

Increasing Access to Inhaled Medicines for COPD and Asthma across Africa



With five years left to achieve the Sustainable Development Goals and the Political Declaration of the fourth high-level meeting of the UN General Assembly on the prevention and control of noncommunicable diseases, *now is the time* to advance access to quality, affordable, and effective inhalers for all patients across Africa.

The burden of COPD and asthma across Africa is rising

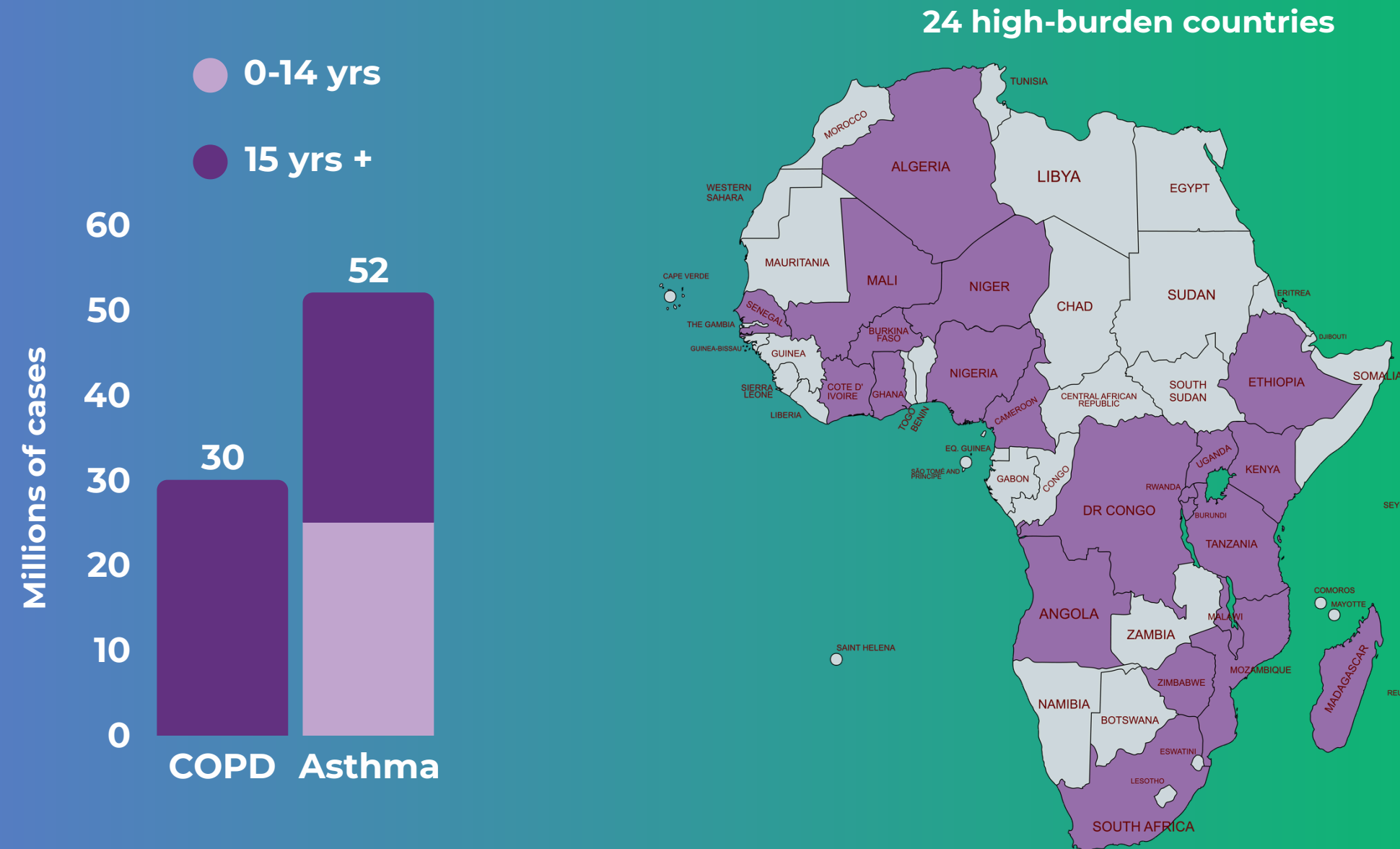
Chronic obstructive pulmonary disease (COPD) and asthma cause a massive and rising burden of death and disability across Africa, placing enormous demands on households and healthcare systems. Most of this burden is preventable and treatable, including with inhaled medicines.



82 million Africans live with COPD or asthma

- 82 million in 2023.
 - 52 million asthma
 - 30 million COPD
- 48% of Africans living with asthma are children under 15. Asthma is a leading cause of Years Lived with Disability (YLD) for African children under 15.
- 40% of Africans living with COPD are aged 15-49 years.
- 90% of Africans with COPD and asthma live in 24 countries (see map).

COPD and asthma prevalence in Africa



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

32 million African children and teens live with asthma

- **Global Burden of Disease, 2023**

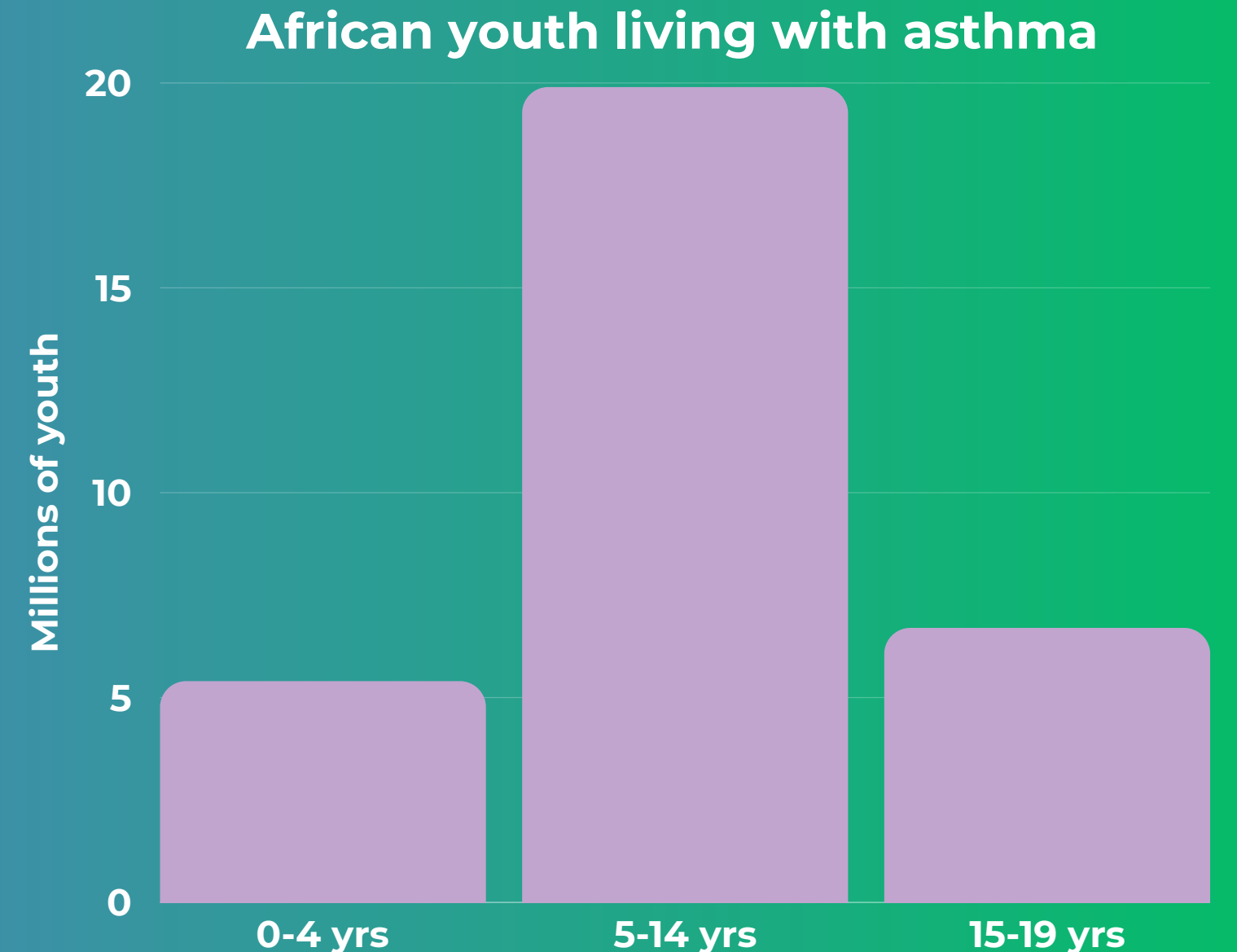
- 32 million Africans under 20 live with asthma
 - 5.4 million under 5 years
 - 19.9 million 5-14 years
 - 6.7 million 15-19 years

- **ACACIA study, 2024**

- 12% of 12-14 year olds in Ghana, Malawi, Nigeria, South Africa, Uganda, and Zimbabwe with asthma symptoms
- Only 20% of symptomatic children with asthma diagnosis
- Two-thirds with diagnosed asthma NOT using inhaled medicines

- **International Study of Asthma and Allergies in Childhood (ISAAC), Phase III study, 2002-2003**

- 9-20% of 13-14 year olds in 14 African urban centers reported asthma symptoms



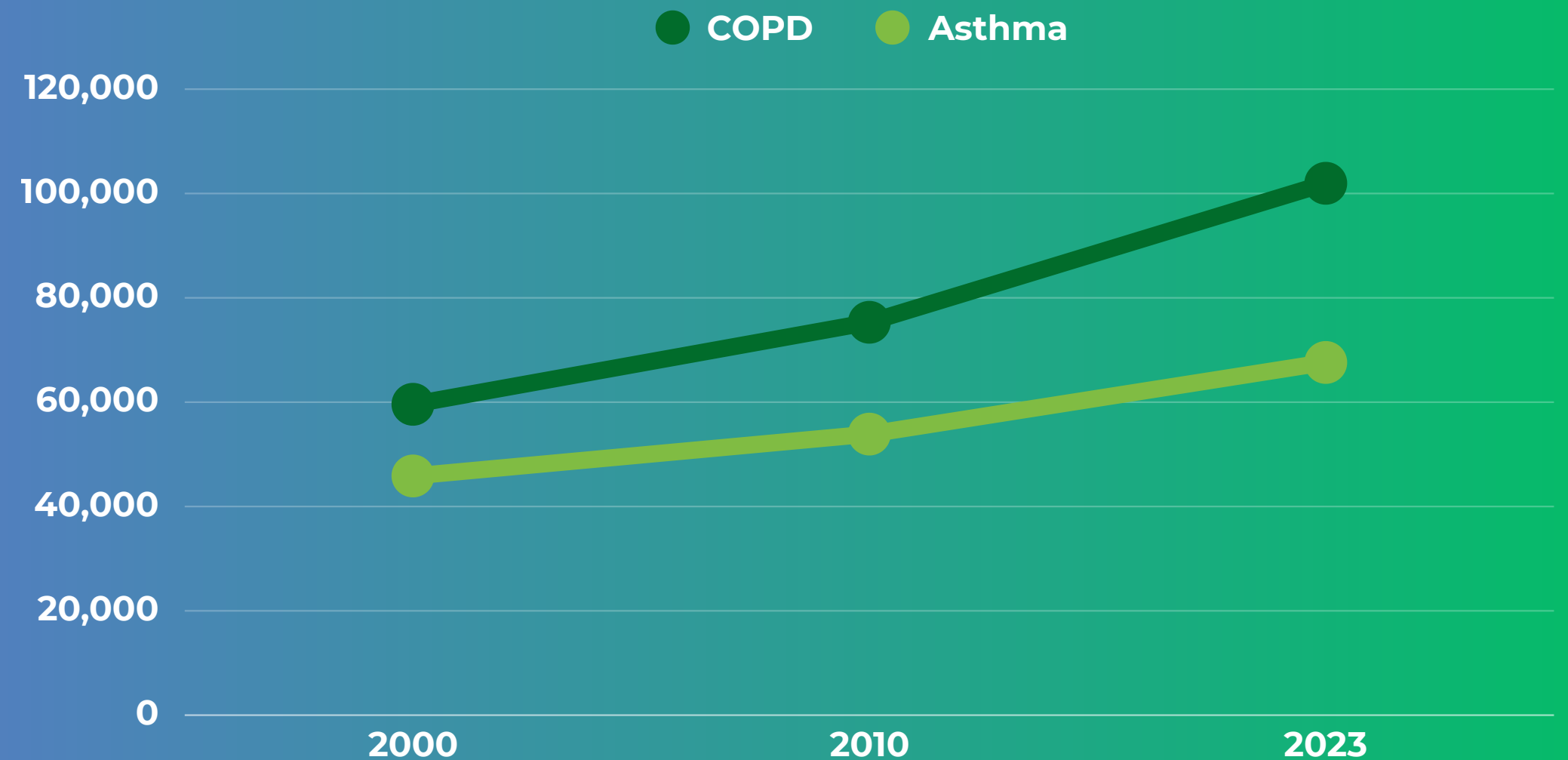
Source: Global Burden of Disease, 2023

COPD and asthma deaths are rising in Africa

Across Africa, COPD deaths rose by 71% and asthma deaths by 47% between 2000 and 2023.

- COPD deaths more than doubled in 16 countries (Algeria, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Eritrea, Ghana, Kenya, Madagascar, Mali, Mozambique, Niger, Rwanda, Senegal, The Gambia, and Togo), while asthma deaths rose by more than 50% in Angola, Eritrea, Kenya, and Niger.
- Major risk factors driving COPD deaths in Africa include air pollution, smoking, and occupational exposures.
- Major risk factors driving asthma deaths in Africa include high body-mass index (BMI), occupational exposures, and smoking.
- COPD deaths across Africa are forecast to more than double from 116,000 in 2025 to 245,000 in 2050.

COPD and asthma deaths are rising in Africa



Source: Global Burden of Disease, 2023

COPD and asthma impose a massive burden on Africa

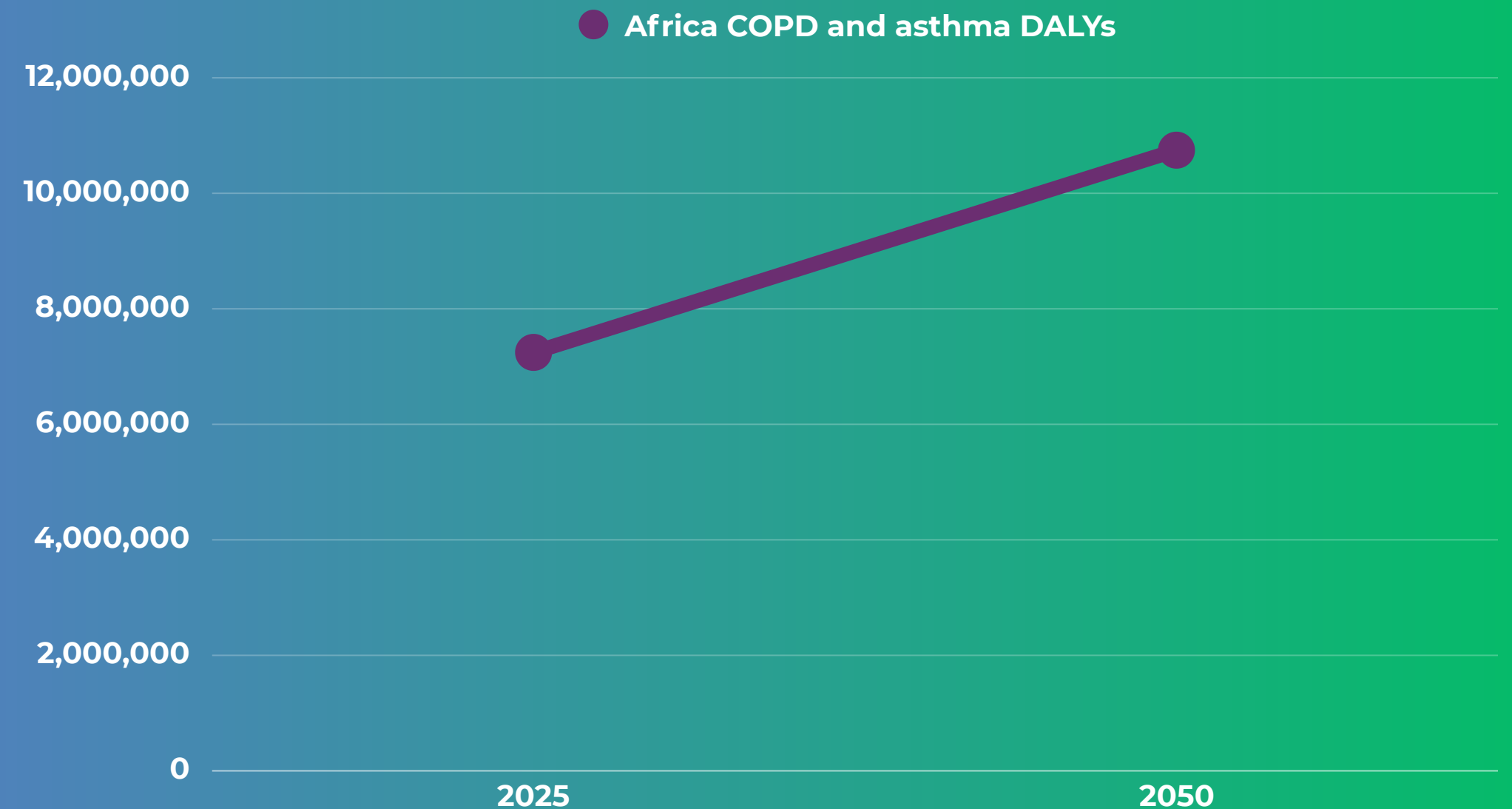
In addition to the tragic loss of life, COPD and asthma pose significant costs to Africa, including:

- Healthcare costs, especially hospitalization and medicines, born by governments and 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 50% in the next 25 years across Africa.

COPD and asthma burden forecast to rise



Source: Global Burden of Disease Foresight Visualization, 2025

COPD and asthma impose a massive burden on Africa

Few studies have estimated health and economic costs of COPD and asthma in Africa:





- COPD US\$58 billion economic loss in Sub-Saharan Africa 2020-2050. (Chen S, et al. Lancet Global Health, 2023).
- Asthma treatment annual cost US\$10.35 per patient in Nigeria - medications accounting for 56%. Annual cost per clinic visit US\$27 - catastrophic for 18% of households (Ughasoro, MD, et al. Pediatric Respiratory Review, 2021).
- CHEST study of 4,000 children and teens underway on asthma prevalence and costs in Ghana, Nigeria, Democratic Republic of Congo, and Uganda; and COPD prevalence and costs in up to 3,000 adults across Nigeria, Burkina Faso, Mozambique, Rwanda, and Sierra Leone.

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Respiratory epidemiology

BMJ Open
Respiratory
Research

Chronic respiratory disease observatory for Africa (CHEST-Africa): study protocol for the prevalence, determinants and economic impacts of asthma and COPD in Africa

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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 flare-ups, which can be distressing, disruptive, and life-threatening, inhalers enable people to manage their condition, lead normal lives, and engage in education, work, and sport.



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 \leq I\$100 per HLY gained in low-income and lower middle-income countries

Acute treatment of asthma exacerbations with inhaled bronchodilators and oral steroids¹

Acute treatment of chronic obstructive pulmonary disease (COPD) exacerbations with inhaled bronchodilators and oral steroids¹

Long-term management of COPD with inhaled bronchodilator¹



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 beclomethasone¹

¹. Requires trained providers at all levels of health care

Affordable inhalers are hard to find in Africa

Largest study of the *availability and affordability* of inhalers across 60 LMICs found:

- 6 of 58 (10%) met 80% NCD Action Plan access target for bronchodilators and 3 of 48 (6%) for inhaled steroids
- No country met target for combination inhalers

“Spacers” - tube-shaped devices that make it easier to use inhalers (especially for children) also widely unavailable across LMICs.

% LMIC health facilities with COPD and asthma inhalers

Available & Affordable	Bronchodilators (rescue/relief)	Steroid Inhalers (prevent/control)	Combination Inhalers
Pharmacies (mostly private)	51%	30%	11%
Hospitals (mostly public)	61%	36%	5%

Source: Stolbrink, et al, 2024

Inhalers often cost more than a week's wages

Inhalers can cost more than a week's wages for a month's supply in many LMICs:

- Steroid inhalers much more expensive than bronchodilators, especially in Africa.

Without affordable inhalers, patients often rely on episodic, acute care and/or on less effective and potentially harmful treatments.

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

High cost of inhaled medicines in LMICs

**BRONCHODILATORS
(short-acting)**
1-4 days' wages

**BRONCHODILATORS
(long-acting)**
6-26 days' wages

INHALED STEROIDS
2-107 days' wages

Source: Stolbrink, et al, 2022

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.

Cost is not the only barrier to inhaler access

MISSING POLICIES

- Essential Medicines Lists
- Insurance Reimbursements Lists
- Clinical management Guidelines

POOR DIAGNOSIS

- Missed diagnosis
- Misdiagnosis
- Lack of spirometry clinical training

LIMITED AWARENESS

- Clinicians unaware
- Patients unaware
- Lack of patient advocacy groups

LOW SUPPLY

- Inhalers not registered
- Inhalers not procured
- Inhalers not distributed widely

WEAK DATA

- Disease burden unknown
- Inhaler cost-benefit unavailable
- Inhaler demand forecasts non-existent



UN Member States commit to action on access to inhaled medicines

Clause 55 of the UN Political Declaration on NCDs underscored highlighted access to effective treatment for COPD and asthma.

We, Heads of State and Government assembled at the United Nations on 25 September 2025 commit to urgently strengthen primary health care, by:

Clause 55

Promote national policies for an integrated approach to lung health encompassing both noncommunicable and communicable diseases within primary health care and scale up prevention, early diagnosis and treatment of asthma and chronic obstructive pulmonary disease by improving measures such as access to effective treatment, strengthening diagnostic services and establishing structured programmes and services for the long-term management of chronic respiratory diseases...

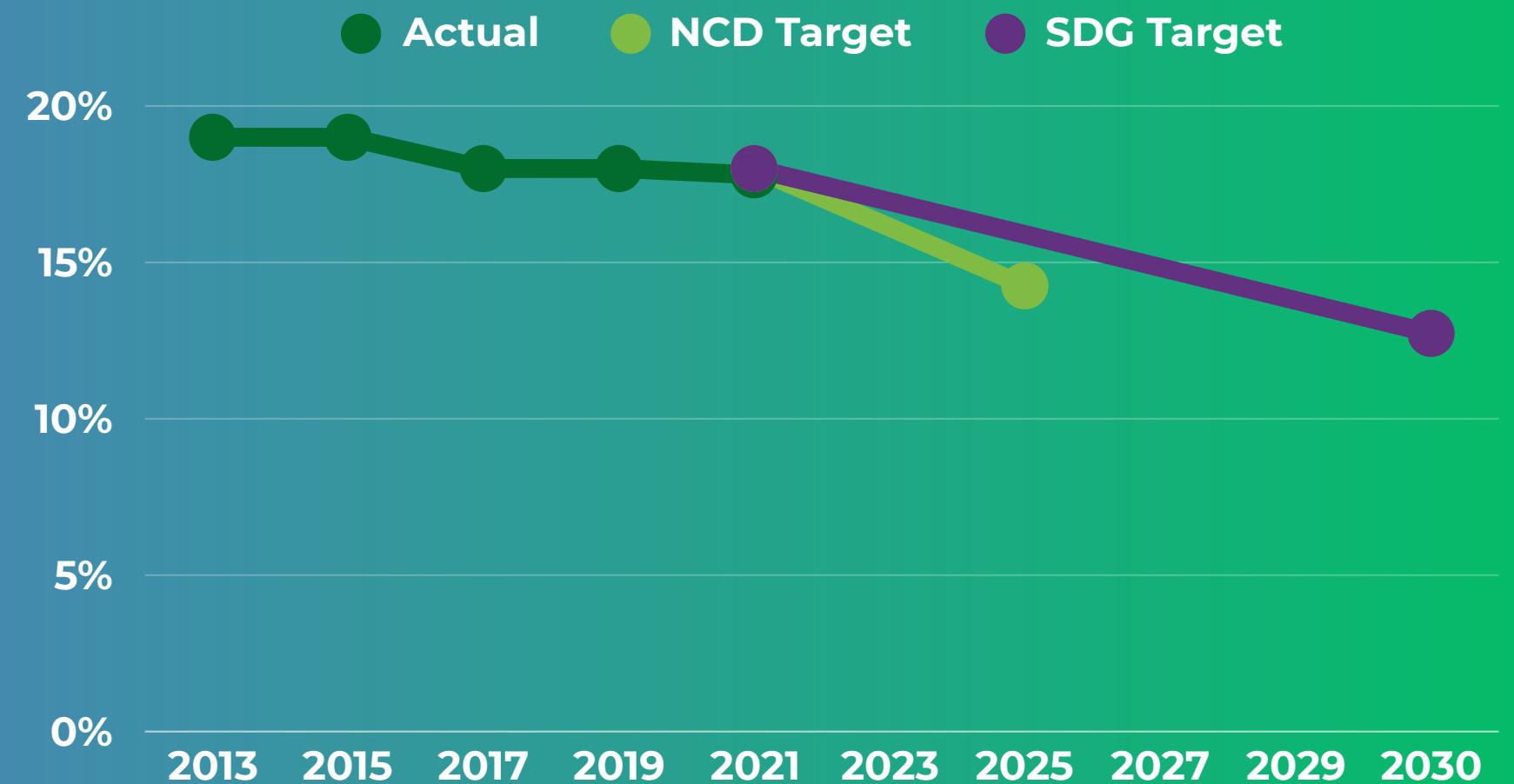
UN Political Declaration on NCDs, adopted 15 December, 2025

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 - none are in Africa.

No progress reducing probability of premature deaths from NCDs



Source: WHO, 2024

What does action on inhaled medicines look like?

FIRS is call for action in five key areas, the five “Ps”:



Policy: Inclusion of recommended inhalers in all global and national asthma treatment guidelines, essential medicine lists, and UHC reimbursement lists



Product: Improved availability of inhaled medicines by facilitating registration, technology transfer, voluntary licensing agreements, and other programs



Price: Reductions in inhaler prices from bulk purchasing, pooled procurement, tiered/differential pricing, generic alternatives, and other proven strategies



Primary Care: Increased training to diagnose and manage asthma, including improved access to spirometry and peak flow measurement tools



Patient Advocacy: Investments in campaigns to increase community awareness of asthma and to destigmatize and improve the correct use of inhalers

What is FIRS doing?



The **Forum of International Respiratory Societies** (FIRS) is leading a campaign to engage governments, UN and global health agencies, industry, donors, patient advocacy and civil society organizations, to improve the availability of quality, affordable, and effective inhalers for COPD and asthma in low-resource, high-burden settings.

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 Disease (The Union)
- Global Initiative for Asthma
- Global Initiative for Chronic Obstructive Lung Disease
- Pan African Thoracic Society

Join us!

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

Please contact the following members for more information:

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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.

