and donor investments well-aligned with national plans, health systems can be strengthened in ways that advance many health priorities simultaneously – communicable, non-communicable, maternal, newborn, and child, and injuries. Further, by investing in climate-sensitive, energy-efficient solutions, national medical oxygen systems can be at the forefront of the future we want – the long-term health and sustainability of our most precious resources – people and planet.

To interview members of the Commission, contact Leith Greenslade, Every Breath Counts Coalition, leith@justactions.org.

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KEY FINDINGS

- *Global access to medical oxygen is highly inequitable. Five billion people, 60% of the world's population, do not currently have access to safe, quality, affordable medical oxygen, with the greatest inequities in low- and middle-income countries (LMICs).*
- *Global need for medical oxygen is high and concentrated in LMICs. Each year, 374 million newborns, children, and adults need medical oxygen, including 364 million patients with acute medical and surgical conditions, and nine million patients with long-term oxygen needs due to chronic obstructive pulmonary disease (COPD). Eighty-two percent (306 million) of these patients live in LMICs, with 68% (253 million) concentrated in South Asia, East Asia and the Pacific, and Sub-Saharan Africa.*
- *Oxygen coverage rates are unacceptably low in LMICs. Less than one in three (30%) people who need oxygen for acute medical or surgical conditions receive it due to gaps in service contact, readiness, provision, and quality, leaving 70% of patients without coverage. Coverage gaps are even higher in Sub-Saharan Africa (91%), South Asia (78%), and East Asia and Pacific (74%). Oxygen coverage gaps far exceed gaps for HIV/AIDS (23%) and tuberculosis (25%) treatment.*
- *Pulse oximeters and oxygen are available in just 54% and 58% of general hospitals, and 83% and 86% of tertiary hospitals respectively, with frequent shortages and equipment breakdown, and practically non-existent in primary healthcare facilities. The greatest inequities are in small, rural, government health facilities.*
- *Even when available, pulse oximetry is provided infrequently for unwell patients attending general hospitals (19%) or tertiary hospitals (54%), and only 45% of patients with hypoxaemia in general hospitals and 79% in tertiary hospitals receive oxygen therapy. On any given day, 93% of primary healthcare facilities, 45% of general hospitals, and 25% of tertiary hospitals in LMICs experience oxygen stockouts.*
- *Pulse oximetry is the gateway to safe, quality, affordable oxygen care and needs to be integrated in clinical guidelines and education, and routinely used to assess patients at all levels of healthcare.*
- *Global quantities of oxygen needed are large and rising. Patients with acute medical and surgical needs require a minimum 1.2 billion cubic metres (Nm³) of medical oxygen annually, while the needs for long-term oxygen therapy (COPD) are 3.2 billion cubic metres. This need is rising, driven by population growth, surgery needs, and demand for long-term oxygen therapy. Aging populations, smoking and poor diet, and air pollution are major factors driving rising demand.*

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- Oxygen needs can rise exponentially during emergencies. In 2021, an additional 52 million patients needed 1.9 billion cubic meters of oxygen to treat COVID-19 globally, putting enormous pressure on health systems. Excess COVID-19 mortality in 2020 and 2021 is estimated at 15.9 million globally, with most deaths in South Asia (4.4 million), Sub-Saharan Africa (2.4 million), and Latin American and the Caribbean (2.3 million) regions.
- Global costs to fill oxygen coverage gaps are large. An additional US\$6.8 billion is needed annually to close oxygen coverage gaps in LMICs, equating to US\$34 billion between 2025 and 2030. This does not include the substantial cost to meet the additional oxygen needed for pandemics (e.g., US\$6.8 billion for COVID-19 in 2021) or costs for long-term oxygen therapy services.
- Oxygen represents a highly cost-effective investment. The case for investing in medical oxygen is strong – it is as cost-effective as routine childhood immunization (i.e., US\$59 per DALY averted). It will accelerate progress on eight of the nine health-related **Sustainable Development Goals** (SDGs), and pandemic preparedness and response.
- Governments should collaborate with the Global Oxygen Alliance (GO₂AL) members to develop national plans to close medical oxygen coverage gaps and increase domestic and international funding. Donors should contribute to **GO₂AL's US\$4 billion resource mobilization target** (2025–2030) and ensure that oxygen is included in the 8th Replenishment of The Global Fund. As operational costs account for 50–80% of total oxygen system costs but have received little global health funding to date, new investments should focus here.
- Pulse oximetry and medical oxygen coverage should be routine indicators in UN databases (e.g., WHO Global Health Observatory, UNICEF child health coverage), and hypoxemia-related mortality a risk factor for death and disability in the next iteration of the Global Burden of Disease.
- Oxygen companies should adopt specific access to medical oxygen targets, increase collaboration with governments and global health agencies (e.g., GO₂AL), and publish company progress in annual reports.
- Governments, industry, and donors should collaborate to increase investment in 20 Priority Areas for Oxygen Innovation, many of which originated in LMICs.
- The Commission has developed new tools to measure and evaluate performance are available, including 10 Oxygen Coverage Indicators for monitoring universal access to safe, quality, affordable pulse oximetry and medical oxygen services, and an Access to Medical Oxygen Scorecard (ATMO₂S) that governments should use to report their progress implementing the WHO **Increasing Access to Medical Oxygen Resolution**.

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ABOUT THE COMMISSION

Announced in September 2022, *The Lancet Global Health* Commission on Medical Oxygen Security provides a thorough exploration of medical oxygen coverage gaps, with recommendations to ensure that no patient dies for lack of access to this essential medicine, including during public health emergencies like COVID-19.

The Commission was led by 18 Commissioners - multi-disciplinary academics with clinical, economic, engineering, epidemiological, and public policy expertise - representing all regions of the world. Forty Advisors representing United Nations and global health agencies, donors, academic institutions, and non-governmental organizations provided guidance. A large global network of Oxygen Access Collaborators provided constant input to the Commission and included representatives from industry and Ministries of Health. Special consultations were conducted with patients, caregivers, and clinicians to ensure that their voices and experiences shaped the Commission's recommendations.

An Executive Committee coordinated the work of the Commission and included representatives from **Makerere University**, Uganda; **International Centre for Diarrheal Disease Research (icddr,b)**, Bangladesh; **Murdoch Children's Research Institute (MCRI)**, Australia; **Karolinska Institutet**, Sweden; and **Every Breath Counts Coalition**, USA.

You can find the Commission report [here](#) and advocacy package [here](#), including:

- **Report with Comments**
- **Policy Brief (English, French, Spanish, Arabic, Chinese, and Russian)**
- **Spotlight Brief: Access to Medical Oxygen Scorecard (ATMO₂S)**
- **Spotlight Brief: Patient and Caregiver Testimonials**
- **Spotlight Brief: 10 Oxygen Coverage Indicators**
- **Spotlight Brief: 20 Priority Areas for Oxygen Innovation**
- **Country Case Studies**



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