Increasing Access to Inhaled Medicines for COPD and Asthma

With 5 years left to achieve the Sustainable Development Goals and the 4th High-level Meeting of the United Nations General Assembly on the Prevention and Control of Noncommunicable Diseases in September 2025, *now is the time* to advance access to quality, affordable, effective inhalers for all patients.

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United for Lung Health

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. Most of this burden is preventable and treatable, including with inhaled medicines.

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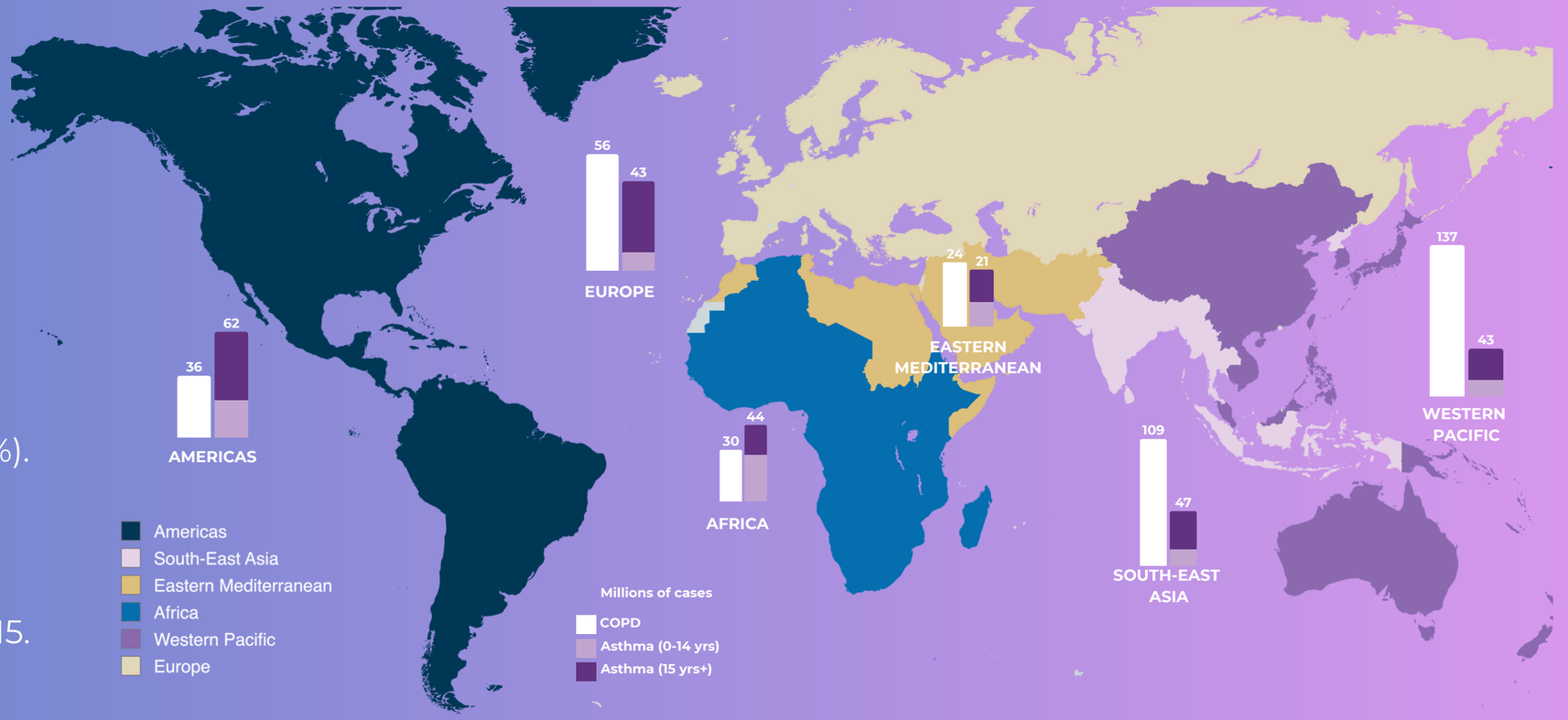
652 million people live with COPD and asthma

- 652 million cases in 2021.
  - 392 million COPD
  - 260 million asthma
- 63% of COPD cases are in the Western Pacific and South-East Asia.
- Asthma cases concentrate in the Americas (24%), South-East Asia (18%), Africa (17%), and the Western Pacific (17%).
- COPD affects older adults, but asthma affects all ages, including a large population of 96 million children under 15.
- Asthma is the second leading cause of Years Lived with Disability (YLD) among children under 5.



Sources: Adeloye D, et al. *The Lancet* Respiratory Medicine, 2022 and Global Burden of Disease, 2021

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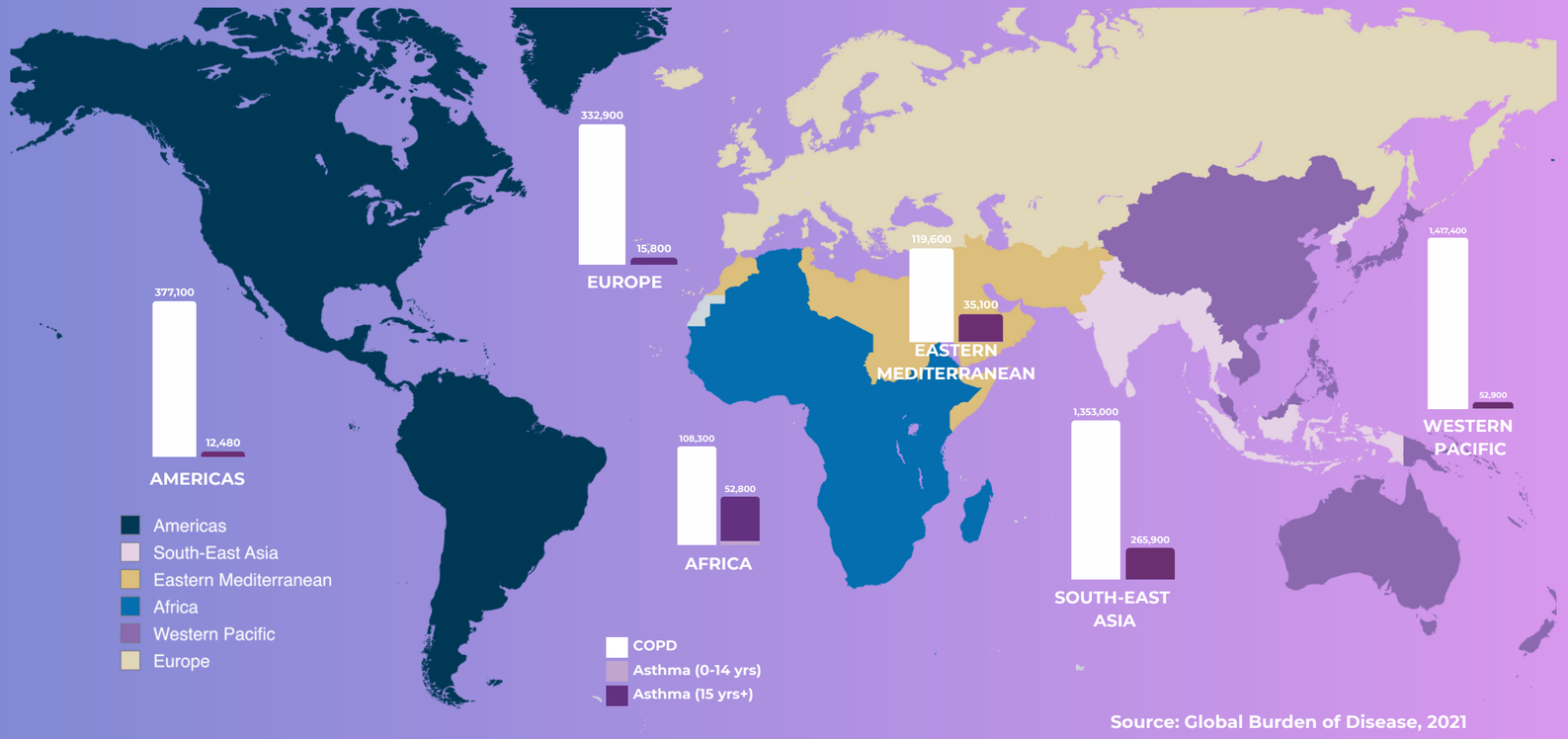
COPD and asthma kill 4.1 million people

- 4.1 million deaths in 2021.
  - 3.7 million COPD deaths
  - 436,000 asthma deaths
- 74% of COPD deaths are in the Western Pacific and South-East Asia.
- 60% of asthma deaths across all ages occur in South-East Asia, but 47% of child asthma deaths are in Africa.
- 75% of COPD deaths occur among over 70 year olds, while 50% of asthma deaths are among those under 70, including 8,200 deaths among children under 15.
- 86% of COPD deaths and 96% of asthma deaths occur in low- and middle-income countries (LMICs).



Source: Global Burden of Disease, 2021

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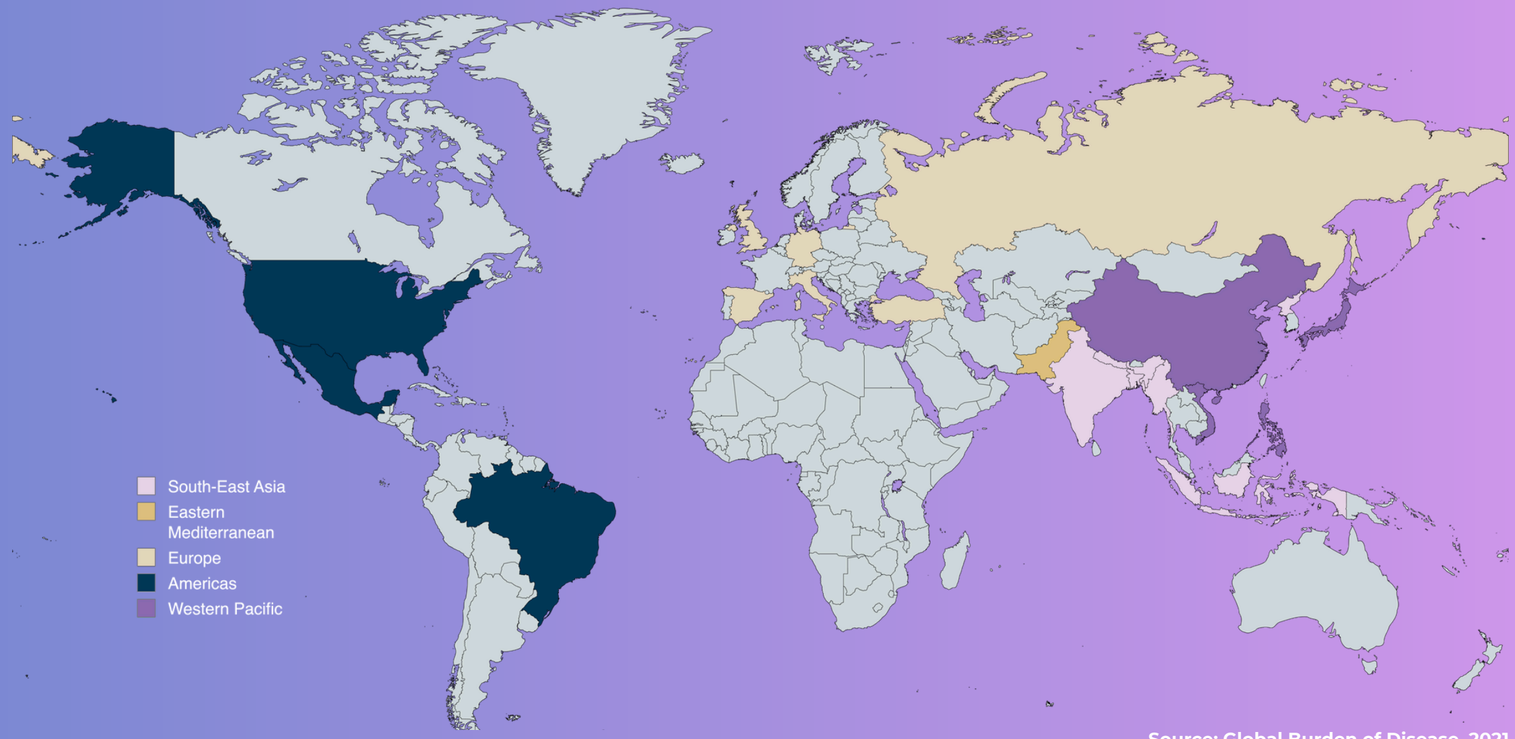
COPD deaths are highly concentrated in 20 countries

COPD deaths are highly concentrated in the following countries:

- China*
- India*
- USA
- Indonesia*
- Bangladesh*
- Pakistan*
- Brazil*
- Germany
- Myanmar*
- United Kingdom
- Viet Nam*
- Türkiye*
- Japan
- Russia
- Mexico*
- North Korea*
- Spain
- Italy
- Nepal*
- Philippines*

*Low- and middle-income countries

80% of COPD deaths are in 20 countries



Source: Global Burden of Disease, 2021

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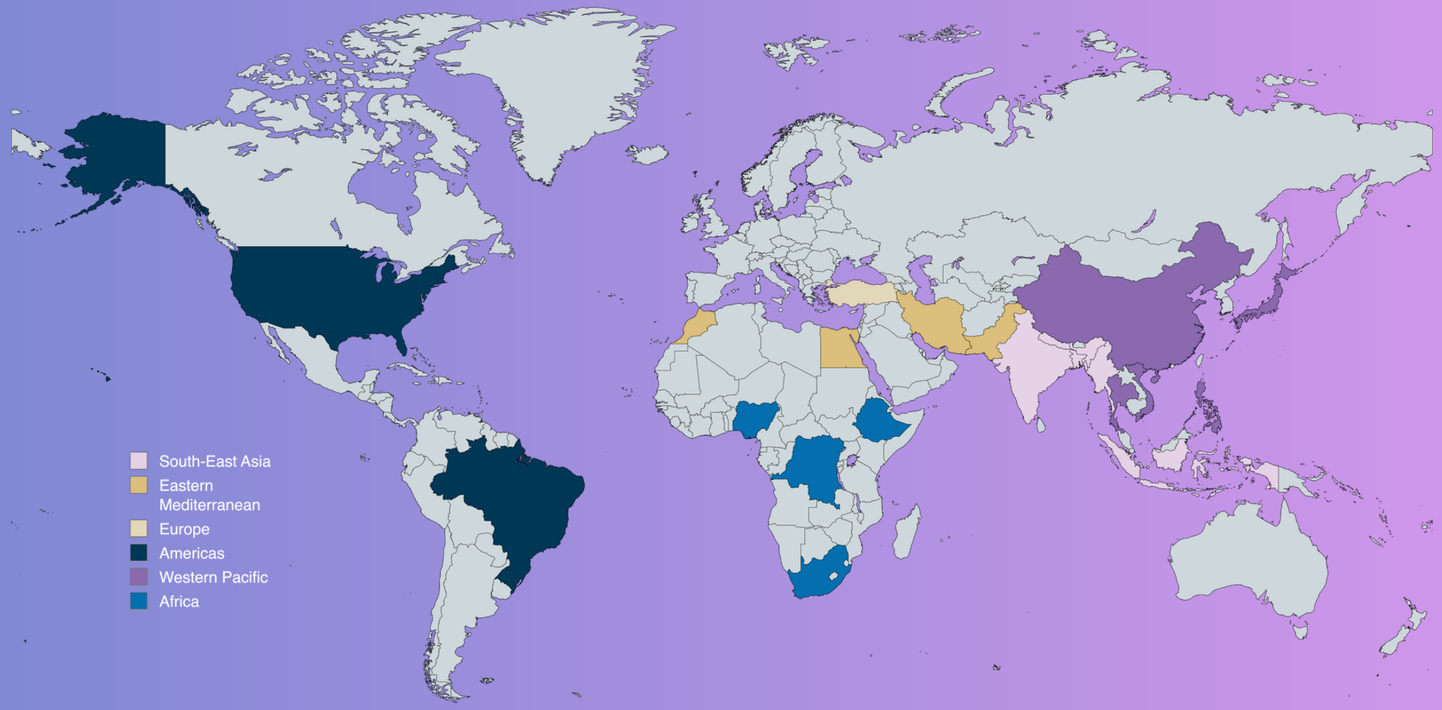
Asthma deaths are even more concentrated in 20 countries

Asthma deaths are highly concentrated in the following countries:

- India*
- Indonesia*
- China*
- Pakistan*
- Bangladesh*
- Myanmar*
- Philippines*
- Viet Nam*
- Nigeria*
- Democratic Republic of Congo*
- South Africa*
- Nepal*
- Thailand*
- USA
- Iran*
- Morocco*
- Ethiopia*
- Egypt*
- Brazil*
- Türkiye*

*Low- and middle-income countries

90% of asthma deaths are in 20 countries



Source: Global Burden of Disease, 2021

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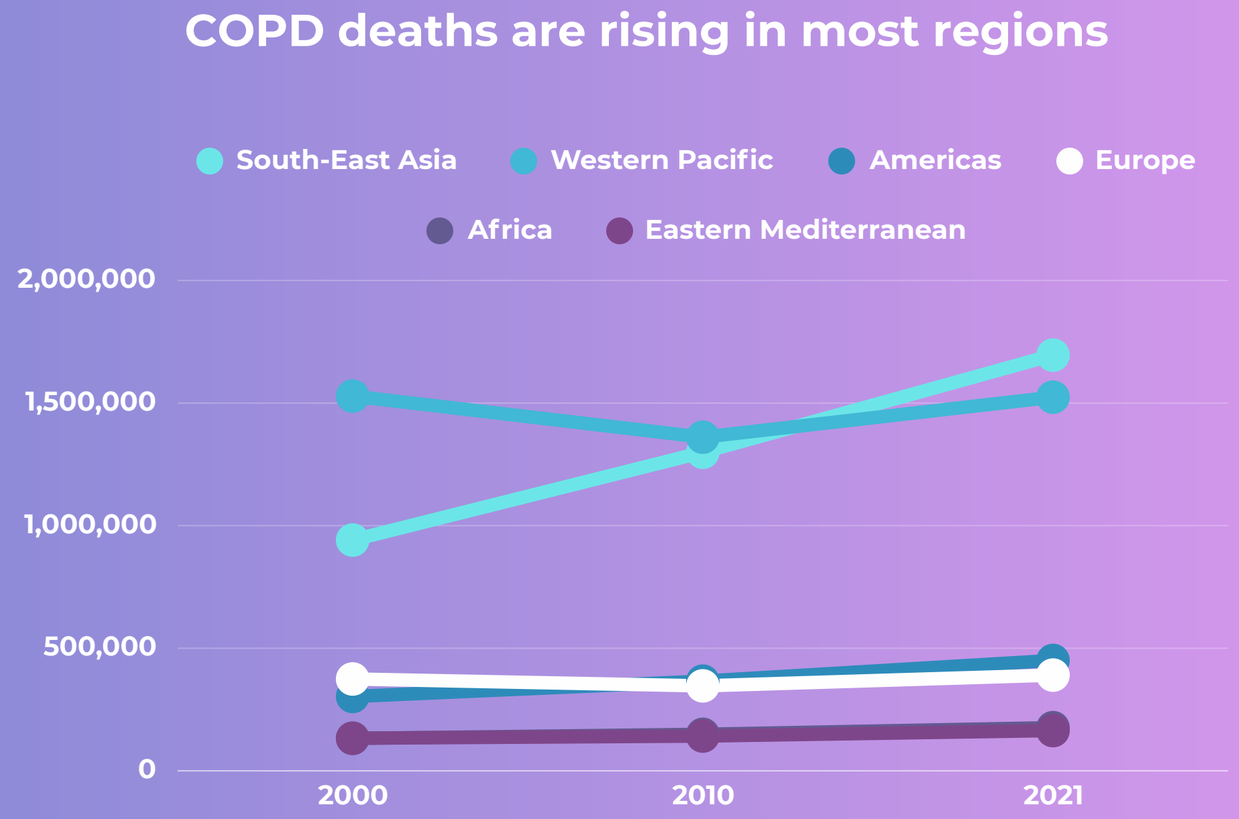
COPD deaths are rising sharply in most regions

COPD deaths rose by 29% between 2000 and 2021.

- COPD deaths rose most sharply in South-East Asia (92%), the Americas (48%), and Africa (44%).
    - Among the 20 high-burden countries, COPD deaths rose by more than 60% in Türkiye, India, Nepal, Philippines, Mexico, and Indonesia
- Major risk factors driving increases include smoking, outdoor air pollution, and occupational exposures to particulate matter, gases, and fumes.
- COPD deaths are forecast to double to 7.4 million by 2050.



Source: Global Burden of Disease, 2021

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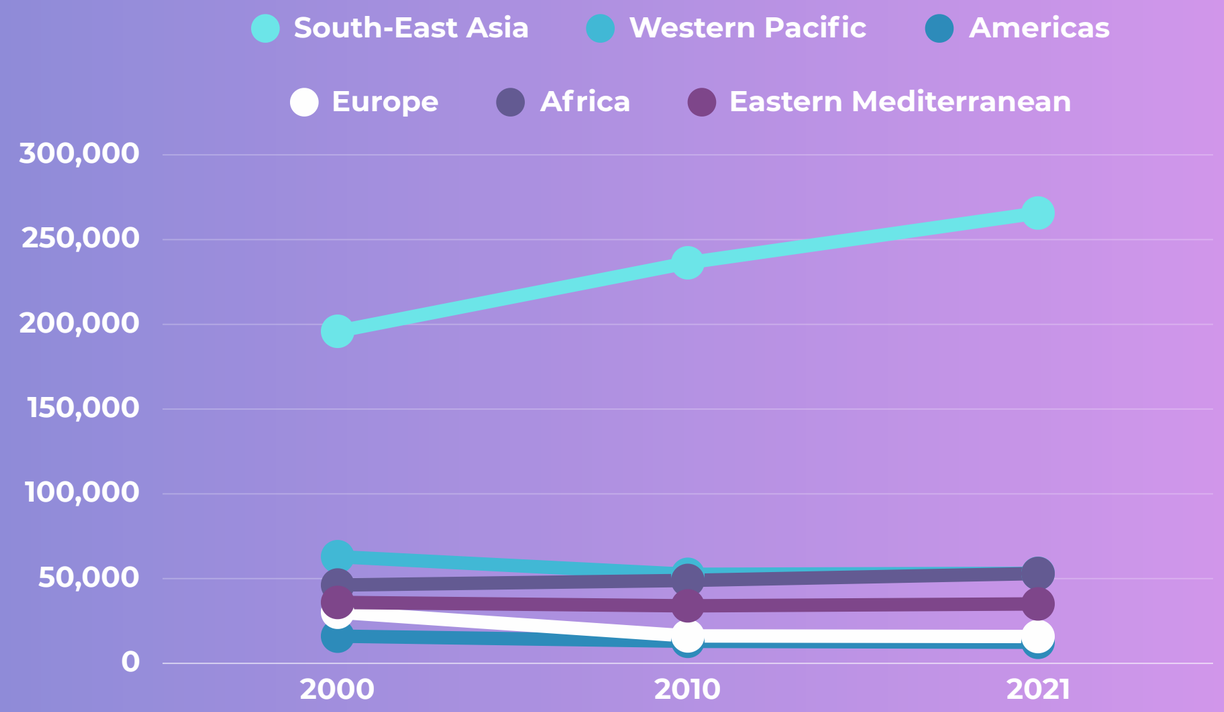
Asthma deaths are also rising, but only in some regions

Asthma deaths rose by 12% between 2000 and 2021.

- Asthma deaths are rising in South-East Asia (36%) and Africa (15%) but falling in Europe (-48%), Americas (-23%), the Western Pacific (-16%), and Eastern Mediterranean (-12%).
    - Among the 20 high-burden countries, asthma deaths rose by more than 20% in India, Nepal, Democratic Republic of Congo, Philippines, and Morocco
- Major risk factors driving asthma deaths include increasing body-mass index (BMI).

Asthma deaths are falling in most regions



Source: Global Burden of Disease, 2021

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COPD and asthma impose a massive burden on society

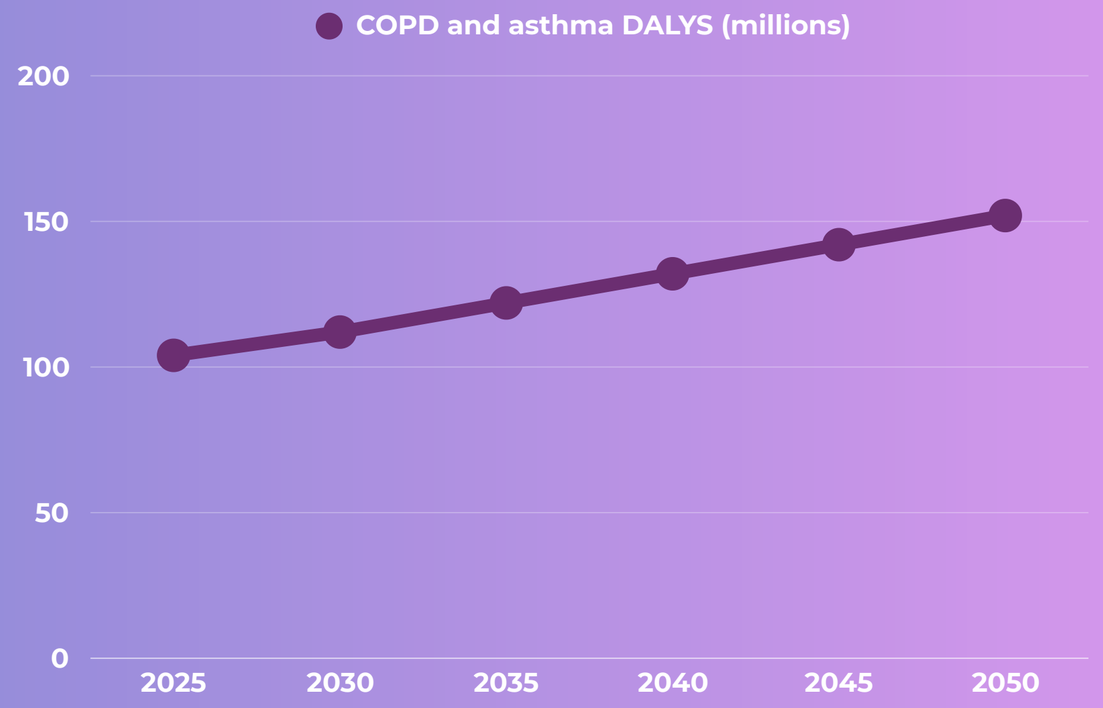
In addition to the tragic loss of life, COPD and asthma pose significant costs to society, including:

- Healthcare costs, especially hospitalization and medicines, often born by patients.
- Educational costs, including lost school days, especially for children with asthma.
- Economic costs, including lost work days, productivity, and wages.

These costs will continue to rise with population growth and longer lifespans.

- COPD and asthma Disability-adjusted Life Years (DALYs) - a measure of years of life lost to premature death and years of life lost to disability - are forecast to rise by 46% in the next 25 years.

COPD and asthma burden forecast to rise



Source: Global Burden of Disease Foresight Visualization, 2025

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Inhalers are proven to reduce disease severity and death

Inhalers contain medicines - including bronchodilators and corticosteroids and combinations of these - that deliver medication directly to the lungs. By preventing COPD and asthma exacerbations, they reduce the risk of death and enable people to manage their condition, lead normal lives, and engage in education, work, and sport.

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Inhalers are a “best-buy” for COPD and asthma management

From:
Tackling NCDs: Best buys and other recommended interventions for the prevention and control of noncommunicable diseases.

WHO, 2024

Manage chronic respiratory diseases

Best buys and other recommended interventions

●●● Best buys: Effective interventions with cost-effectiveness analysis ≤ I$100 per HLY gained in low-income and lower middle-income countries	Acute treatment of asthma exacerbations with inhaled bronchodilators and oral steroids[1] Acute treatment of chronic obstructive pulmonary disease (COPD) exacerbations with inhaled bronchodilators and oral steroids[1] Long-term management of COPD with inhaled bronchodilator[1]
●● Effective interventions with cost-effectiveness analysis > I$100 per HLY gained in low-income and lower middle-income countries	Long-term management of asthma with inhaled bronchodilator and low-dose beclomethasone[1]

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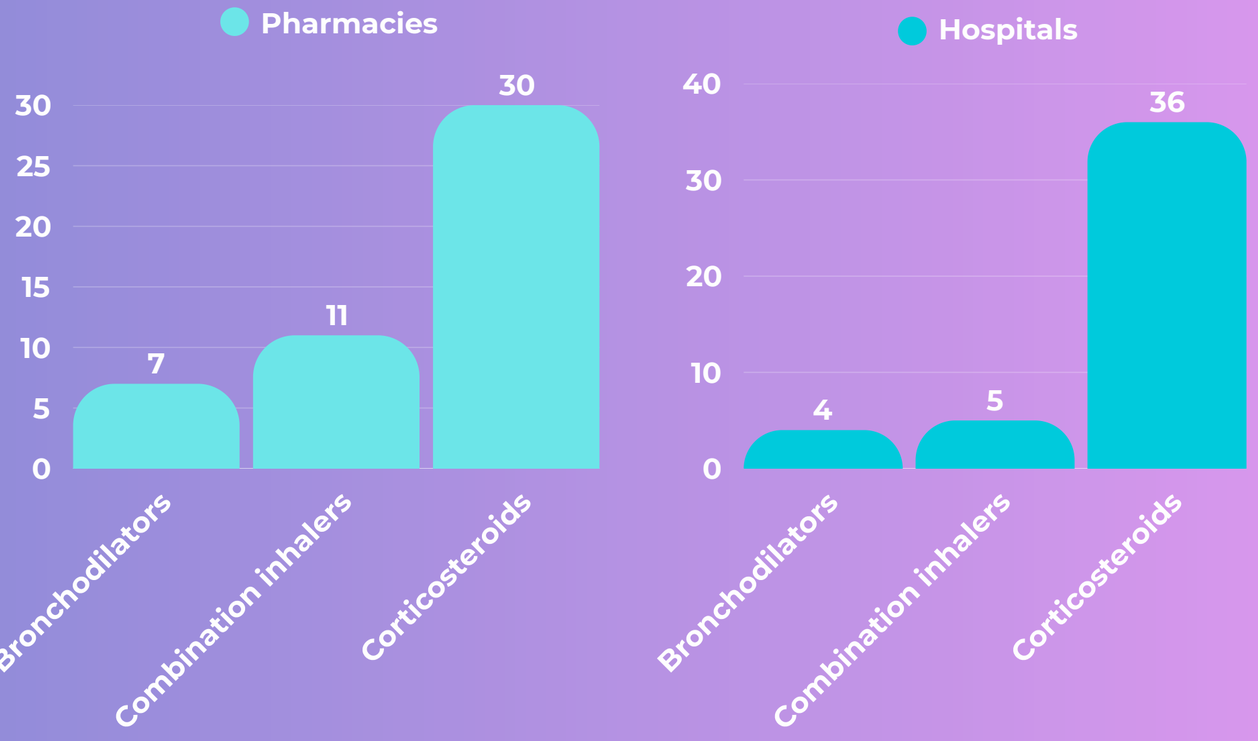
Affordable inhalers are hard to find in LMICs

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

- Long-acting inhaled bronchodilators for COPD available and affordable in just 7% of pharmacies and 4% of hospitals.
- Combination long-acting inhaled bronchodilators and corticosteroids for COPD and asthma available and affordable in just 11% of pharmacies and 5% of hospitals.
- Inhaled corticosteroids for asthma available and affordable in 30% of pharmacies and 36% of hospitals.

Only 30% of LMICs have essential medicines to treat COPD and asthma, well below the 80% Global NCD Action Plan target.

% LMIC health facilities with COPD and asthma inhalers



Source: Stolbrink, et al, 2024

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Inhalers often cost more than a week’s wages

Studies have found that inhalers can cost more than a week’s wages for a month’s supply in many LMICs.

- Corticosteroid inhalers are much more expensive than bronchodilators, especially in African countries.

When affordable inhalers are unavailable, patients often rely on episodic, acute care and/or on less effective and potentially harmful treatments.

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

High cost of inhaled medicines in LMICs

Source: Stolbrink, et al, 2022

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The cost-effectiveness of affordable inhalers is well documented

After Brazil introduced free inhaled medicines for asthma care, household costs fell from 29% of income to 2% and the hospitalisation rate fell from 90 per 100,000 to 60 per 100,000 people.

Source: Comaru T, et al, Free asthma medications reduces hospital admissions in Brazil, Respiratory Medicine, 2016.

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Cost is not the only barrier to inhaler access

Weak data	• National COPD and asthma disease burden unknown • Cost-benefit analysis of inhaled medicines unavailable • Demand forecasts for inhaled medicines non-existent
Missing policies	• Global guidelines out of date (Note: WHO is currently in the process of updating both COPD and Asthma Diagnosis and Treatment Guidelines and the Package of Essential Noncommunicable Disease (PEN) Interventions for primary health care) • Inhaled medicines not on national medicines lists, health policies/plans, and/or treatment guidelines • Primary care workers unable to prescribe inhalers
Poor diagnosis	• Lack of diagnostic tools (e..g, spirometry) • High rates of missed and misdiagnosis (e.g., asthma misdiagnosed as pneumonia/lower respiratory infection)
Low supply	• Inhalers not registered • Inhalers not procured adequately • Inhalers not distributed widely (e.g., do not reach primary health care or rural areas) • Lack of government/industry collaboration (e.g., public-private partnerships, local manufacturing via technology transfer, voluntary licensing, etc.)
Limited awareness	• Clinicians not trained to prescribe inhaled medicines • Patients not aware of inhaled medicines or how to use them; stigma associated with their use • Lack of resourced patient advocacy groups, especially in LMICs

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Momentum for action on access to inhalers is building

2011
1st UN High-level NCD Meeting

2013
WHO Global Action Plan for NCDs

2014
2nd UN High-level NCD Meeting

2015
Sustainable Development Goals 3.4 and 3.8

2018
3rd UN High-level NCD Meeting

2019
1st UN High-level UHC Meeting

2020
NCD Countdown 2030

2022
Updated Appendix 3 of Global NCD Action Plan

2023
2nd UN High-level UHC Meeting

2024
Global Health 2050

2025
4th UN High-level NCD Meeting

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

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Fourth High-level UN Meeting on NCDs

Ensuring the inclusion of access to inhaled medicines in the Political Declaration at the UN 4th High-level Meeting on NCDs, September 2025

Proposed language:

We, Heads of State and Government and representatives of States and Governments, assembled at the United Nations…

Acknowledge the wide gaps in access to quality and effective inhaled medicines for children and adults with COPD or asthma that are affordable to patients in low- and middle-income countries (LMICs), despite the high burden of these chronic lung diseases.(1)

We therefore commit to scale up our efforts and further implement the following actions:

Increase access to quality and effective inhaled medicines for the management of COPD and asthma that are affordable to patients, taking special measures to reduce the wide gaps in access to appropriate inhaled bronchodilators, corticosteroids, and combinations of these in LMICs. These measures will accelerate both the achievement of Sustainable Development Goals 3.4 and 3.8, as well as the target of 80% availability of affordable essential medicines to treat major NCDs, in the public and private sectors.

(1) Stolbrink M, Ozoh OB, Halpin DMG, 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

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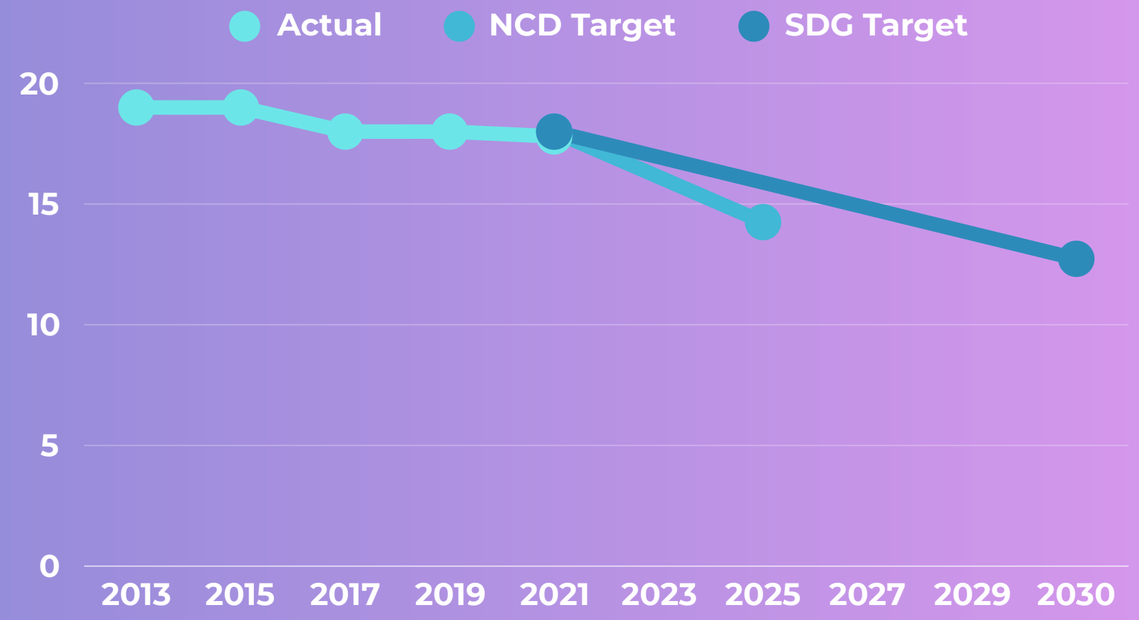
Why we need action on inhalers now

Accelerated action is urgently needed to increase access to COPD and asthma inhalers:

- 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 (19%-18%), despite two global goals.
    - Global NCD Action Plan target of 25% reduction in probability of dying between 30 and 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease, between 2013 and 2025
    - SDG 3.4 target of one-third reduction in probability of same 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.

No progress reducing probability of premature deaths from NCDs (%)



Source: WHO, 2024

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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 in 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 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...*
- *smoothing the transition to environmentally safer inhalers without compromising patient access, especially for children...*

What is FIRS doing?

The **Forum of International Respiratory Societies** (FIRS), comprised of the world's leading international professional respiratory societies, is supporting a campaign to improve access to safe, quality, affordable inhalers for COPD and asthma, with a special focus on low-resource, high-burden settings.

The campaign will engage governments, UN and global health agencies, industry, donors, civil society organizations, and media in the actions required to transform access to inhaled medicines.

Members of FIRS include:

- **American College Chest Physicians**
- **American Thoracic Society**
- **Asian Pacific Society of Respirology**
- **Asociación Latino Americana De Tórax**
- **European Respiratory Society**
- **International Union Against Tuberculosis and Lung Diseases**
- **Global Initiative for Asthma**
- **Global Initiative for Chronic Obstructive Lung Disease**
- **Pan African Thoracic Society**

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Join us!

This initiative is led by the **FIRS Working Group on Access to Affordable Inhaled Medicines for COPD and Asthma**.

Please contact the following members for more information:

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Professor Guy Marks, **gmarks@theunion.org**
Professor Heather Zar, **heather.zar@uct.ac.za**

We acknowledge the leadership and support of the late Eric Bateman FERS, FRCS, MBChB, MD, Professor of Medicine, Head of the Division of Pulmonology, Department of Medicine, University of Cape Town (UCT), and Founder, UCT Lung Institute, South Africa in the conception and development of this initiative. We honor his memory.

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