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Burden of Disease caused by Opioid Use disorders in the Americas Region

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Sources of Information:

1. The WHO's Global Health Estimates (GHE),
series 2000-2019

2. The Global Burden of Disease, Injuries and Risk Factors (GBD):
Multinational collaborative study University of Washington, Seattle; series 1990-2021



- **450k deaths due to opioid use**

Drug type	Drug use disorders	HIV	HBV	HCV	RTA	Suicide	Total deaths
Opioid	123 848	60 679	7 287	233 941	5 351	17 383	448 489
Cocaine	7 420	2 589	258	8 789	2 285	4 741	26 082
Amphetamine	4 454	5 427	666	21 345	9 214	5 555	46 661
Cannabis	–	–	–	–	14 206	–	14 206
Other	46 035	346	56	1 637	–	–	48 074
All drugs	181 758	69 040	8 267	265 711	31 056	27 679	583 511



Approach to the definition and uses of the burden of disease indicator - DALYs

<https://www.who.int/data/gho/indicator-metadata-registry/imr-details/158>

- Mortality does not give a complete picture of the burden of disease borne by individuals in different populations.
- The overall burden of disease is assessed using the **disability-adjusted life year (DALY)**, a time-based measure that combines years of life lost due to premature mortality (YLLs) and years of life lost due to time lived in states of less than full health, or years of healthy life lost due to disability (YLDs).

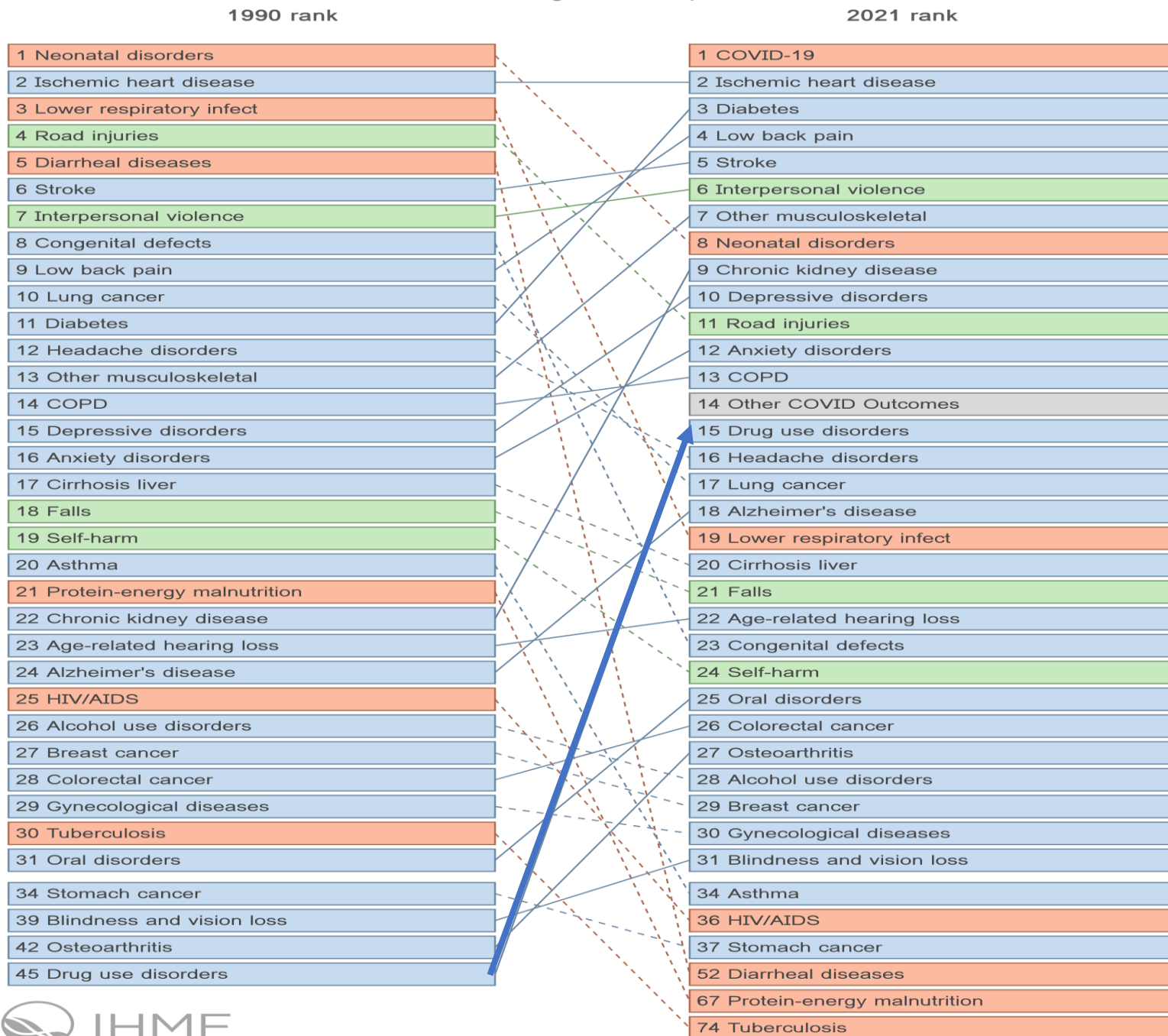


Approach to the definition and uses of the burden of disease indicator DALYs (AVAD in Spanish)

<https://www.who.int/data/gho/indicator-metadata-registry/imr-details/158>

- One DALY represents the loss of the equivalent of one year of full health. DALYs are the sum of the years of life lost to due to premature mortality (YLLs) and the years lived with a disability (YLDs) due to disease or health condition in a population.
- Despite not being the most prevalent substance use disorder, **Opioid Use disorders** is the **largest contributor** to the DALYs

America
Both sexes, All ages, DALYs per 100,000



- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases
- Injuries
- Other COVID-19 pandemic-related outcomes

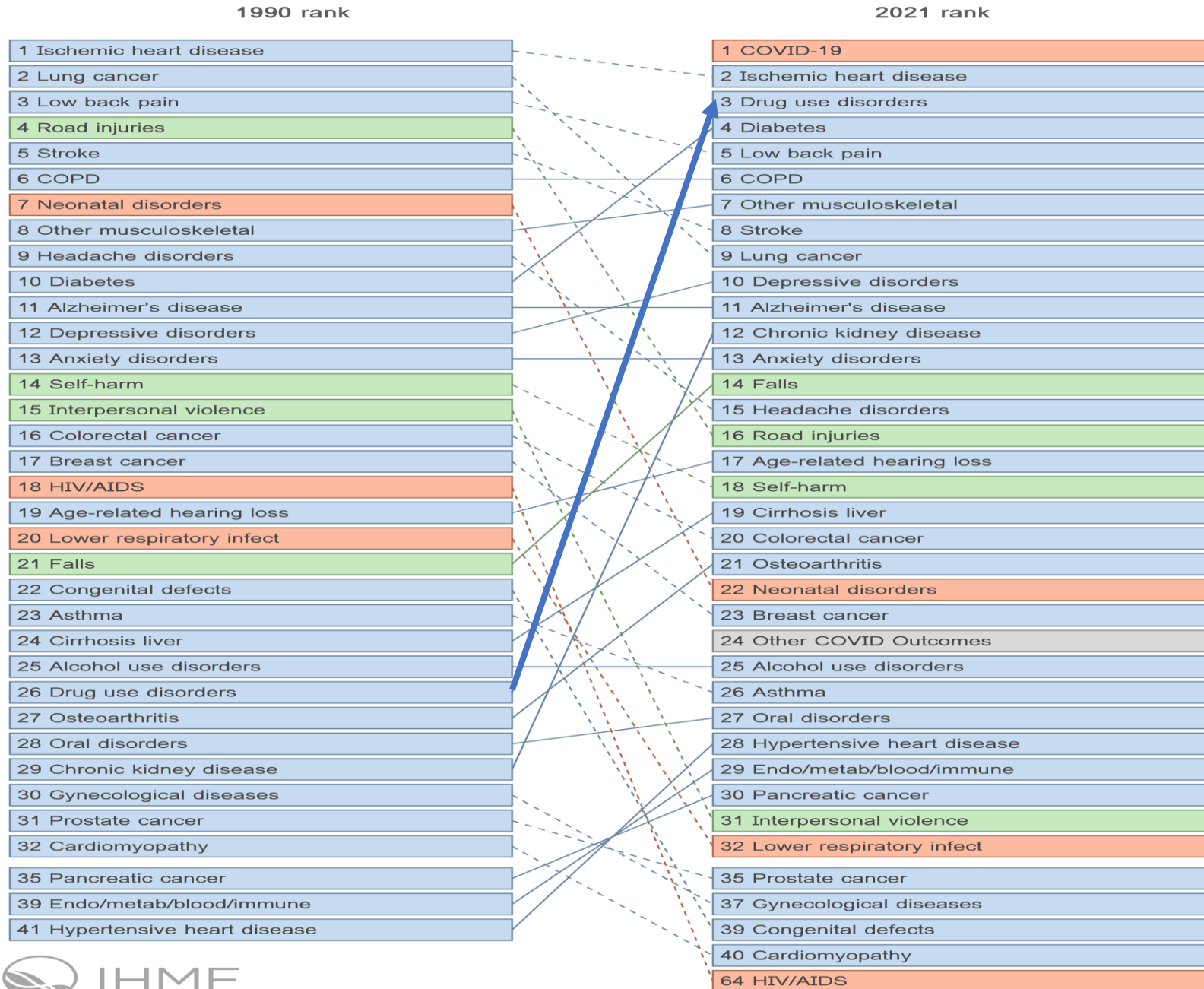
CAUSES OF DALYs IN AMERICA (level 3)

Drug Use Disorders moved from position 45th in 1990 to 15th in 2021

A 251% increase in the period, reaching 733 DALYS x 100.000 pop in 2021



High-income North America
Both sexes, All ages, DALYs per 100,000



- Communicable, maternal, neonatal, and nutritional disease:
- Non-communicable diseases
- Injuries
- Other COVID-19 pandemic-related outcomes

CAUSES OF DALYs IN NORTH AMERICA (level 3)

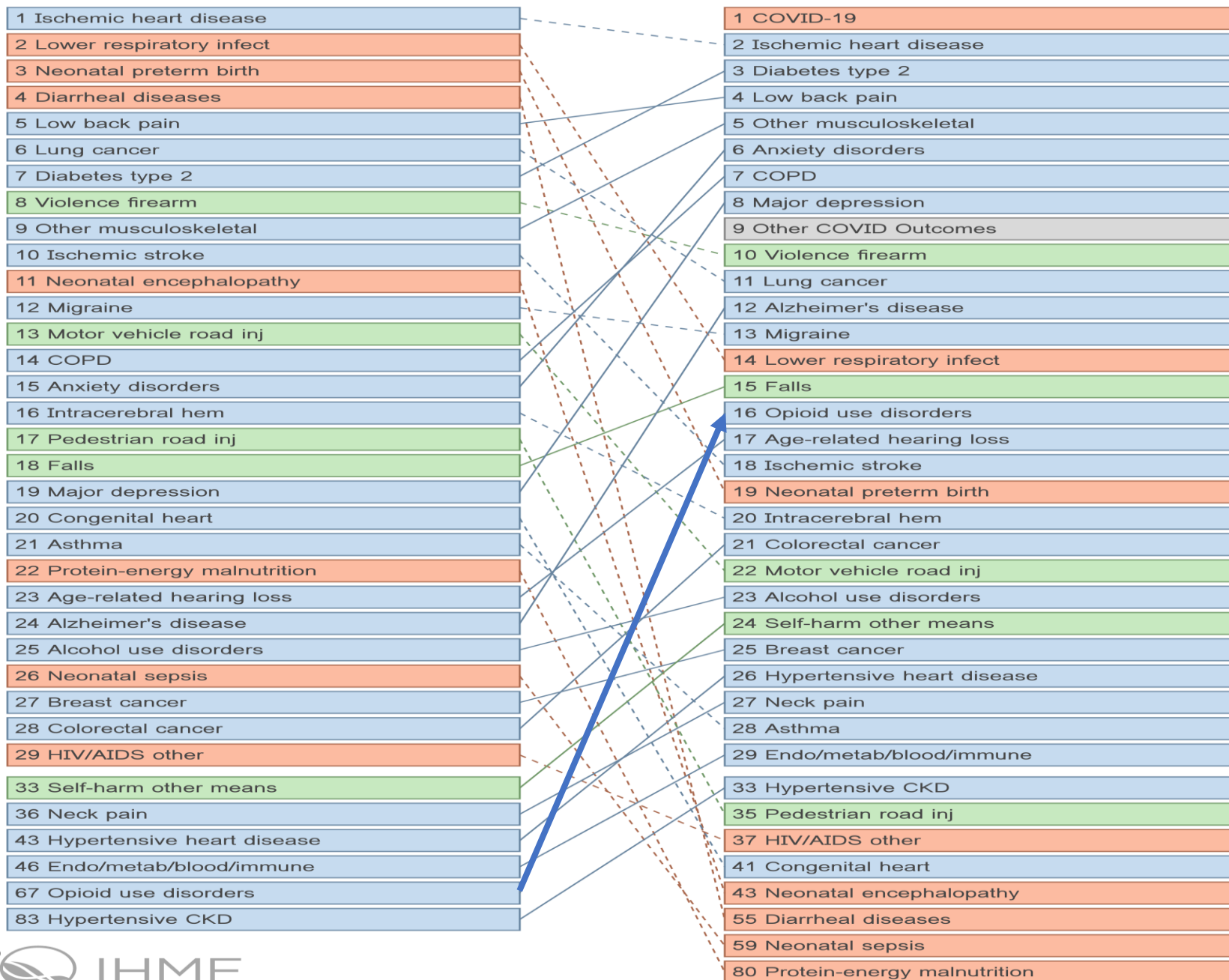
Drug Use Disorders moved from position 26th in 1990 to 3er in 2021

Increasing 380% (1.838 DALYS x 100.000)

Region of the Americas
Both sexes, All ages, DALYs per 100,000

1990 rank

2021 rank



- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases
- Injuries
- Other COVID-19 pandemic-related outcomes

CAUSES OF DALYs IN AMERICA (level 4)

Opioid Use Disorders moved up from 67th in 1990 to 16th position in 2021

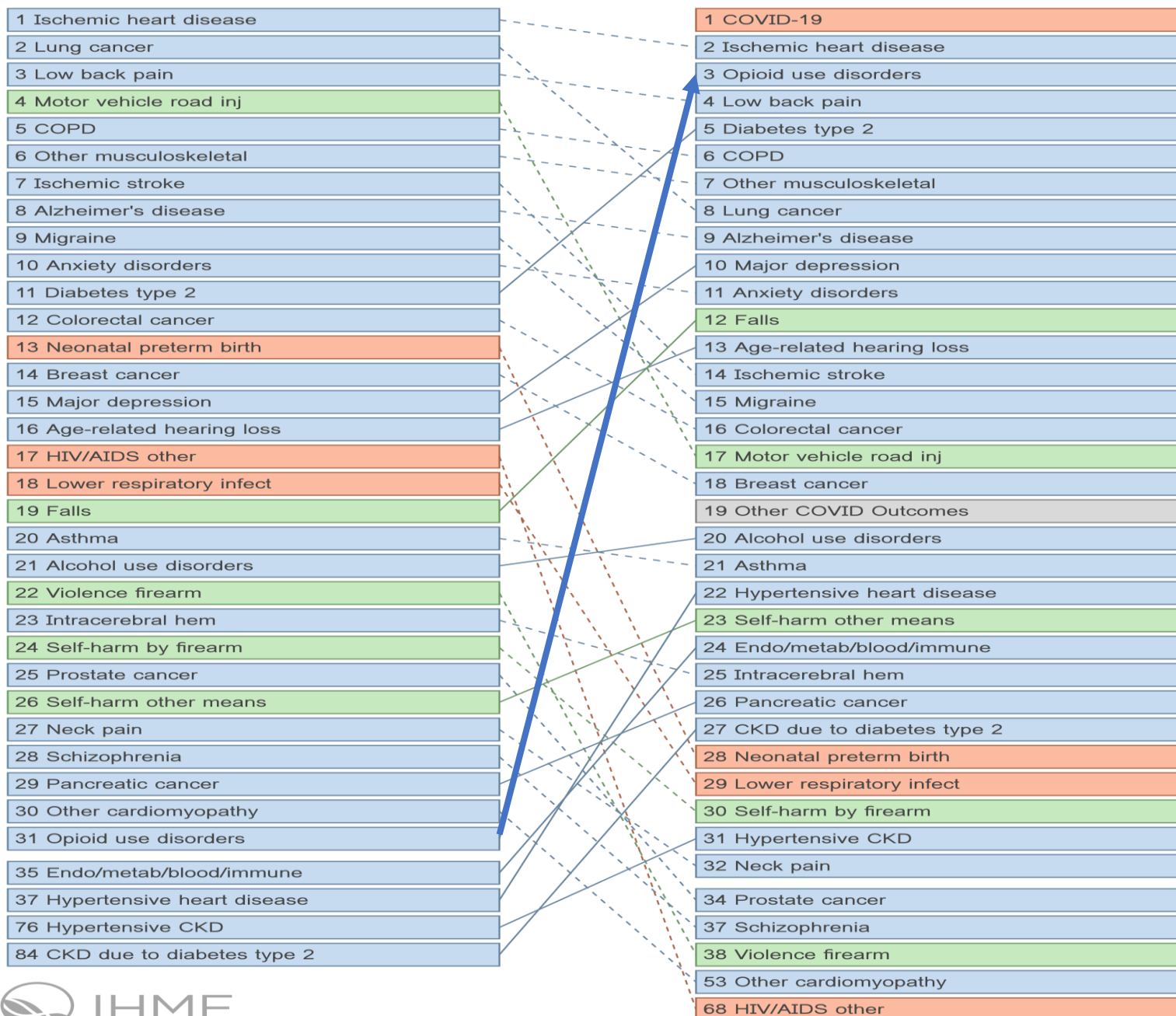
Increasing 391% (570 DALYs x 100.000)

North America
Both sexes, All ages, DALYs per 100,000



1990 rank

2021 rank



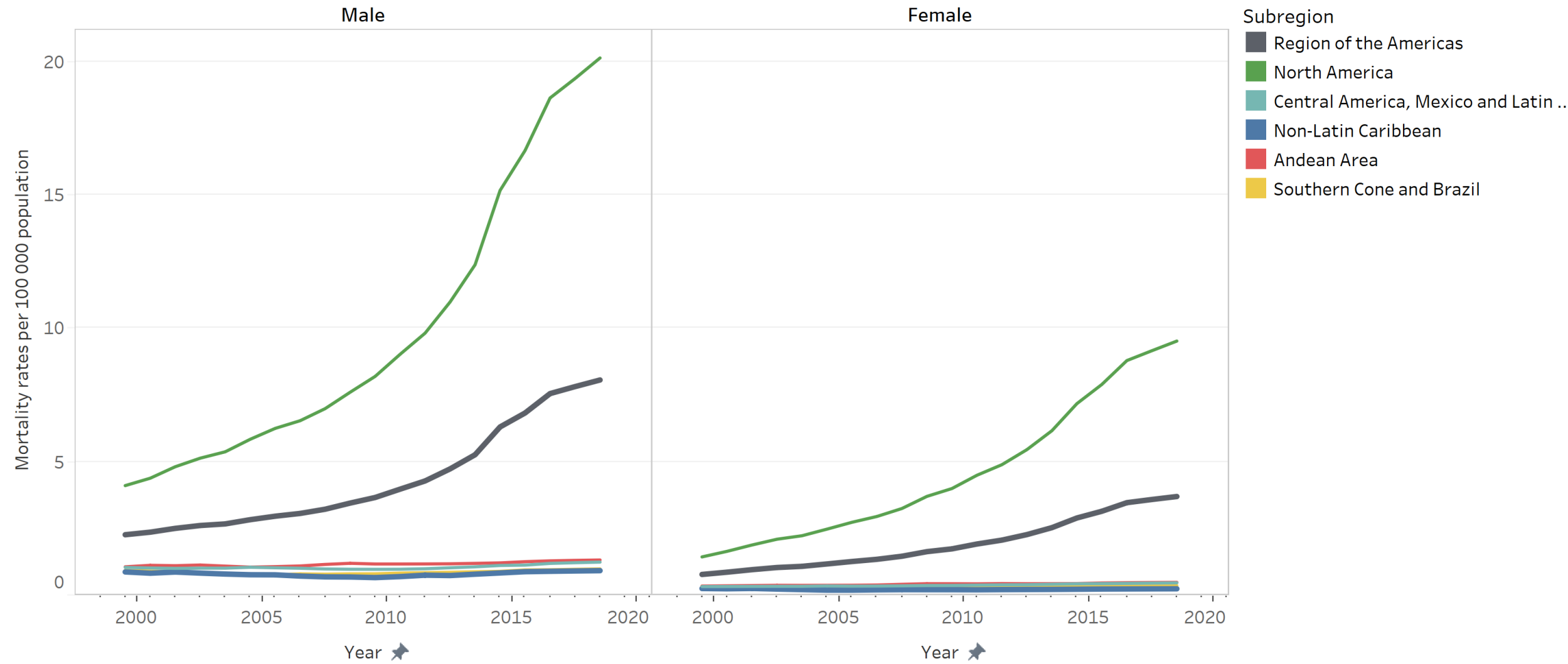
- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases
- Injuries
- Other COVID-19 pandemic-related outcomes

CAUSES OF DALYs IN NORTH AMERICA, (level 4)

Opioid Use Disorders moved up from 31st in 1990 to 3er position in 2021

Increasing 553% (1.504 DALYs x 100.000)

Trends in age-standardized rates per 100 000 population due to opioid use disorder by sex across subregions of the Americas, 2000-2019



Source: Global Health Estimates 2020, World Health Organization (WHO).

Disability-Adjusted Life Years (DALYs)

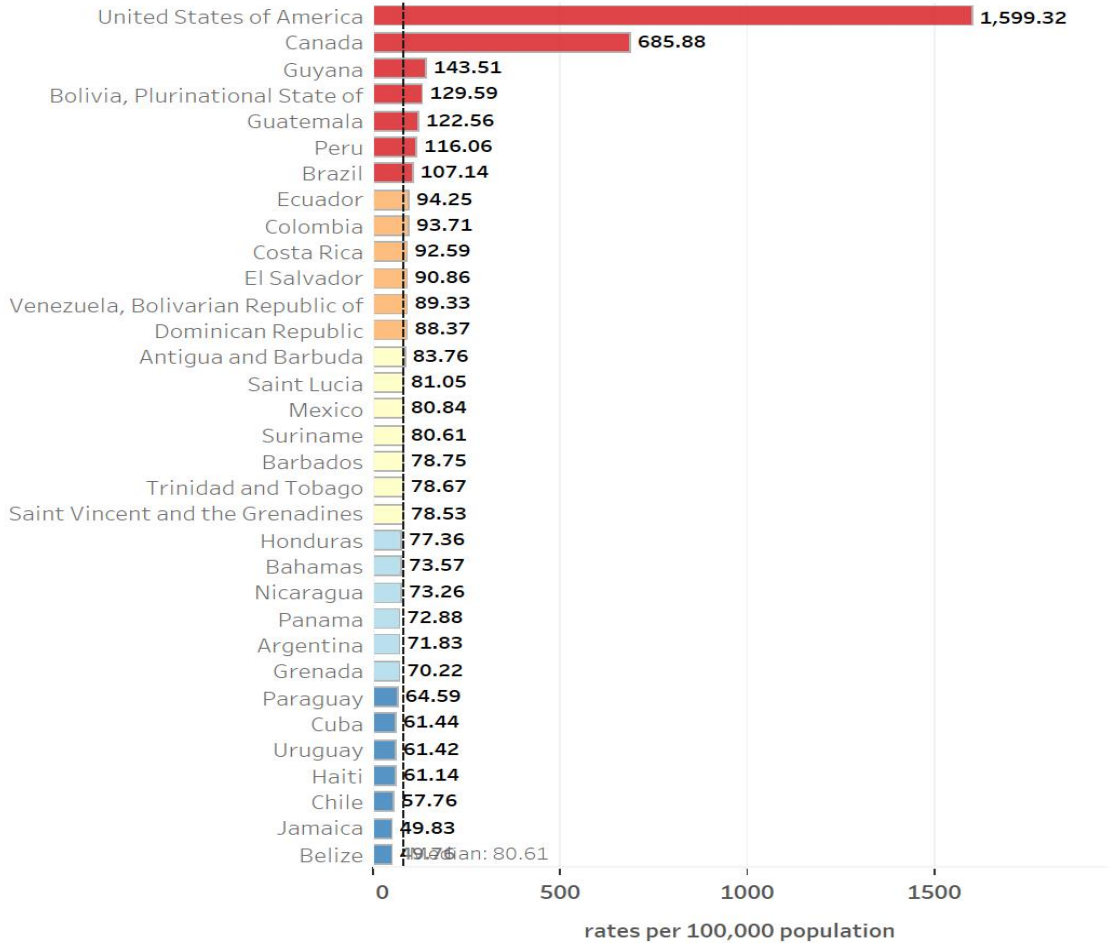
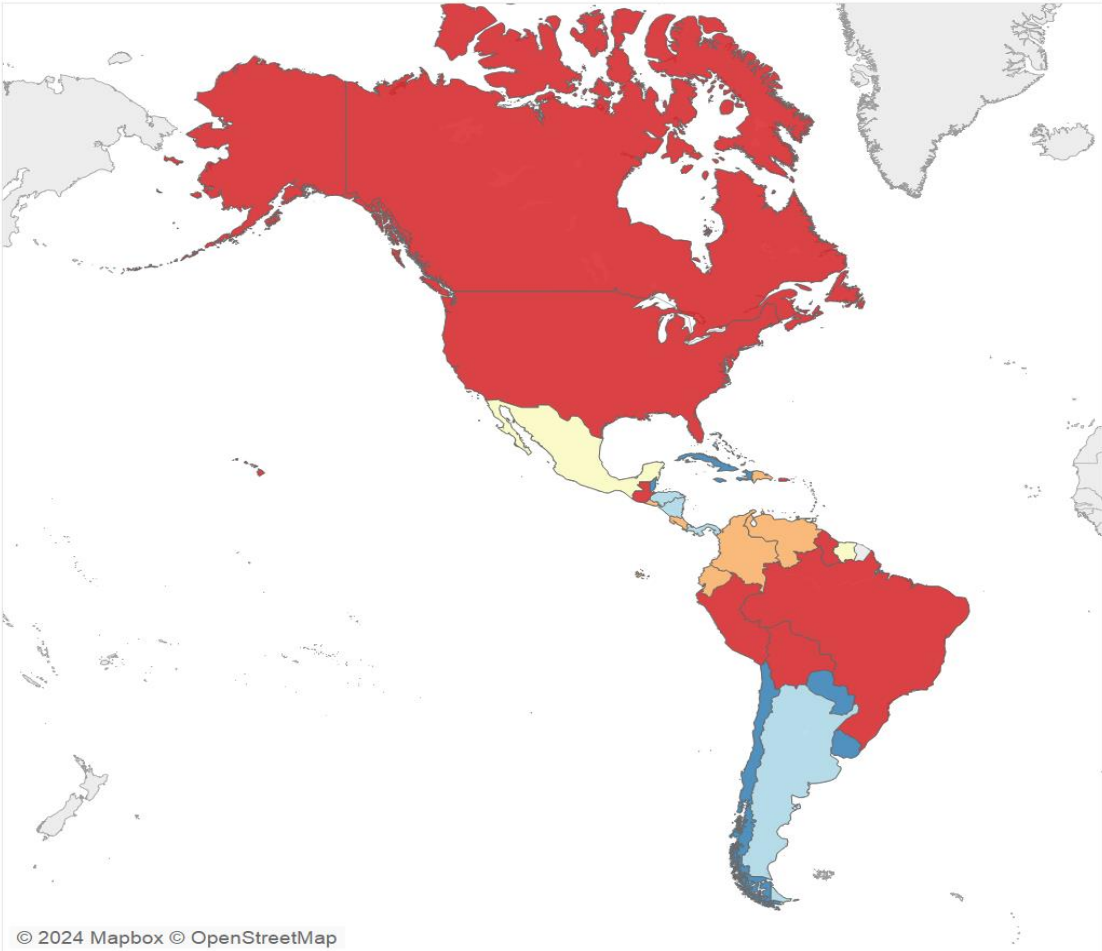
Burden of Drug Use Disorders: level by country

Rates per 100,000 population



Measure	Cause	Age group	Sex	Year
Disability-Adjusted Life Years (DALYs)	II.E.5.a. Opioid use disorders	Age-standardized	Both sexes	2019

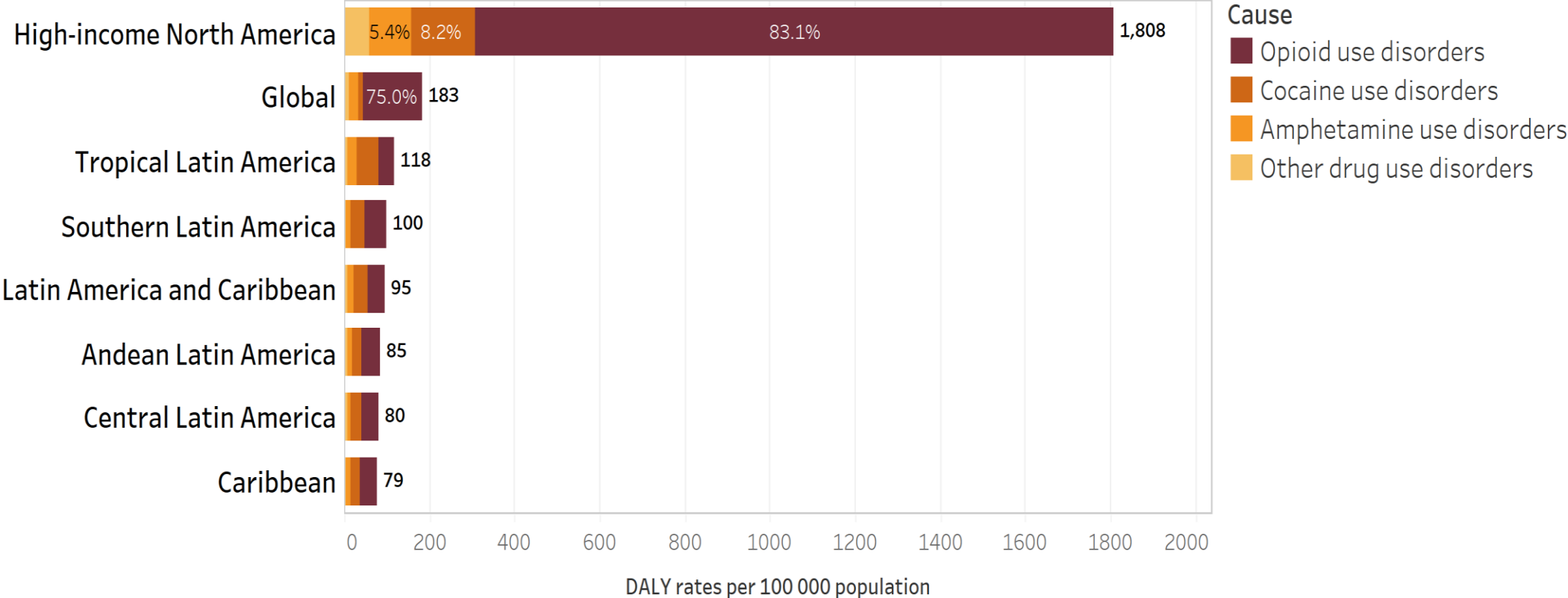
Quintiles ■ Quintile 1: 0 to 20% ■ Quintile 2: 20 to 40% ■ Quintile 3: 40 to 60% ■ Quintile 4: 60 to 80% ■ Quintile 5: 80 to 100%



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Disability-adjusted Life Years (DALYs) rates (age-standardized per 100,000 population) due to drug use disorders in the Region of the Americas, 2021

Distribution of DALYs by drug type across subregions

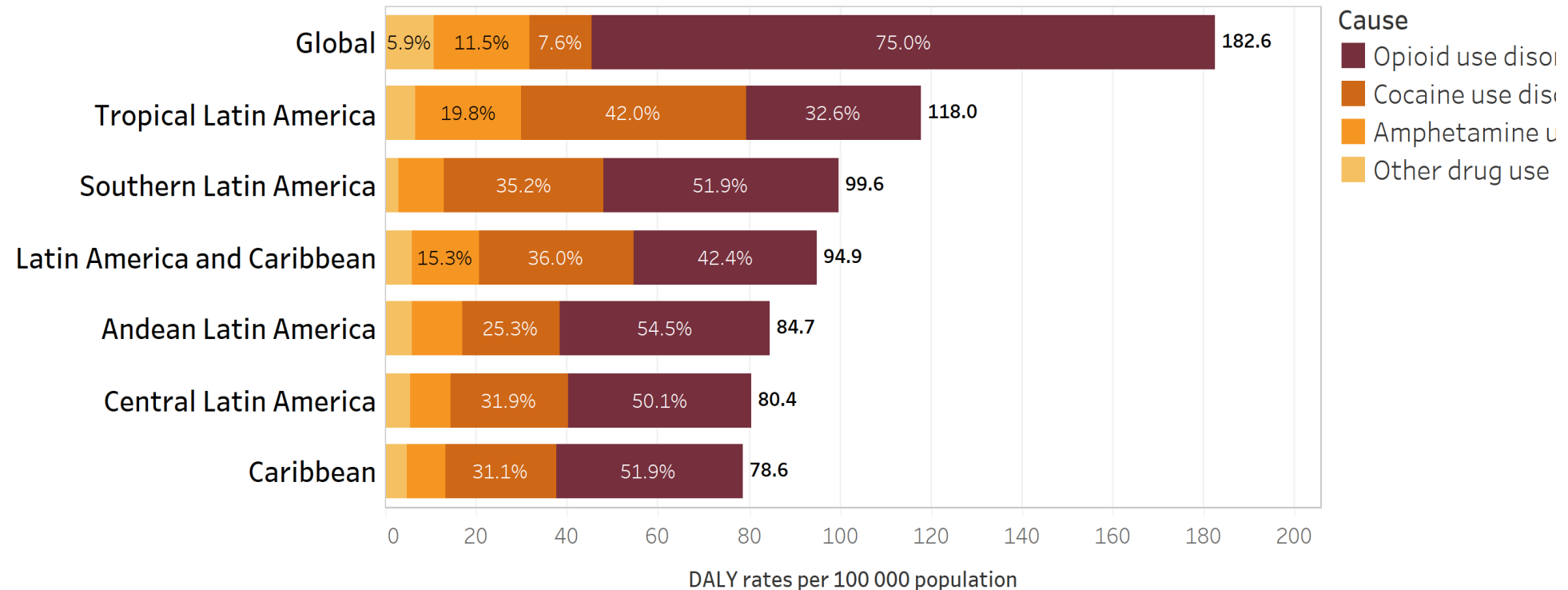


Source: Global Burden of Diseases, Injuries and Risk Factors Study.

- **Central Latin America:** Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panamá, Venezuela
- **Andean Latin America:** Bolivia, Ecuador, Perú
- **Tropical Latin America:** Brazil, Paraguay
- **Southern Latin America:** Argentina, Chile, Uruguay

Disability-adjusted Life Years (DALYs) rates (age-standardized per 100,000 population) due to drug use disorders in the Region of the Americas, 2021

Distribution of DALYs by drug type across subregions (excluding High-income North America)

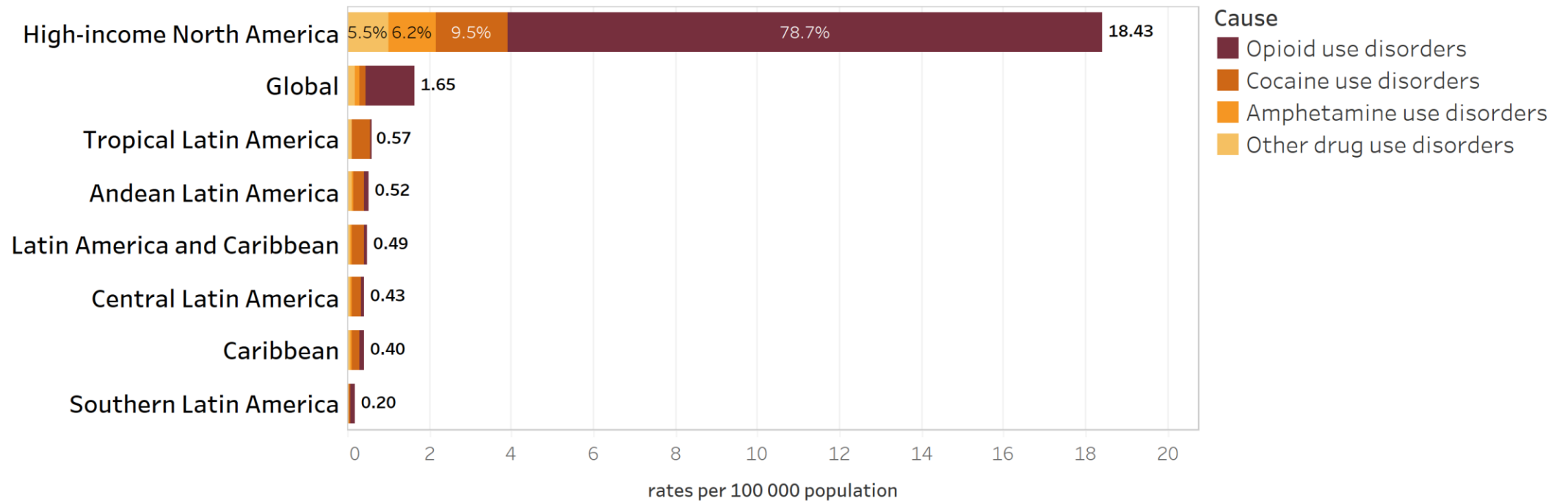


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Age-standardized deaths rates per 100,000 population caused by drug use disorders in the Region of the Americas, 2021

Distribution of deaths by drug type across subregions

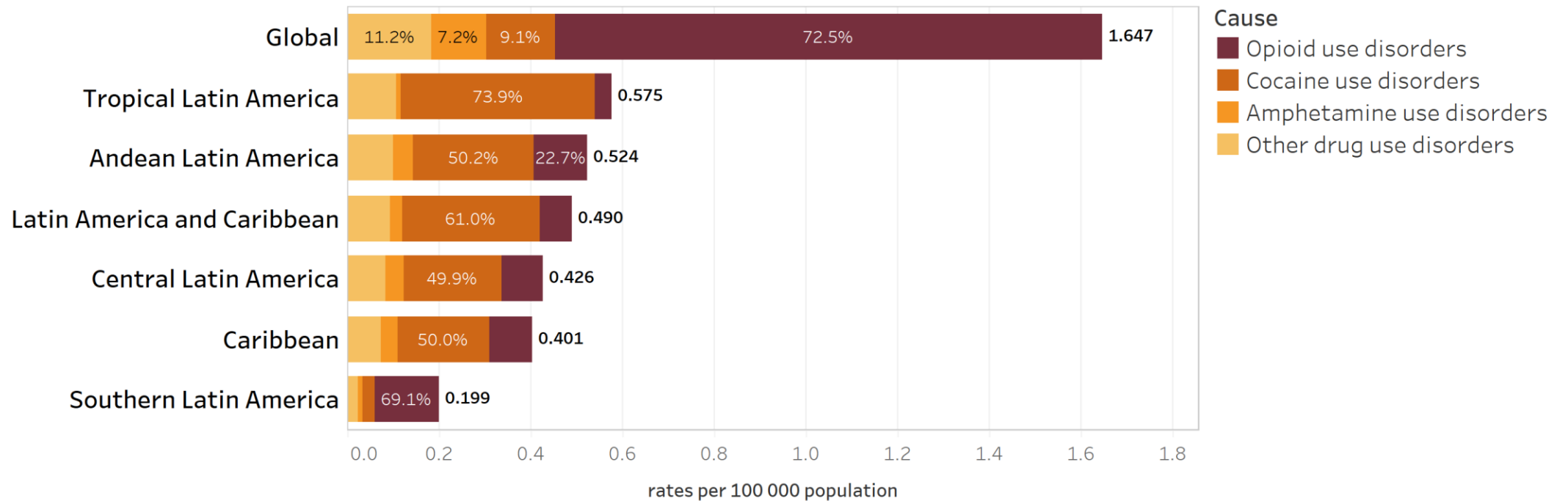


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In Brief:

- ✓ The burden of disease - The Disability-Adjusted Life Year (DALY) is a crucial indicator for prioritizing public health policies. It highlights the significant impact of drug use disorders on population health.
- ✓ The mortality, and disease burden caused by opioid use disorders in the Region of the Americas are higher than the global average, a situation primarily driven by North American countries.
- ✓ The burden of disease – Opioid use disorders accounts for about 50% of DALYs due to drug use disorders across American subregions excluding North American countries.
- ✓ It is necessary to improve access to comprehensive prevention and treatment programs in the region to reduce the burden of disease caused by opioid consumption, and we will surely raise this next with the presentation of our invited experts.

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