

Increasing Access to Inhaled Medicines for COPD and Asthma

POLICY BRIEF

With 5 years left to achieve the Sustainable Development Goals (SDGs) and a new Political Declaration from the 4th UN High-level Meeting on the Prevention and Control of Noncommunicable Diseases (NCDs) and the Promotion of Mental Health and Well-being, *now is the time* to advance access to quality, affordable, and effective inhalers for all COPD and asthma patients.



*My disease has been controlled with inhaled medications for the last two years.**

Aydın, Türkiye, 52 years old

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The burden of COPD and asthma is massive and rising

Chronic obstructive pulmonary disease (COPD) and asthma cause a massive and rising burden of death and disability, placing enormous demands on households and healthcare systems.

More than 750 million children and adults are living with COPD or asthma, reducing quality of life and increasing health and economic costs.

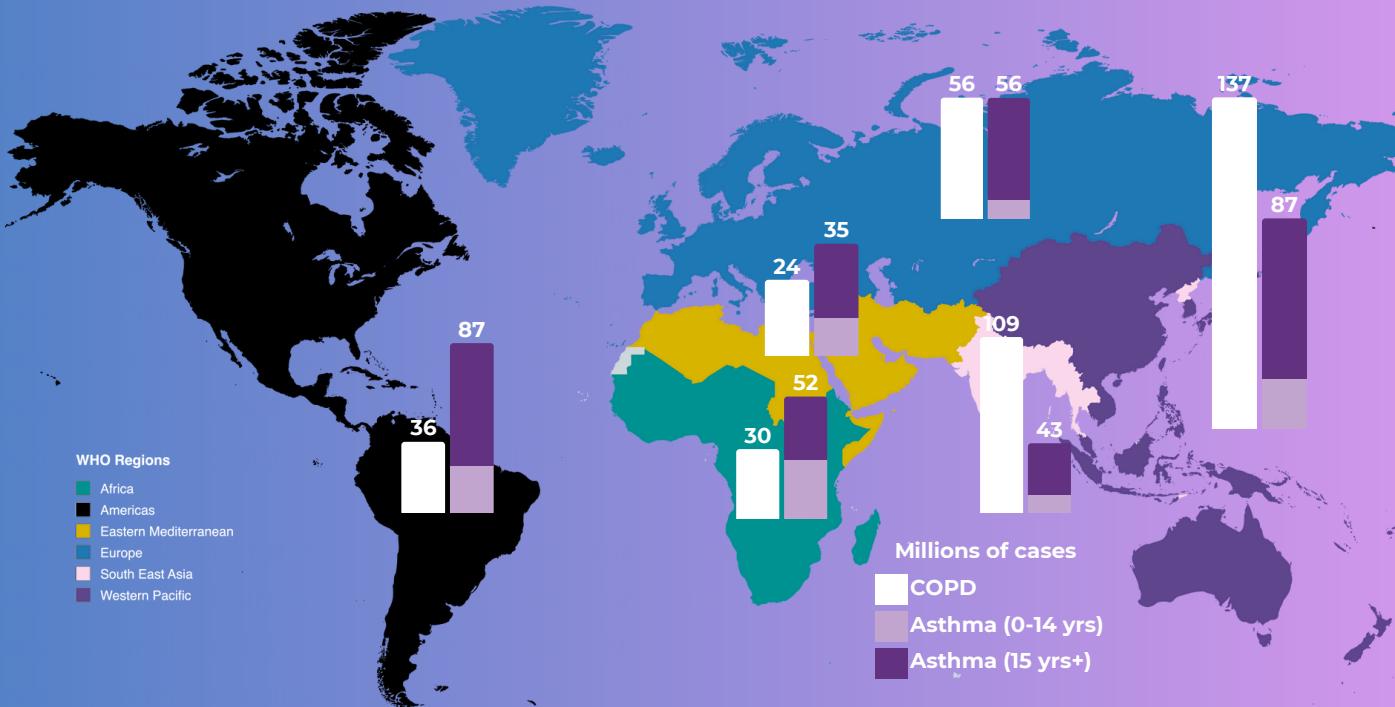
- COPD affects 392 million people, while asthma affects 363 million people.(1)
- While COPD affects working age and older adults, asthma affects all ages, including a large population of 102 million children under 15.

Most people with COPD live in the Western Pacific (33%) and South-East Asia (22%) regions, while the Americas and the Western Pacific regions are home to the largest number of people living with asthma.

COPD and asthma place enormous health and economic costs on patients, carers, and healthcare systems.

- Systematic reviews of COPD (2) and asthma (3) costs have found that outpatient visits and medicines are the largest components of healthcare costs.
- For people with asthma, emergency room visits and hospital admissions are common.(4) As COPD worsens, patients spend more on hospital stays and palliative care, home oxygen therapy, and physician home visits.
- Economic costs include lost school days for children and lost work days for adults as well as carers. One study found that 33% of adolescents missed at least one school day in the previous month because of asthma.(5)

More than 750 million people live with COPD or asthma



Sources: Adeloye D, et al. *The Lancet Respiratory Medicine* 2022 and Global Burden of Disease, 2023

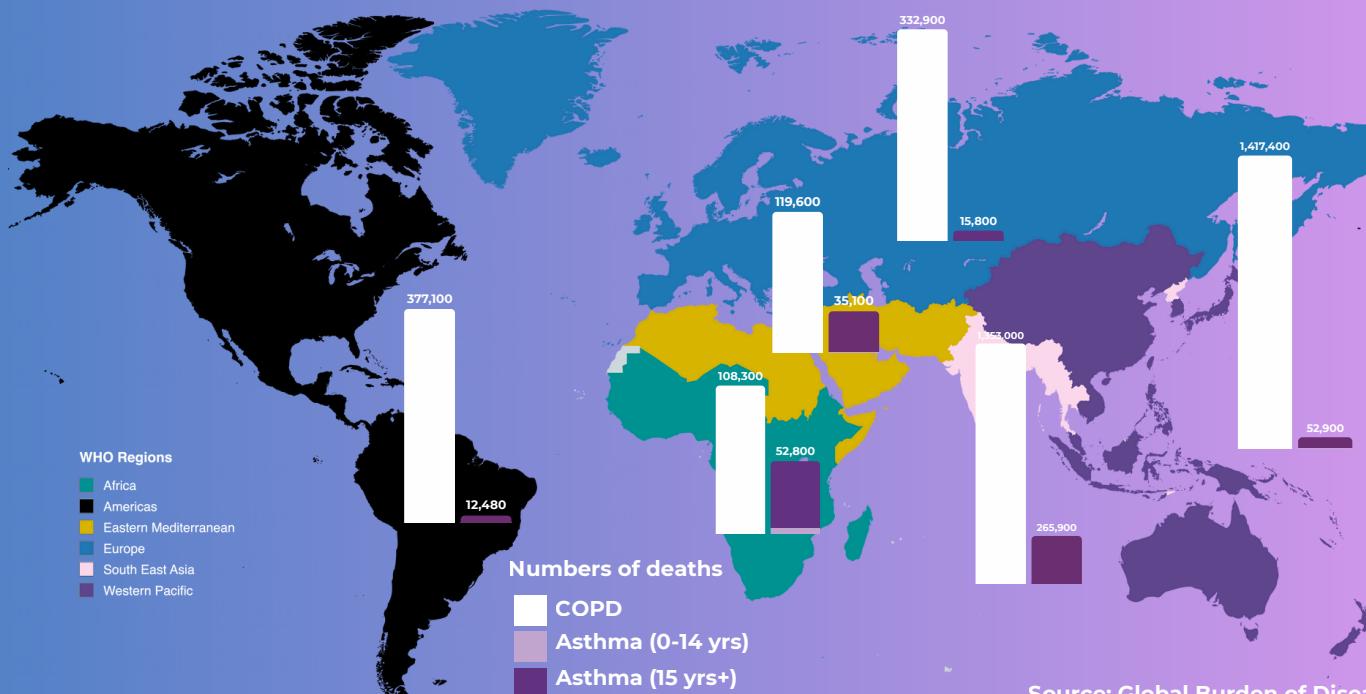
COPD and asthma caused 3.8 million deaths in 2023 - 3.4 million and 442,000 respectively. Only heart disease and stroke caused more deaths.

- While 76% of COPD deaths are among people aged over 70, 48% of asthma deaths are among people under 70, including 12,000 deaths among children under 15.
- COPD deaths concentrate in the South-East Asia (37%) and Western Pacific (35%) regions, while 50% of asthma deaths are in South-East Asia.
- However, it is important to note that 53% of all asthma deaths among children under 15 are in Africa.
- 20 countries account for more than 80% of all COPD and asthma deaths.
 - 13 LMICs are on the COPD list, 10 in Asia
 - 19 LMICs are on the asthma list, 7 in Africa

COPD and asthma deaths have risen by 42% and 29% respectively since 2000.

- Air pollution, smoking, and non-optimal temperature (mainly low) are leading risks for COPD death.
- High body-mass index (BMI), tobacco and occupational exposures are leading risks for asthma deaths.

3.8 million people die from COPD or asthma



Since 2000, COPD deaths have risen most sharply in South-East Asia (95%), Africa (71%), and the Eastern Mediterranean (60%), while asthma deaths have risen in Africa (47%), South-East Asia (43%) and the Western Pacific (29%), but have declined in Europe and the Americas.

- Among the 20 high-burden countries, COPD deaths rose by more than 90% in Bangladesh, Nepal, India, Myanmar, and Türkiye, while asthma deaths rose by more than 60% in Indonesia, Tanzania, Democratic Republic of Congo, Viet Nam, and Kenya between 2000 and 2023.

Both COPD and asthma are in the top five causes of Disability Adjusted Life Years (DALYs) - a measure of both death and disability for adults and children.

- COPD and asthma cause 109 million DALYs, 75 million from COPD and 26 million from asthma.

Without specific actions, this burden of death and disability will continue to rise with population growth and longer lifespans.

- COPD deaths are forecast to almost double to 7.4 million and DALYs to rise by 60% by 2050.(6) A recent study estimated that the cumulative economic burden from COPD alone will approach US\$40 trillion by 2050, including US\$24 trillion in medical expenses and US\$15 trillion due to work disruptions.(7)

Source: Global Burden of Disease, 2023

Wide gaps in access to inhalers exist in most regions

Wide gaps in access to recommended inhalers persist in most LMICs, driven by high costs and many other factors.

Inhalers contain medicines, including bronchodilators and corticosteroids, that deliver medication directly to the lungs. Inhalers reduce flare-ups which can be distressing, disruptive, and life-threatening and enable people with COPD or asthma to lead normal lives and engage in education, work, and sport.

- Global COPD and asthma guidelines recommend specific inhalers depending on disease severity, including appropriate inhaled bronchodilators and corticosteroids, and combinations of these, for optimal disease management.
- WHO has described inhaled medicines for acute treatment of COPD and asthma and for long-term management of COPD as “best-buys”.(8)
- Studies have documented important benefits from combination therapies, including reductions in underlying airway inflammation and exacerbations, (9) and a reduced risk of death from asthma.(10)

The cost-effectiveness of increased access to inhalers is well documented.

- After Brazil introduced free asthma inhalers, household costs fell from 29% of income to 2% and the hospitalization rate fell from 90 per 100,000 to 60 per 100,000 people.(11)

However, there are wide gaps in access to recommended inhalers in LMICs which is contributing to the heavy burden of COPD and asthma death and disability.

The largest study of the availability and affordability of inhalers for COPD and asthma across LMICs found that health facility access was well below the Global NCD Action Plan target of at least 80%. (12)

- Bronchodilators were available and affordable in 51% of pharmacies and 61% of health facilities.

Pedro used to suffer asthma attacks once a month, but with his new inhaler he has been well for the last year.*

Adriana, Mexico, mother

- Inhaled steroids were available and affordable in just 30% of pharmacies and 36% of healthcare facilities.
- Combination inhalers were available and affordable in just 11% of pharmacies and 5% of healthcare facilities.

“Spacers” - tube-shaped devices that make it easier to take asthma medicine (especially for children) are also widely unavailable across LMICs.(13)

Where inhalers are available, they are often old formulations and/or unaffordable, costing more than a week's wages for a month's supply.

When recommended inhalers are unaffordable, patients rely on episodic, acute care and/or less effective and potentially harmful treatments.

- A study of asthma treatment found widespread use of inappropriate oral medicines with increased risk of adverse effects.(14)

The 2021 WHO NCD Country Capacity Survey highlighted the wide equity gap in access to inhalers with 93% of high-income countries and 26% of low-income countries reporting general availability. A recent NCD Alliance report found that the high prices of inhalers and insulin was driving most of the gap in financing all essential NCD medicines.(15)

In addition to high prices, other barriers to accessing inhalers include:

- Lack of national data on local COPD and asthma burden, inhaler demand, and the cost-benefit of meeting demand.
- Failure to include inhalers on national medicines lists, in treatment guidelines, and on Universal Health Coverage (UHC) reimbursement lists.
- A recent study found that just 22% of LMICs had national COPD guidelines, including only one Sub-Saharan African country - South Africa (16), and only 30% of LMICs have essential medicines to treat COPD and asthma, according the UN (17)
- Limited support for product registration, procurement, and distribution of inhalers to all levels of the health system.
- Missed and misdiagnosis of COPD and asthma driven by a lack of clinician awareness, inappropriate prescription practices, and lack of diagnostic tools (e.g., spirometers, peak flow meters)
 - Children with asthma are often misdiagnosed with pneumonia and prescribed antibiotics (18)
- Primary care clinicians unable to prescribe inhaled medicines.
- Misperceptions by patients, use of harmful medicines, and poor patient adherence to treatment regimens - including improper inhaler technique.(19)



As a middle-class family, we experience financial strain when we purchase expensive asthma medications.*

Usha, India, 40 years old

The absence of well-resourced COPD and asthma patient advocacy groups in LMICs is further hampering progress.

Two other issues require attention.

- First, the urgent need to update WHO COPD and asthma treatment guidelines to reflect the latest recommendations of the **Global Initiative for Chronic Obstructive Lung Disease (GOLD)** and the **Global Initiative for Asthma (GINA)**, including:
 - WHO Package of Essential NCD (PEN) Interventions for Primary Health Care
 - WHO Pocketbook of Hospital Care for Children
- Second, access to inhaled medicines in LMICs is under threat by new European regulations to phase out the most commonly used inhaler which contains fluorinated gas propellants that have global warming potential.(20)
 - These inhalers are currently the only feasible option available to most people with asthma in LMICs, especially children. Although ameliorative measures are envisaged by regulators, unless the process is carefully monitored, interruption of supply could result in increased death and disability, especially in LMICs (21)
 - It is vital that supplies of current inhalers remain available until inhaled medications with low global warming potential become available in sufficient quantities for all patients in LMICs.

3

Momentum for action on access to inhalers is building

Since the Political Declaration from the 1st UN High-level Meeting on the Prevention and Control of NCDs in 2011, momentum has been building to increase access to COPD and asthma inhalers.

2011

Political Declaration from 1st UN High-level NCD Meeting

2013

WHO Global Action Plan for NCDs

2014

2nd UN High-level NCD Meeting

2018

3rd UN High-level NCD Meeting

2015

Sustainable Development Goals (SDGs) SDG 3.4 and SDG 3.8

2019

Political Declaration from 1st UN High-level UHC Meeting

2020

NCD Countdown 2030

2022

Appendix 3 of Global NCD Action Plan

2023

Political Declaration from 3rd UN High-level NCD Meeting

2025

4th UN High-level NCD and Mental Health Meeting

2024

Global Health 2050



Why we need action on inhalers

Now is the time to accelerate the momentum to secure access to quality, affordable, and effective inhalers for all.

The probability of a 30 year old dying from one of the four major NCDs (cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases) before they turn 70 has barely changed in the last decade, falling from 19% in 2013 to 18% in 2021.(22)

- As a result, the world is not on track to achieve the NCD Action Plan target of a 25% reduction in the probability of dying between 2013 and 2025, and the SDG 3.4 target of a one third reduction between 2015 and 2030.

- Only 19 out of 194 countries are on track to meet SDG target 3.4 to reduce NCD mortality by one third by 2030.(23)



What does action on inhaled medicines look like?

There are several actions that need to happen to transform access to inhaled medicines for all, including:

- Inclusion of the latest evidence-based inhalers on the WHO COPD and asthma management and PEN guidelines...*
- Alignment of national COPD and asthma treatment guidelines, essential medicine lists, and other relevant health policies with best practices for children and adults...*
- Addition of inhalers to the WHO Prequalification Programme, and facilitation of product registration and regulatory harmonisation across LMICs...*
- Stronger partnerships with pharmaceutical companies to increase access to inhalers, including by technology transfer, voluntary licensing agreements, and other proven strategies...*

- Inhaler price reductions from bulk purchasing, pooled procurement, tiered/differential pricing, promoting generic and biosimilar alternatives, and other proven strategies...*
- Out-of-pocket cost reductions by including inhalers in UHC packages and on national reimbursement lists...*
- Training for healthcare providers, especially in primary care, to diagnose and manage COPD and asthma with inhalers...*
- Campaigns to increase community awareness of COPD and asthma and destigmatise use of inhalers...*
- Increased research to generate up to date local data on the burden of COPD and asthma, inhaler availability, cost, affordability, demand, and cost-benefit...*
- Smoothing the transition to environmentally safer inhalers without compromising patient access, especially for children...*

Join us to secure access to quality, affordable, and effective inhalers for all!

Following the recommendation of a group of experts, (24), the **Forum of International Respiratory Societies** (FIRS) - which includes the world's leading international professional respiratory societies - is supporting a campaign to improve the availability of quality, affordable, and effective inhalers for COPD and asthma in low-resource, high-burden settings.

The campaign is engaging governments, UN and global health agencies, industry, donors, patient advocacy and civil society organizations, and media to support the actions required to transform access to inhaled medicines.

Investing greater resources to meet the urgent need for inhaled medicines now will accelerate achievement of both Global NCD Action Plan and the SDGs.

Members of FIRS include:

- **American College Chest Physicians (CHEST)**
- **American Thoracic Society (ATS)**
- **Asian Pacific Society of Respirology (APSR)**
- **Asociación Latino Americana De Tórax (ALAT)**
- **European Respiratory Society (ERS)**
- **International Union Against Tuberculosis and Lung Disease (The Union)**
- **Global Initiative for Asthma (GINA)**
- **Global Initiative for Chronic Obstructive Lung Disease (GOLD)**
- **Pan African Thoracic Society (PATS)**

My two children are suffering from asthma and the doctors told me to buy them inhalers, which I cannot afford to buy.*

Pancy, Uganda, mother

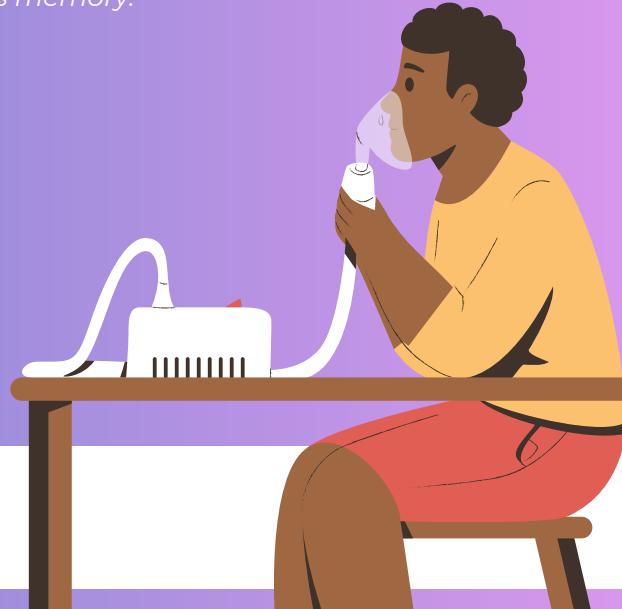
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Resources

*Patient quotes from Mortimer K, et al. *Living with Asthma in Low- and Middle-Income Countries in the Six WHO Regions*. *New England Journal of Medicine Evidence*, 2024, and Stolbrink, et al. *Improving access to affordable quality-assured inhaled medicines in low- and middle-income countries*, *The International Journal of Tuberculosis and Lung Disease*, 2022.

Endnotes

(1) COPD prevalence is from Adeloye D, et al. *Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary disease (COPD) in 2019: a systematic review and modelling analysis*, *The Lancet*, 2022. Asthma prevalence is from Global Burden of Disease Collaborative Network. *Global Burden of Disease Study 2021 (GBD 2021)*, Institute for Health Metrics and Evaluation (IHME), 2024.

(2) Quang Pham H, et al. *Economic Burden of Chronic Obstructive Pulmonary Disease: A Systematic Review*, *Tuberculosis and Respiratory Diseases*, 2024.

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(4) Nunes C, et al. *Asthma costs and social impact*. *Asthma Research and Practice*, 2017.

(5) Oyenuga V O, Asthma symptoms, severity, and control with and without a clinical diagnosis of asthma in early adolescence in sub-Saharan Africa: a multi-country, school-based, cross-sectional study. *The Lancet Child & Adolescent Health*, 2024.

(6) Global Burden of Disease Collaborative Network. *Global Burden of Disease Study 2021 (GBD 2021) Mortality and Life Expectancy Forecasts 2022-2050*. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2024.

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(9) Bateman ED, et al. *As-Needed Budesonide-Formoterol versus Maintenance Budesonide in Mild Asthma*, *New England Journal of Medicine*, 2018; Beasley R, et al. *Controlled Trial of Budesonide-Formoterol as Needed for Mild Asthma*, *New England Journal of Medicine*, 2019; and O'Byrne PM, et al. *Inhaled Combined Budesonide-Formoterol as Needed in Mild Asthma*, *New England Journal of Medicine*, 2018; Oba Y, et al. *Dual combination therapy versus long-acting bronchodilators alone for chronic obstructive pulmonary disease (COPD): a systematic review and network meta-analysis*. *Cochrane Database of Systematic Reviews*, 2018.

(10) Suissa S, et al. *Low-dose inhaled corticosteroids and the prevention of death from asthma*. *New England Journal of Medicine*, 2000.

(11) Comaru T, et al. *Free asthma medications reduce hospital admissions in Brazil (free asthma drugs reduce hospitalizations in Brazil)*, *Respiratory Medicine*, 2016.

(12) Stolbrink M, et al. *Chronic Respiratory Diseases Medicines Survey Investigators Collaboration, et al. Availability, cost and affordability of essential medicines for chronic respiratory diseases in low-income and middle-income countries: a cross-sectional study*, *Thorax*, 2024; Stolbrink M, et al. *The availability, cost, and affordability of essential medicines for asthma and COPD in low-income and middle-income countries: a systematic review*. *Lancet Global Health*, 2022.

(13) Mortimer K, et al. *Asthma management in low- and middle-income countries: case for change*. *European Respiratory Journal*, 2022.

(14) García-Marcos L, et al. *Asthma management and control in children, adolescents, and adults in 25 countries: a Global Asthma Network Phase I cross-sectional study*. *Lancet Global Health*, 2023.

(15) NCD Alliance. *Delivering on Health and Financial Protection for All: Government Spending on Essential NCD Medicines and Services*. University of Washington & NCD Alliance, 10 Sept. 2025.

(16) Tabyshova A, et al. *Gaps in COPD Guidelines of Low- and Middle-Income Countries: A Systematic Scoping Review*. *Chest*, 2021.

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(23) Progress on the prevention and control of non-communicable diseases and the promotion of mental health and well-being: report of the United Nations Secretary-General, 2025.

(24) Stolbrink, et al, *Improving access to affordable quality-assured inhaled medicines in low- and middle-income countries*, *The International Journal of Tuberculosis and Lung Disease*, 2022.

Key documents

- [UN Political Declaration on NCDs](#)
- [WHO Global NCD Action Plan](#)
- [NCD Countdown 2030](#)
- [GOLD 2025 COPD Guidelines](#)
- [GINA 2025 Asthma Guidelines](#)
- [NCD Alliance Report on NCD Spending](#)
- [Global Asthma Report](#)
- [WHO NCD Country Capacity Surveys](#)