

Epidemiology and impact of Chronic Obstructive Pulmonary Disease (COPD) globally.



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SDG targets



3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)

3.8.2 Number of people covered by health insurance or a public health system per 1,000 population

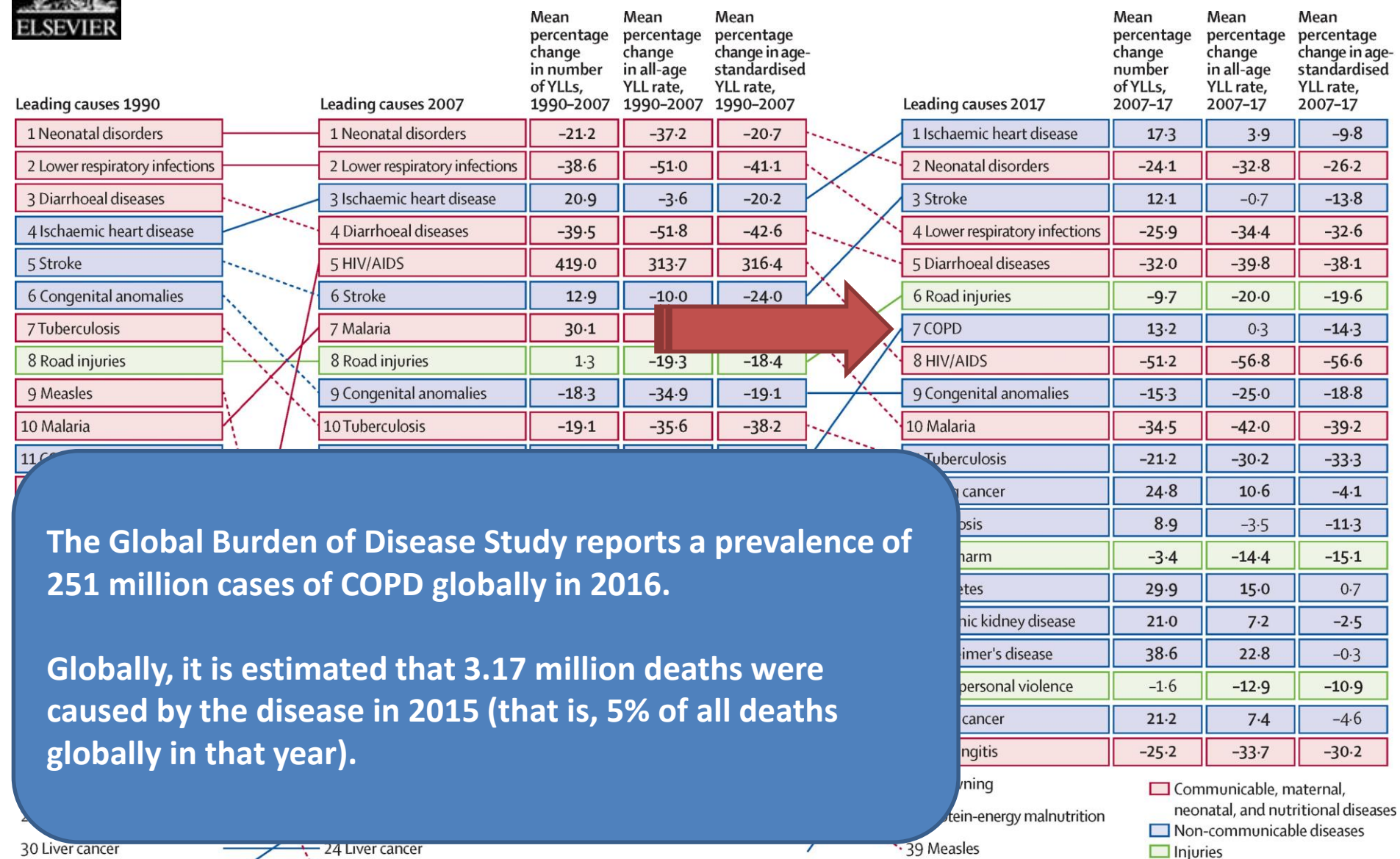
Four types of NCDs are largely preventable by means of effective interventions that tackle shared modifiable risk factors

		Causative risk factors				Air pollution
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol	
Non-communicable diseases	Heart disease and stroke	✓	✓	✓	✓	
	Diabetes	✓	✓	✓	✓	
	Cancer	✓	✓	✓	✓	
	Chronic lung disease	✓				
Mental health						

Chronic obstructive pulmonary disease (COPD)

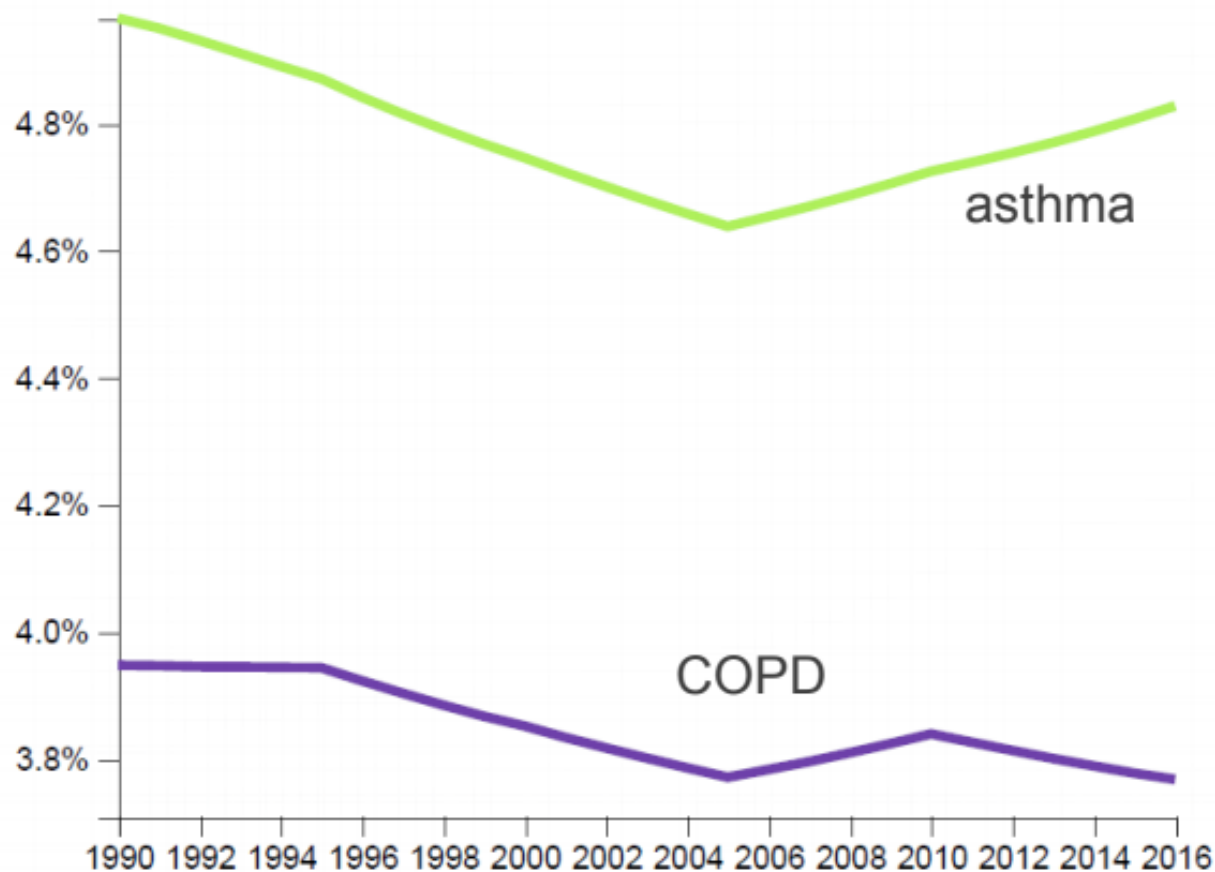
- Is a progressive life threatening lung disease that causes breathlessness (initially with exertion) and predisposes to exacerbations and serious illness.
- More than 90% of COPD deaths occur in low and middle-income countries.
- The primary cause of COPD is exposure to tobacco smoke (either active smoking or secondhand smoke).
- Other risk factors include exposure to indoor and outdoor air pollution and occupational dusts and fumes.
- Exposure to indoor air pollution can affect the unborn child and represent a risk factor for developing COPD later in life.
- Some cases of COPD are due to long-term asthma.
- COPD is likely to increase in coming years due to higher smoking prevalence and aging populations in many countries.





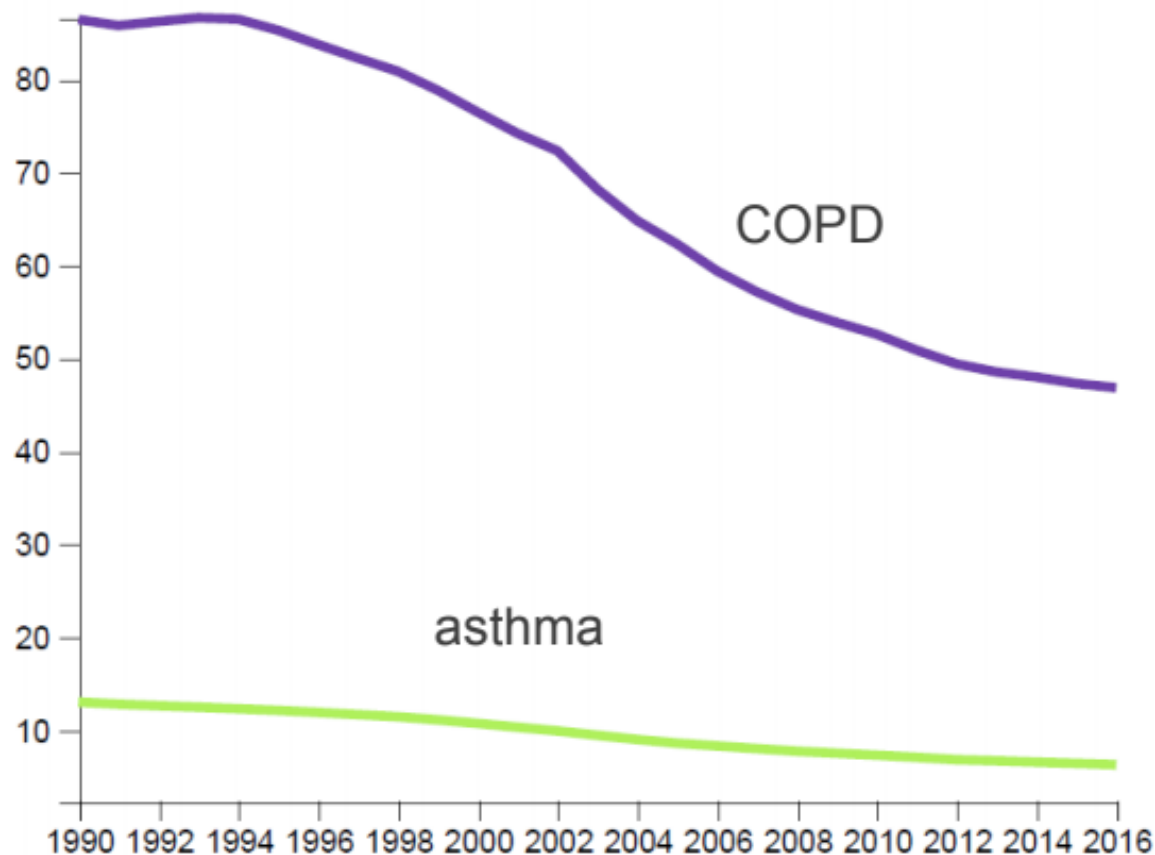
Global prevalence of asthma and COPD, persons, 1990 – 2016, age-standardised

Prevalence, %



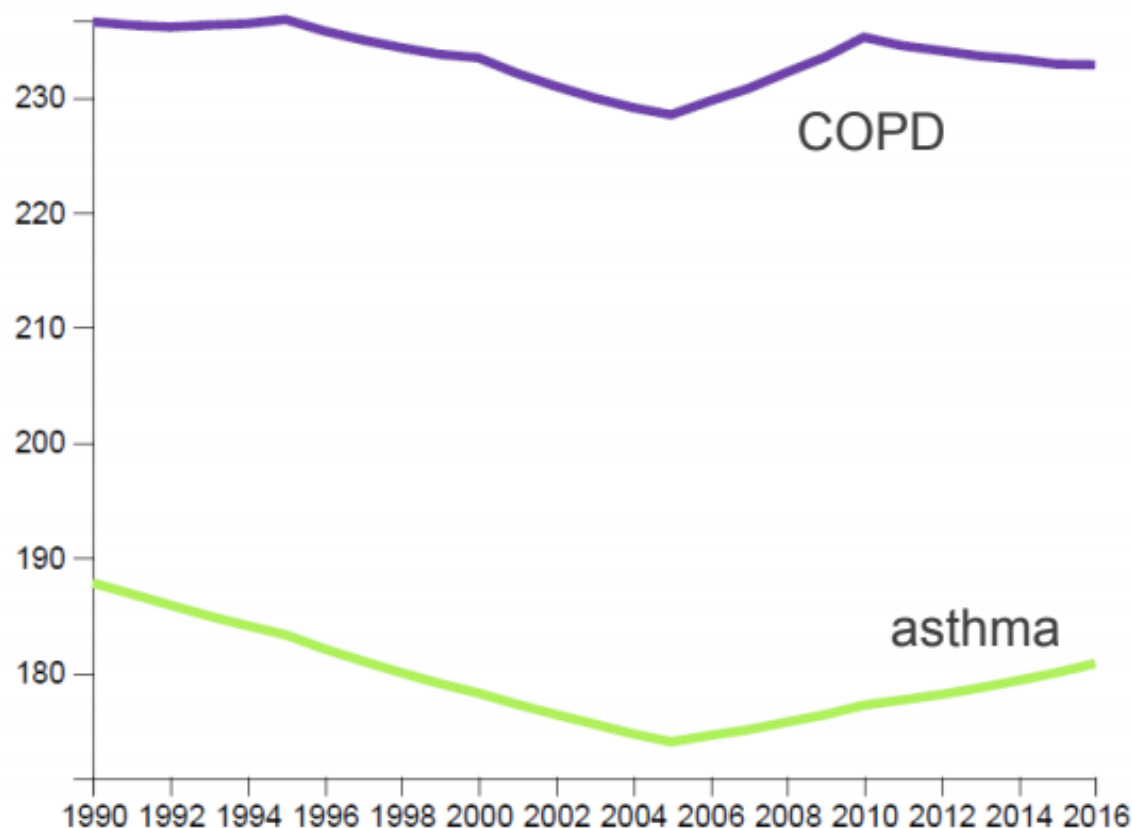
Global death rate due to asthma and COPD, persons, 1990 – 2016, age-standardised

Deaths, rate per 100k



Global YLD due to asthma and COPD, persons, 1990 - 2016

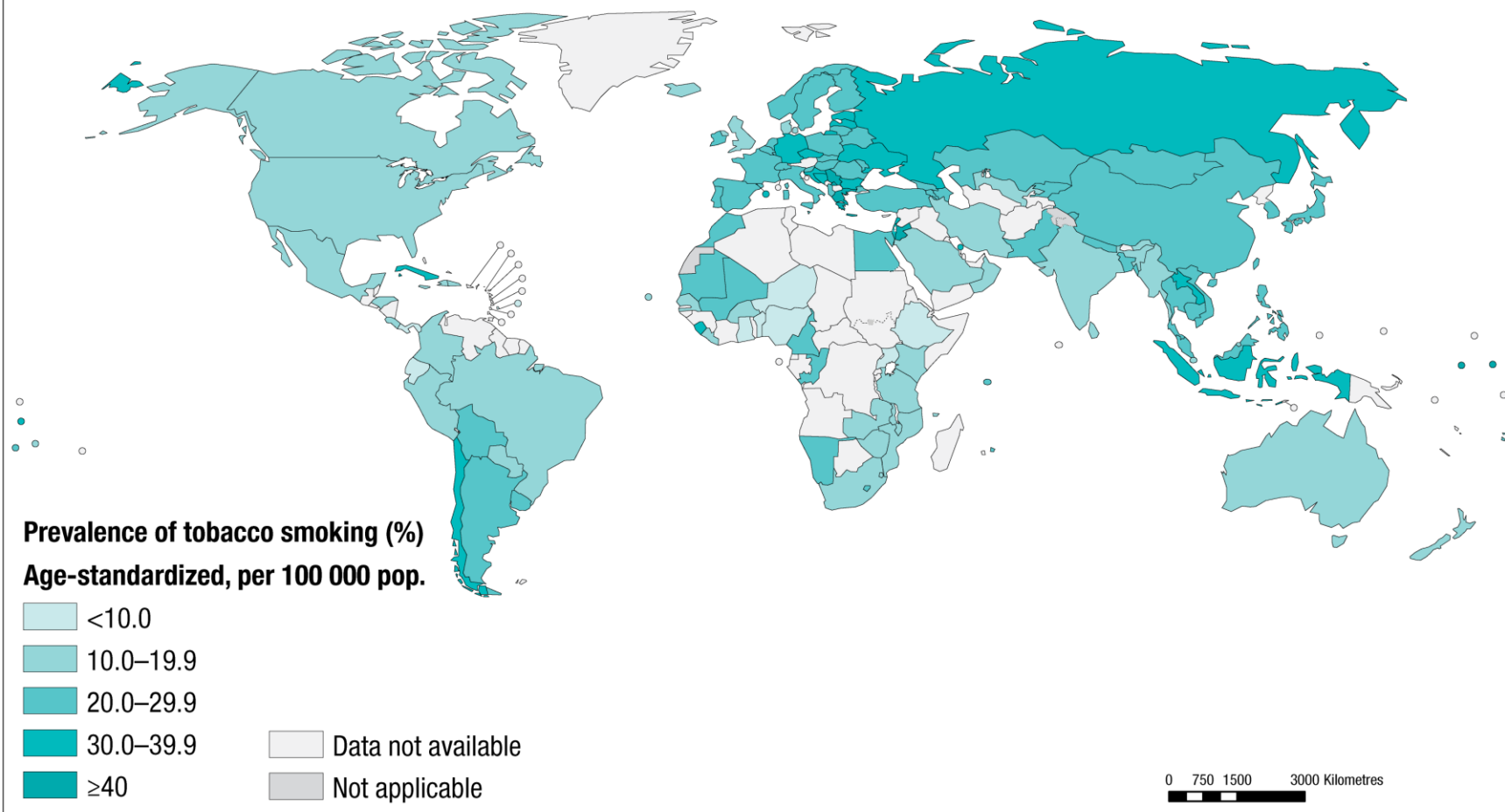
YLDs (Years Lived with Disability), rate per 100k





RISK FACTORS

Age-standardized prevalence of tobacco smoking among persons aged 15 years and older, 2015

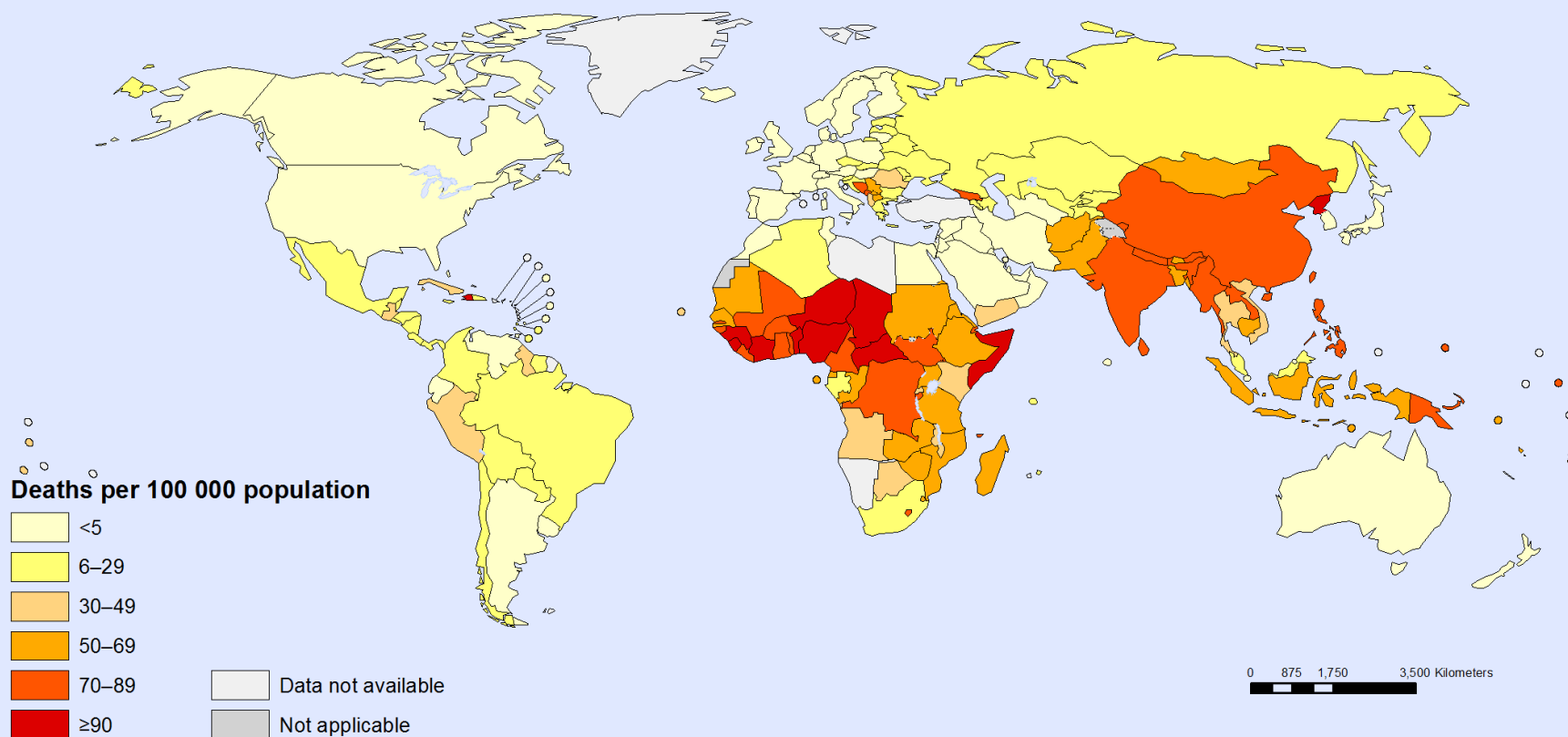


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Data Source: World Health Organization
 Map production: Information Evidence and Research (IER)
 World Health Organization



Deaths attributable to household air pollution, 2016



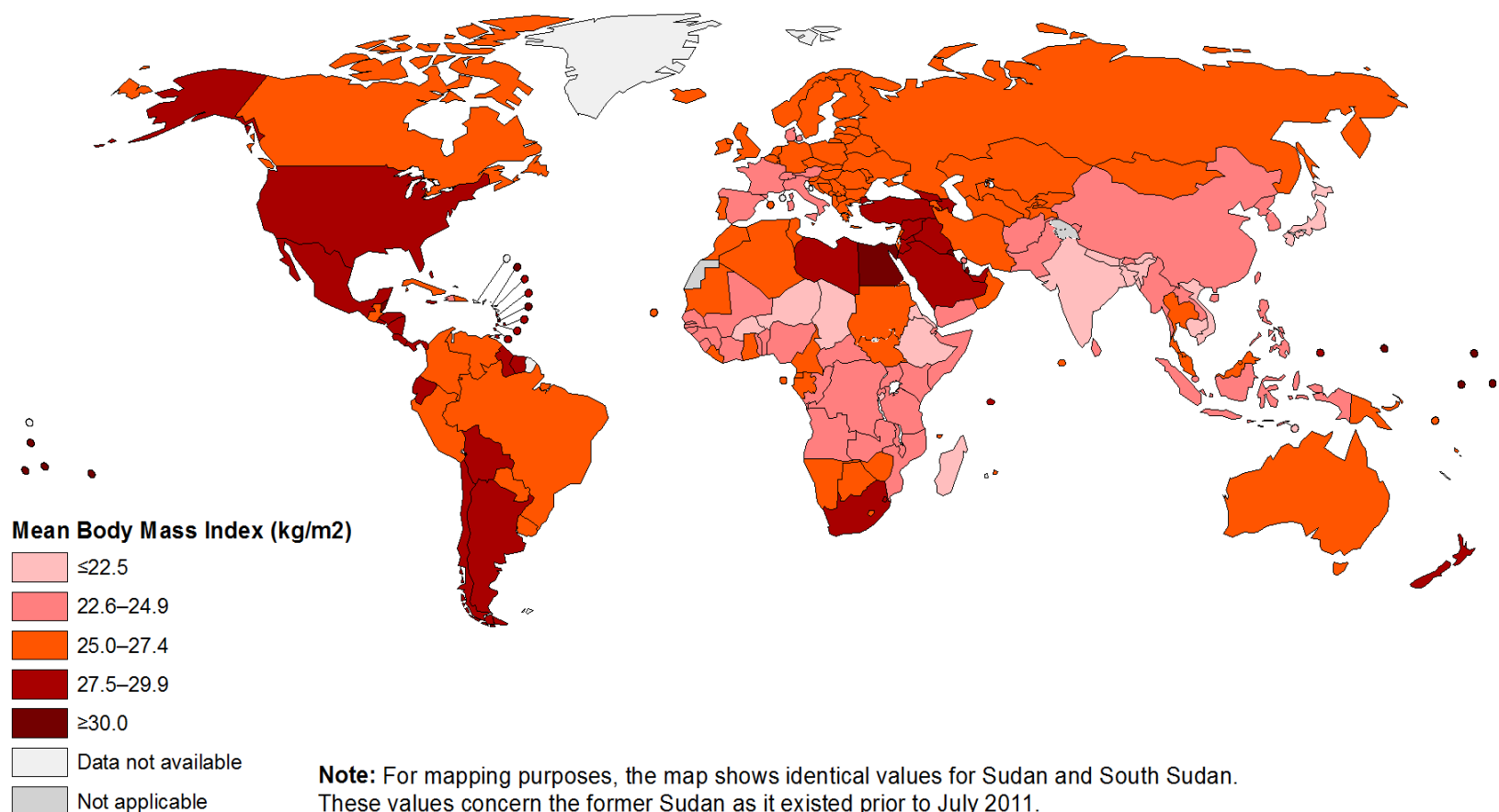
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Mean Body Mass Index (kg/m²), ages 18+, 2016 (age standardized estimate) Female

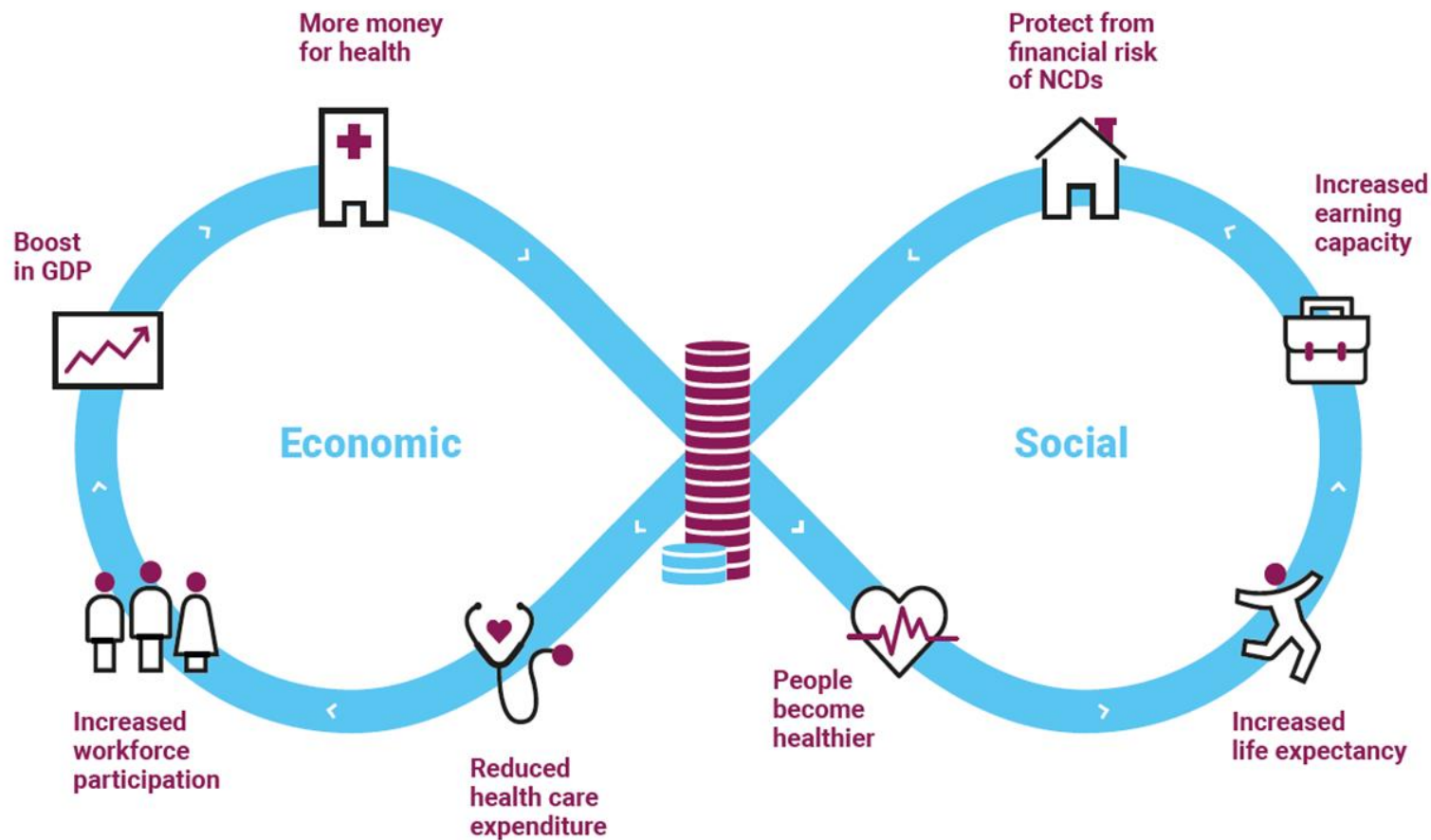


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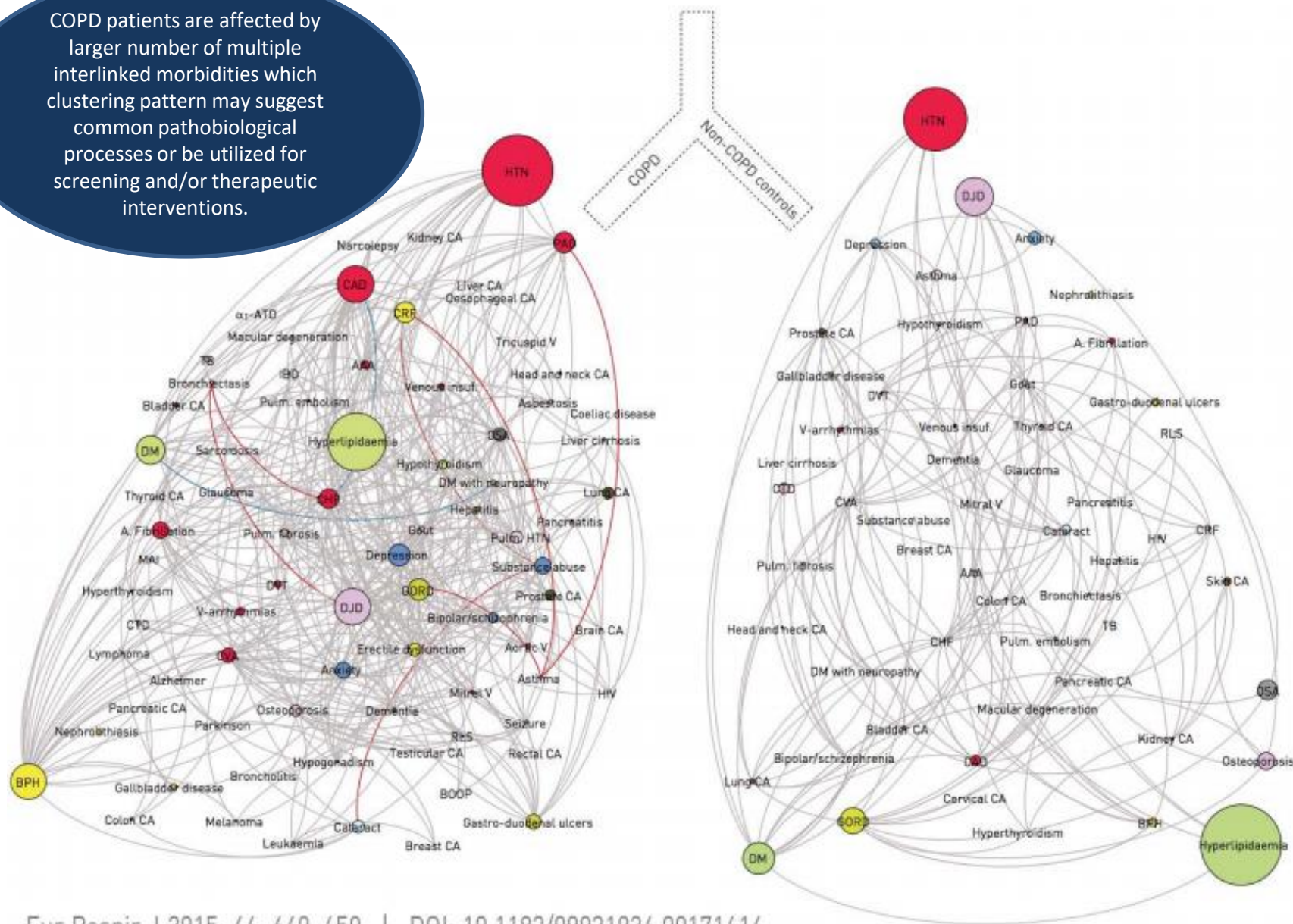


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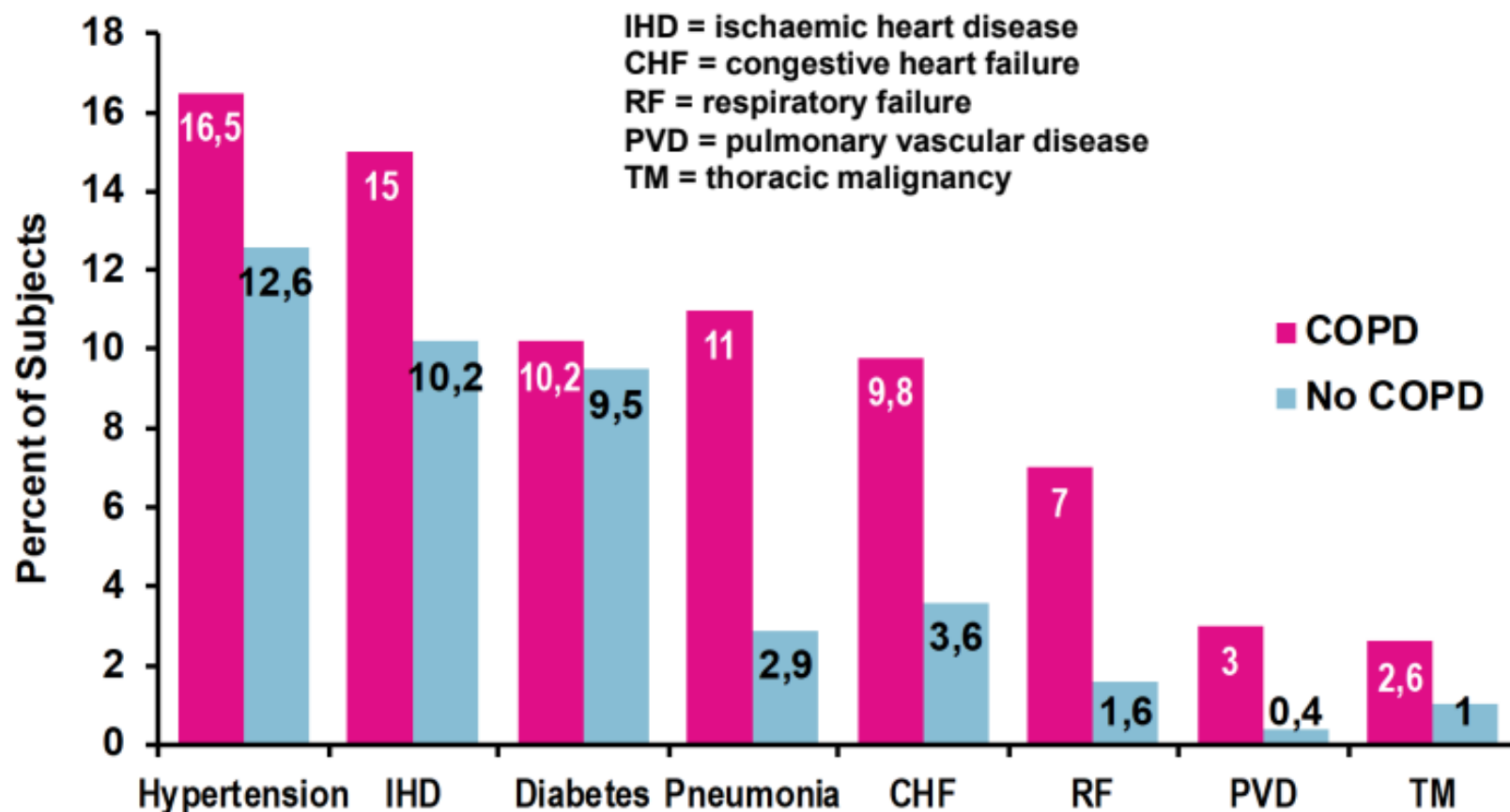
IMPACT

COPD patients are affected by larger number of multiple interlinked morbidities which clustering pattern may suggest common pathobiological processes or be utilized for screening and/or therapeutic interventions.



Eur Respir J 2015; 46: 640-650 | DOI: 10.1183/09031936.00171614

Higher Rates of Hospitalisation Due to Comorbidities in COPD



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COPD

Total national cost (Euro/year):

1999: 1.1 billion

2010: 1.5 billion

Jansson SA, et al, Chest 2002
Jansson SA et al, Resp Med 2013



ACTION

The world is off-track to deliver its commitments on NCDs

Have countries strengthened their capacities to address NCDs since 2011?

Yes

Have there been improvements in NCD health outcomes since 2011?

Yes,
but...

Are we on track to meet the commitments made at the UN General Assembly?

No

Are we on track to meet SDG Target 3.4 (NCDs) by 2030?

No

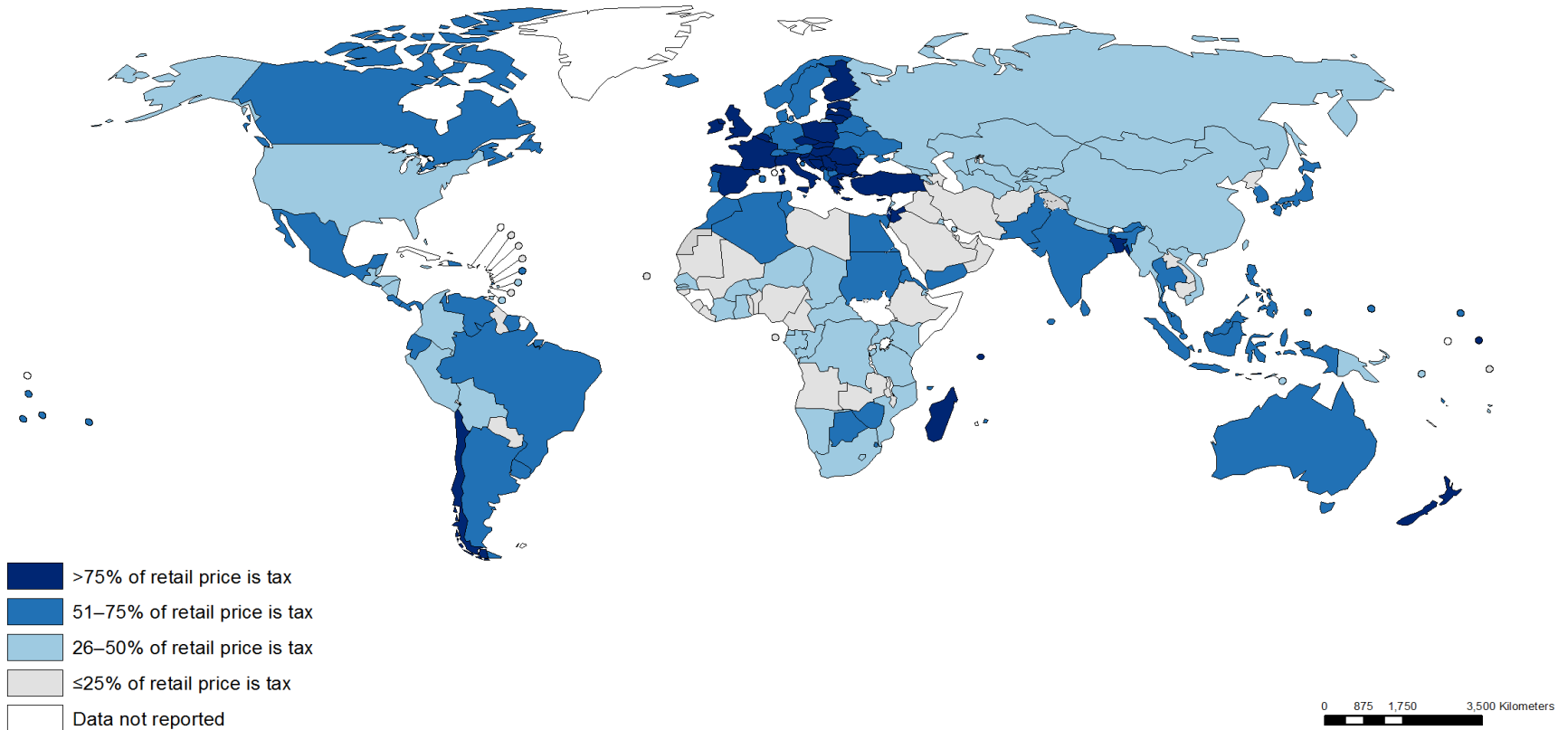


2018: "The world has yet to fulfil its promise of implementing measures to reduce the risk of dying prematurely from NCDs through prevention and treatment"



2018: "It's crucial to reach agreements on a new strategic course and approach to support countries in implementing the best buys for NCDs"

Raise taxes on tobacco, 2014



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Data Source: World Health Organization
Map Production: Health Statistics and
Information Systems (HSI)
World Health Organization



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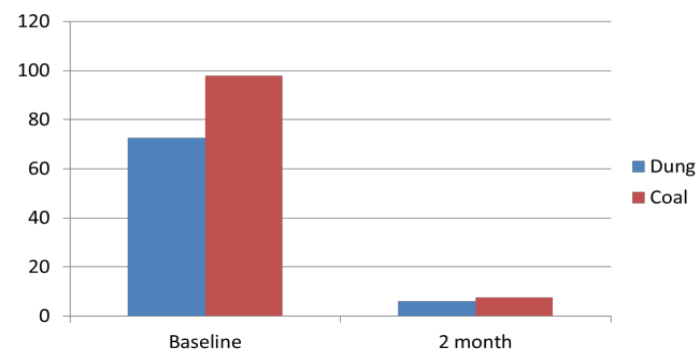


Interventions to reduce indoor air pollution from solid fuels

Source of Pollution	Home environment	User Behaviour
<ul style="list-style-type: none"> -Improved Stoves -Cleaner Fuels (Kerosene, Gas, Electricity) 	<ul style="list-style-type: none"> -Hoods and Chimneys -Windows, Ventilation holes, eaves spaces -Separate Kitchen 	<ul style="list-style-type: none"> -Fuel drying -Use of Pot lids -Good maintenance -Keeping children away from smoke



Max CO in households of highlanders before and after 2 month of Installations New Clean stoves



Manage chronic respiratory diseases

Effective interventions
with CEA >I\$100 per DALY
averted in LMICs



Symptom relief for patients with asthma with inhaled salbutamol

Symptom relief for patients with chronic obstructive pulmonary disease with inhaled salbutamol

Treatment of asthma using low dose inhaled beclometasone and short acting beta agonist

Other recommended
interventions from WHO
guidance (CEA not
available)



Access to improved stoves and cleaner fuels to reduce indoor air pollution

Cost-effective interventions to prevent occupational lung diseases, for example, from exposure to silica, asbestos

Influenza vaccination for patients with chronic obstructive pulmonary disease

OUR POLICY IS PATIENT CENTRED
CARE, SO YOU HAVE TO FILL OUT
FORMS, AB6-12, MR7-9 AND XE113.

UMM DON'T YOU MEAN PAPER
CENTRED CARE.



CHAT scan

just chat with the person!

Standardized protocols
Operational at primary care
Availability of peak flow meters
Access to medicines
Patient education



GLOBAL ALLIANCE AGAINST CHRONIC RESPIRATORY DISEASES

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