



Pan American
Health
Organization



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REGIONAL OFFICE FOR THE Americas

The Burden of Mental Disorders in the Region of the Americas, 2018

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The burden of mental disorders in the Americas

- Mental, neurological, substance use disorders and suicide are:
 - The largest cause of disability globally
 - An important cause of mortality: up to 8% of years of life lost
- Usual assessment methods lead to underestimates:
 - Exclude personality disorders, self-harm and suicide, somatization and pain disorders, and related neurologic syndromes
 - Exclude nearly all mortality caused by mental disorders
 - Current approach: Combining psychiatric and neurologic disorder burden, including suicide and self-harm, personality, somatization and pain disorder

The burden of mental disorders in the Americas

% of total disability adjusted life years in America

59%

Noncommunicable diseases

19%

MNSS

12%

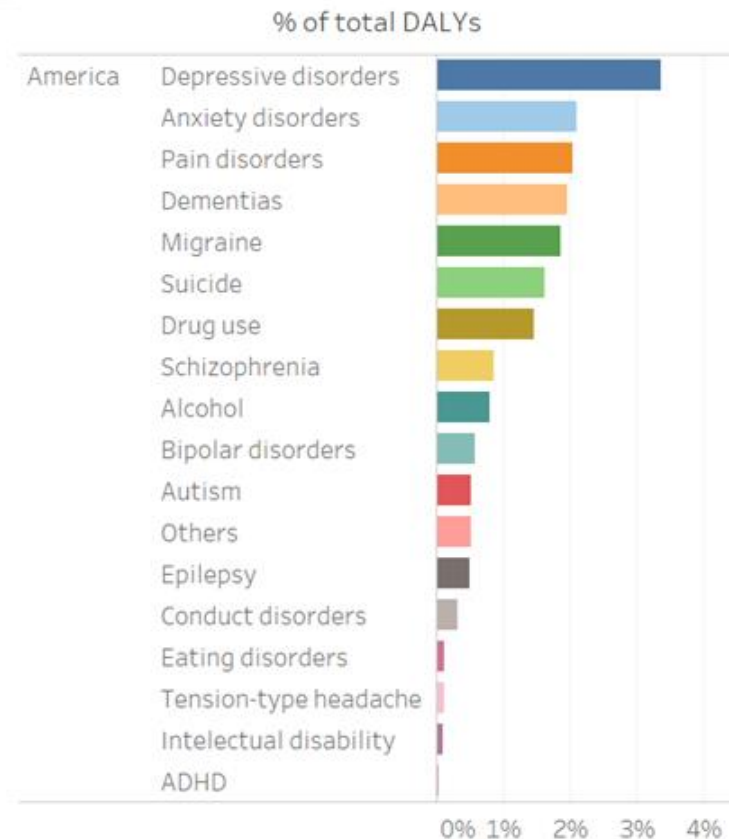
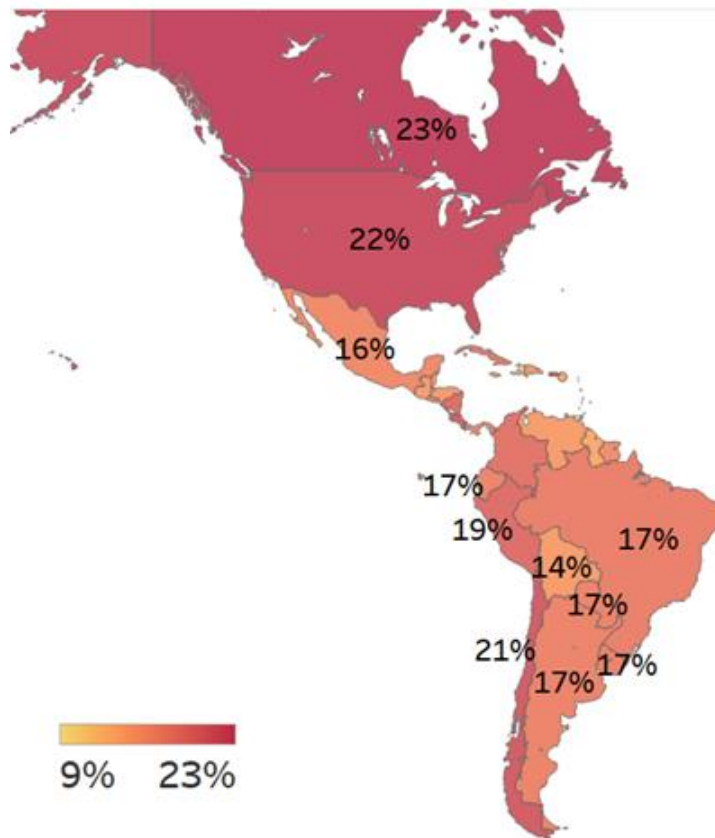
Communicable,
mother, child
and nutritional
disorders

10%

Injuries

The burden of mental disorders in the Americas

Mental, behavioral, substance use, and neuropsychiatric disorders DALYs
(as % of total DALYs by country)



The burden of mental disorders in the Americas

% of total years lived with disability in America

54%

Noncommunicable diseases

34%

MNSS

8%

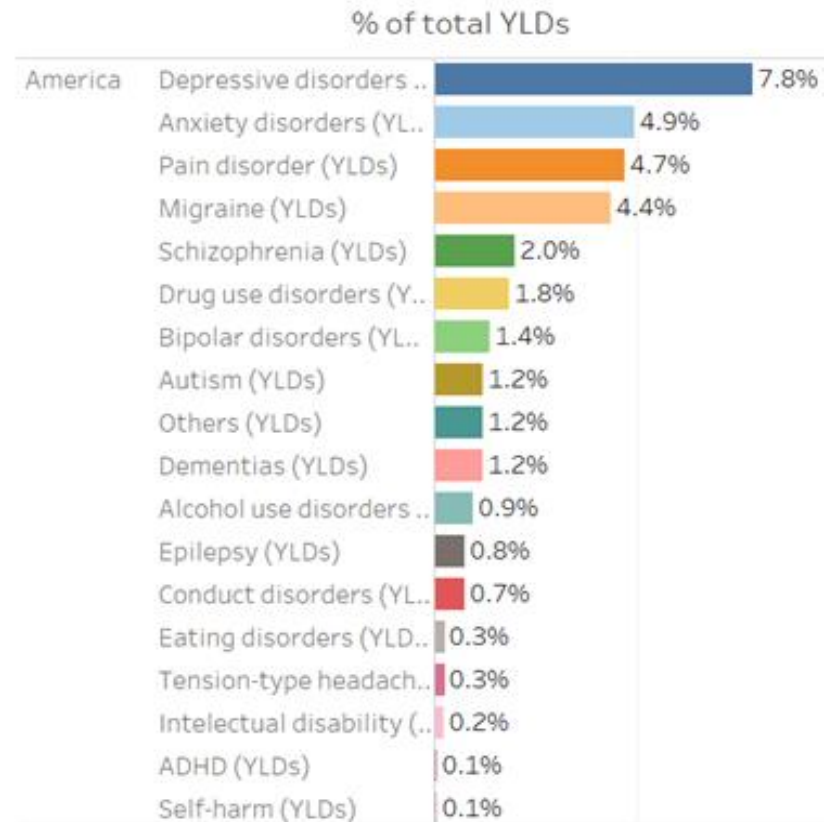
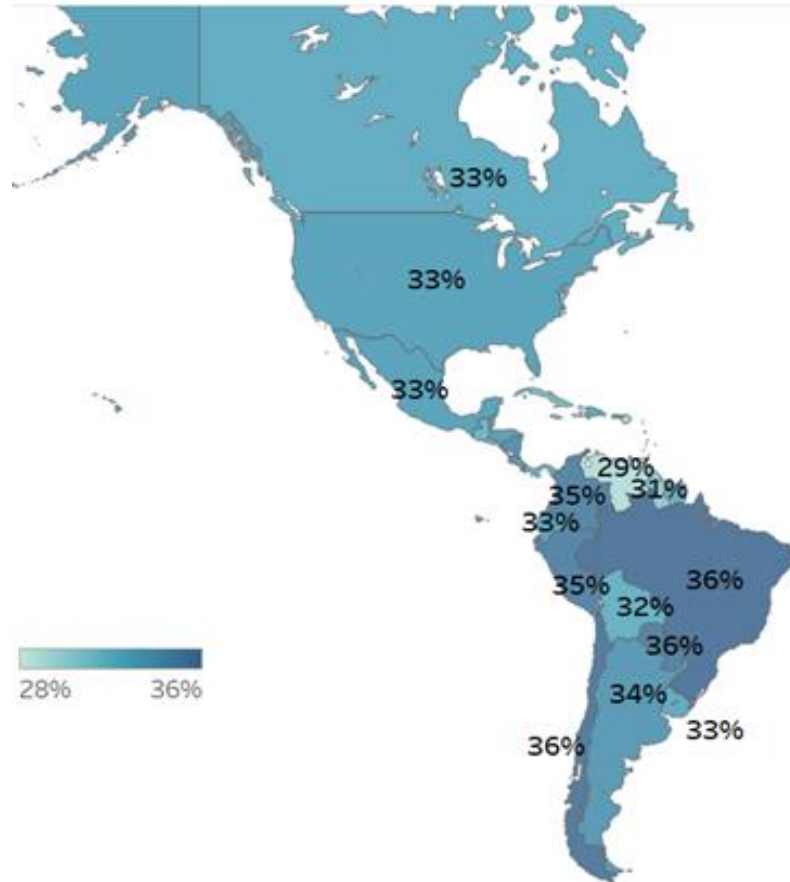
Communicable, maternal,
child and nutritional disorders

4%

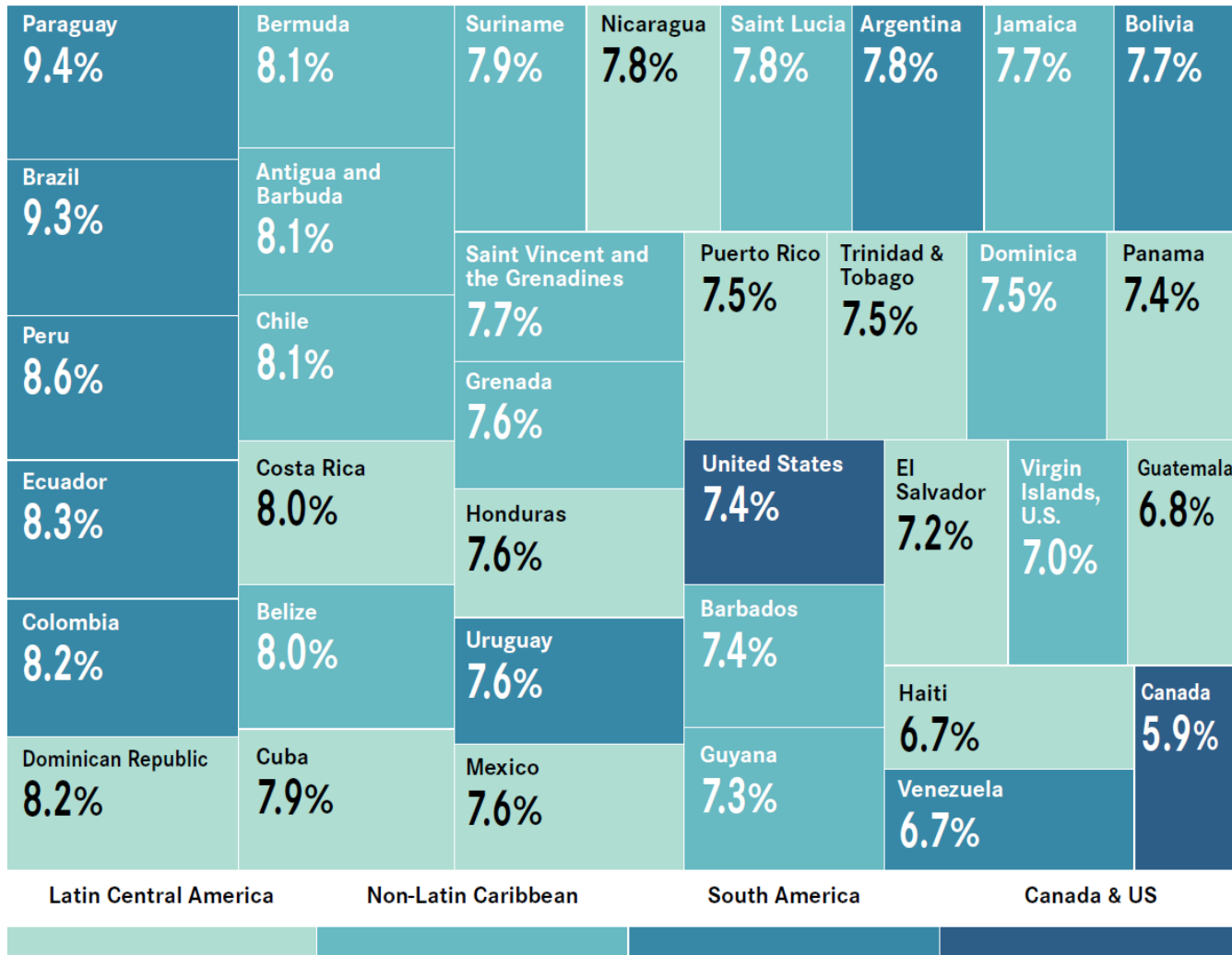
Injuries

The burden of mental disorders in the Americas

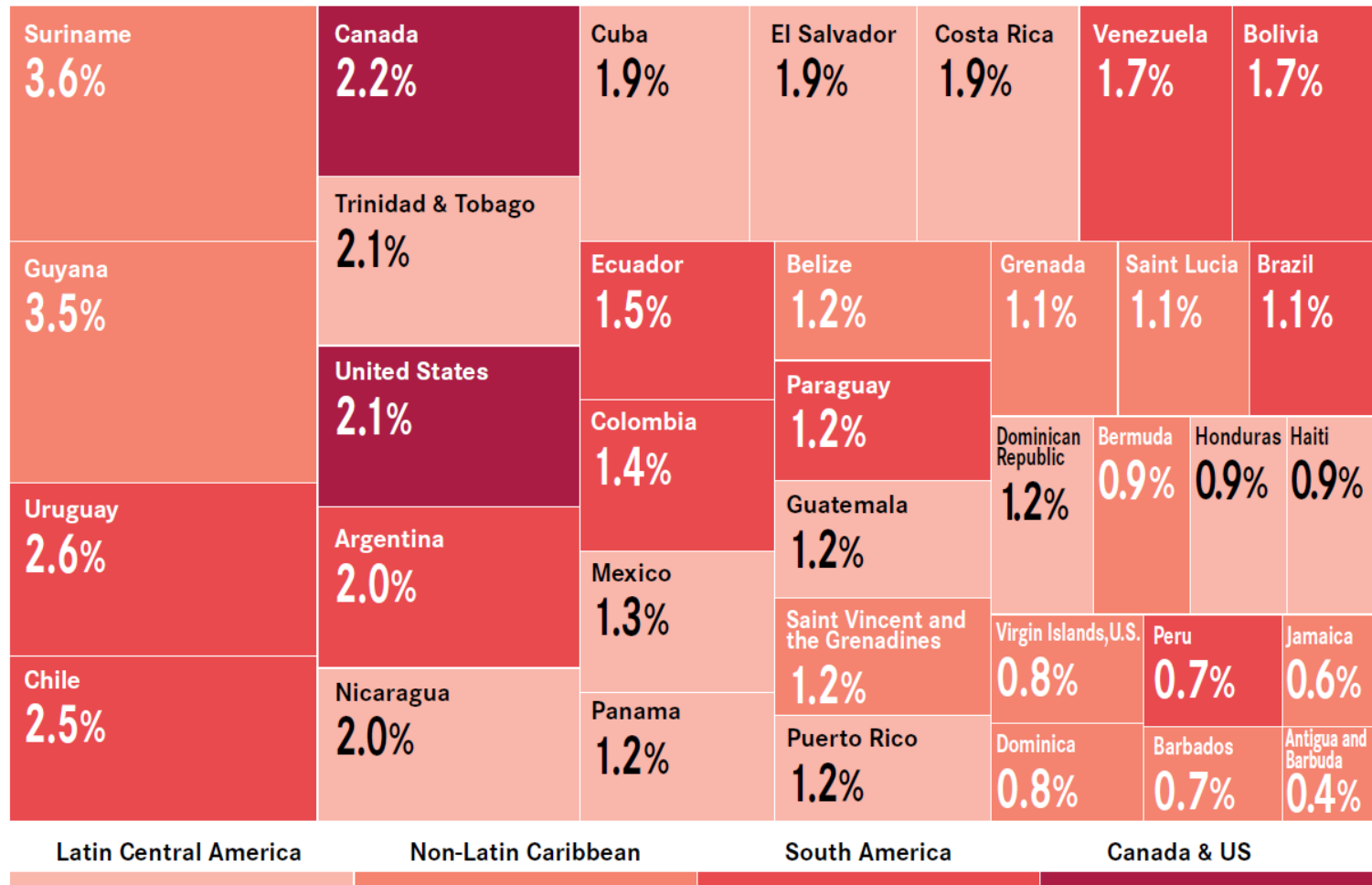
Mental, behavioral, substance use, and neuropsychiatric disorders YLDs
(as % of total YLDs by country)



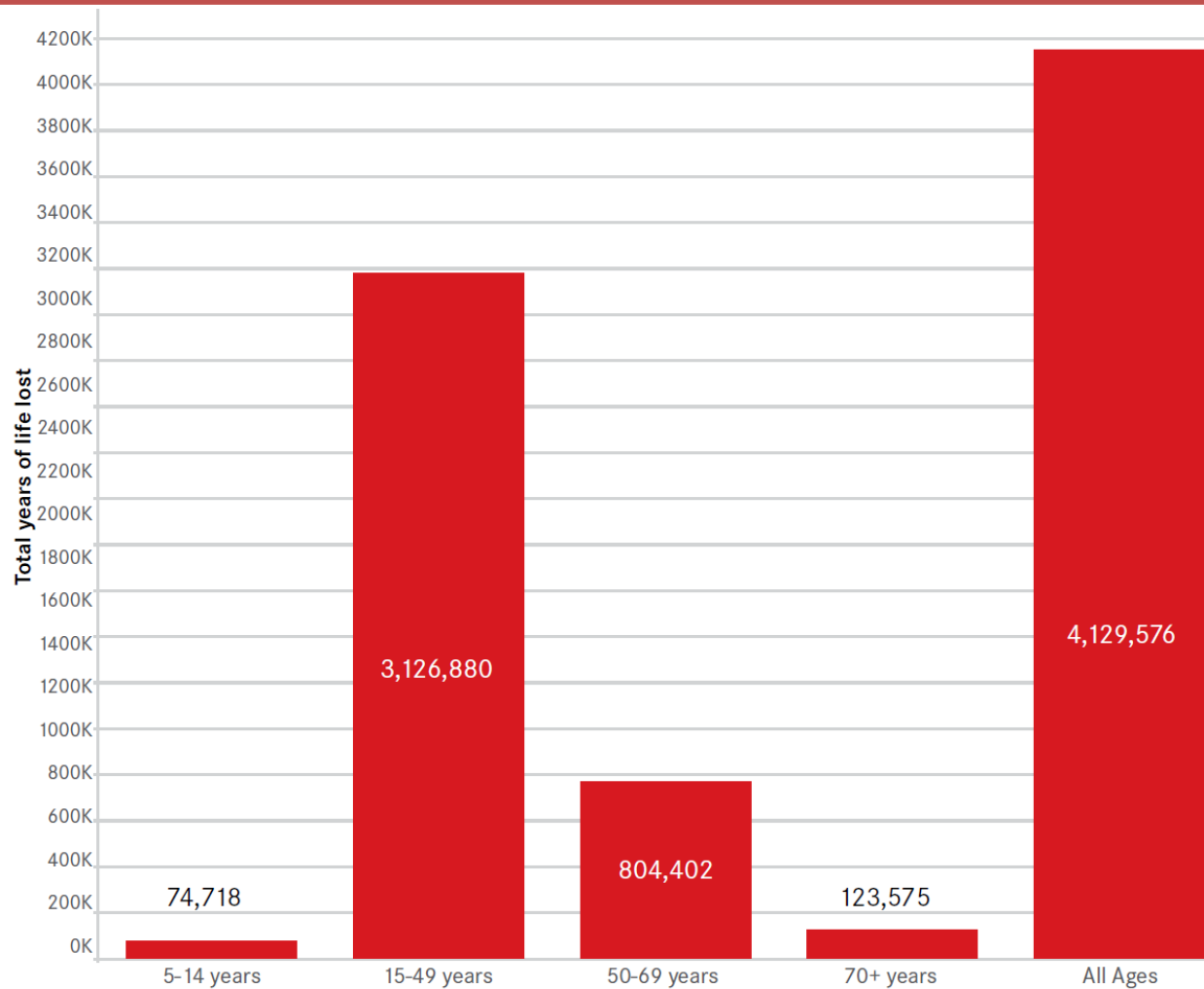
Common mental illness and suicide: Depression YLDs as a % of total disability



Common mental illness and suicide: Suicide DALYs as a % of total disability

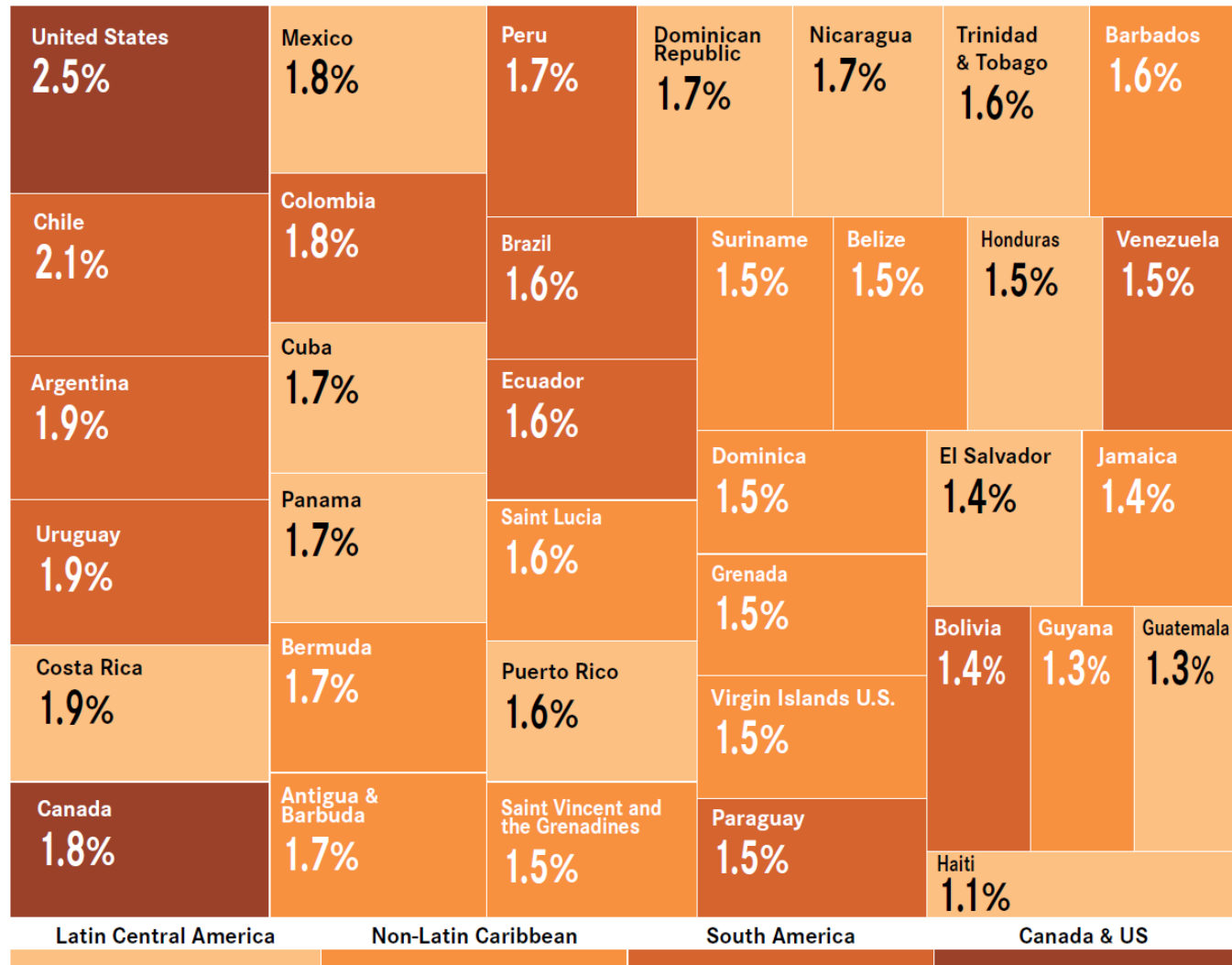


Common mental illness and suicide

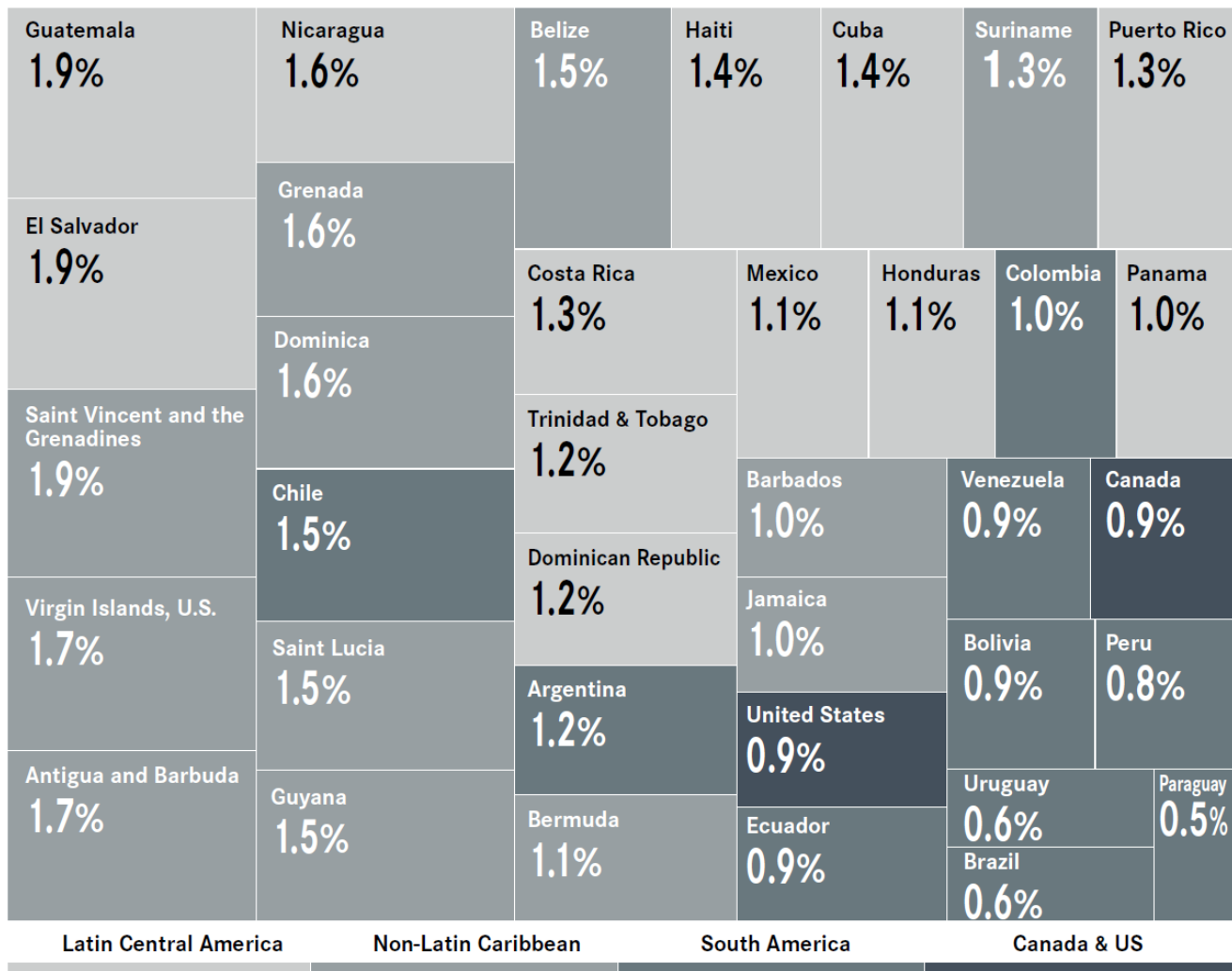


*Columns represent total YLLs in the Americas for four separate age groups, and a fifth column for all ages.

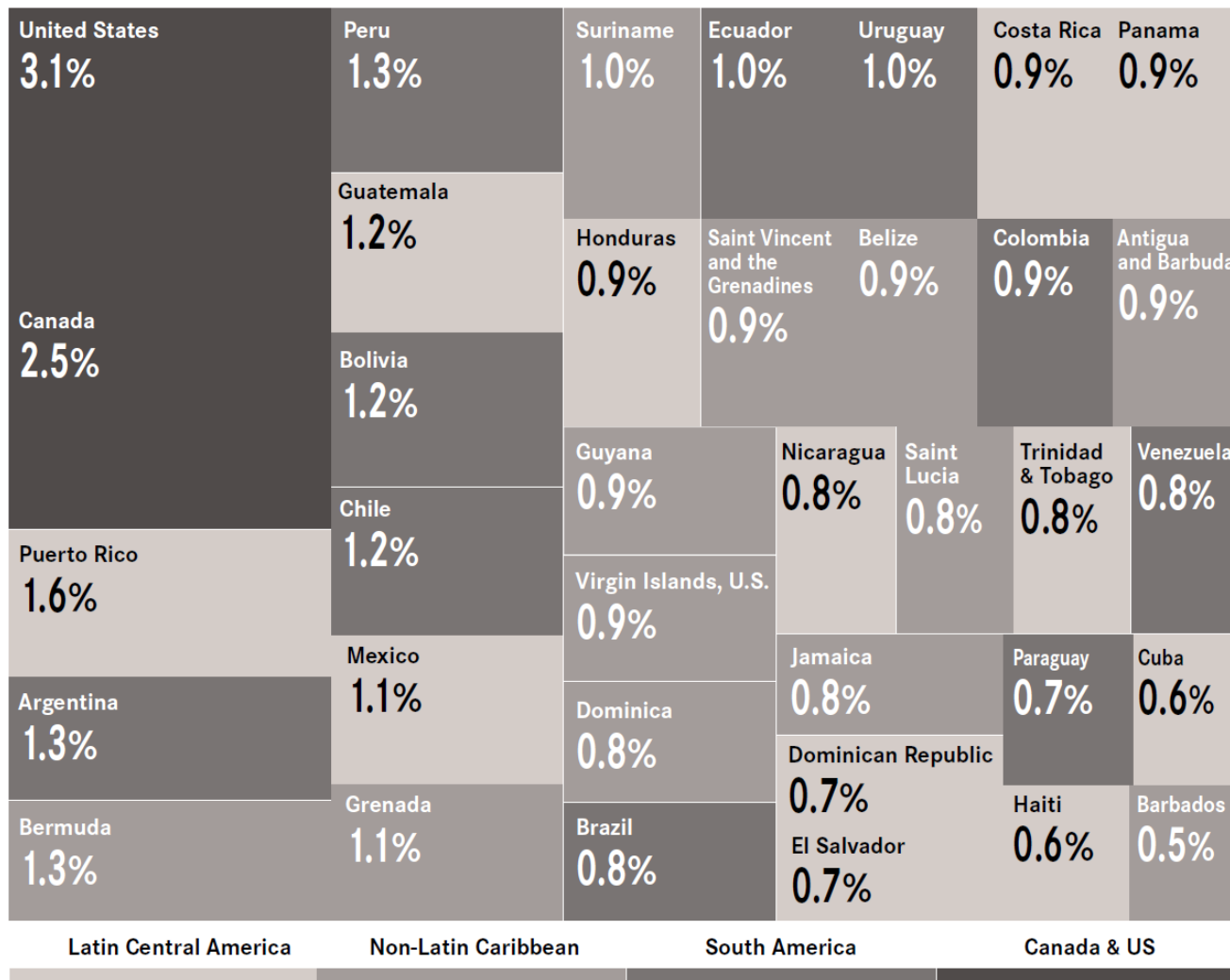
Severe mental illness: Schizophrenia YLDs as a % of total disability



Substance use: Alcohol use disorders YLDs as a % of total disability

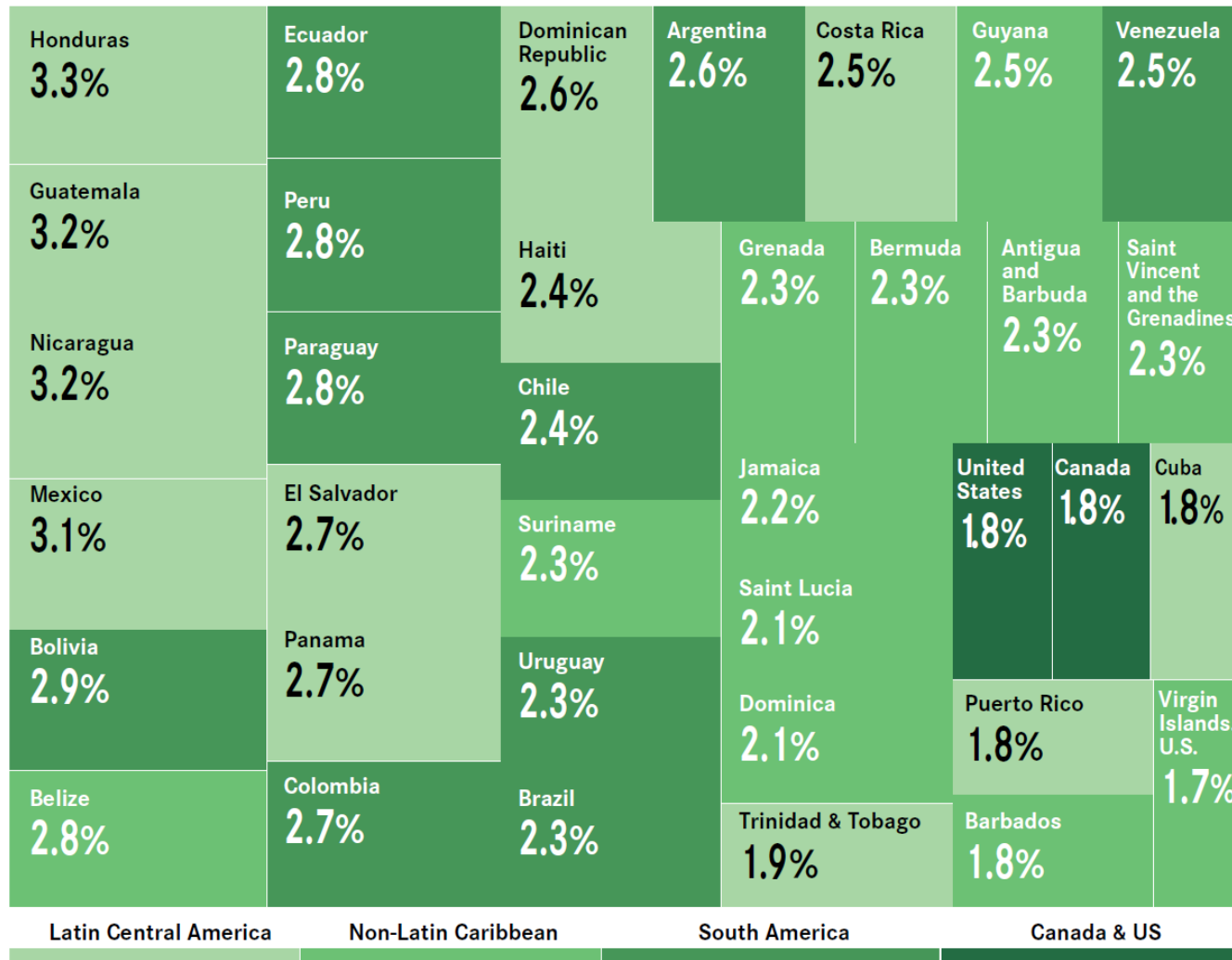


Substance use: Drug use disorders YLDs as a % of total disability

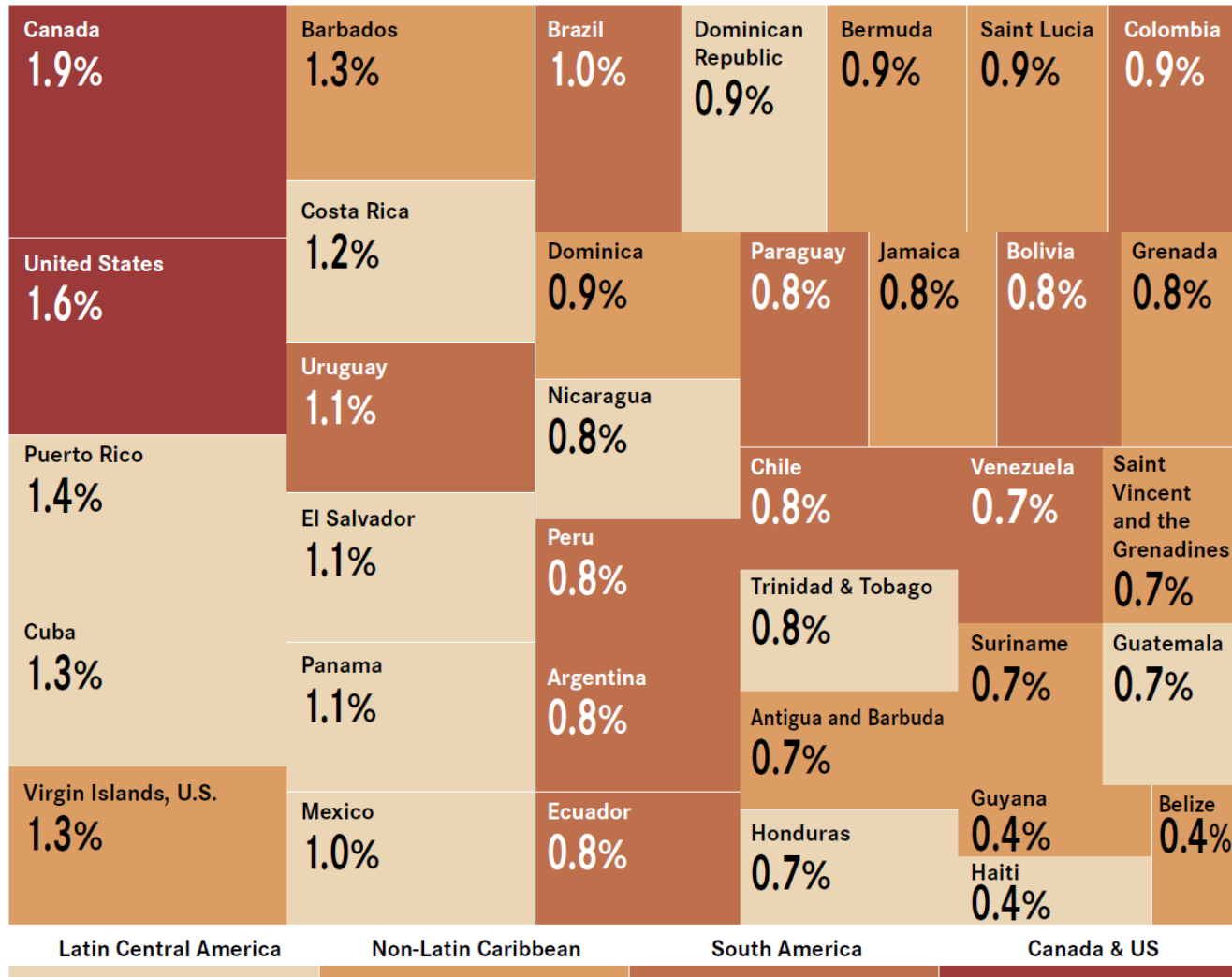


Childhood onset disorders

YLDs as a % of total disability

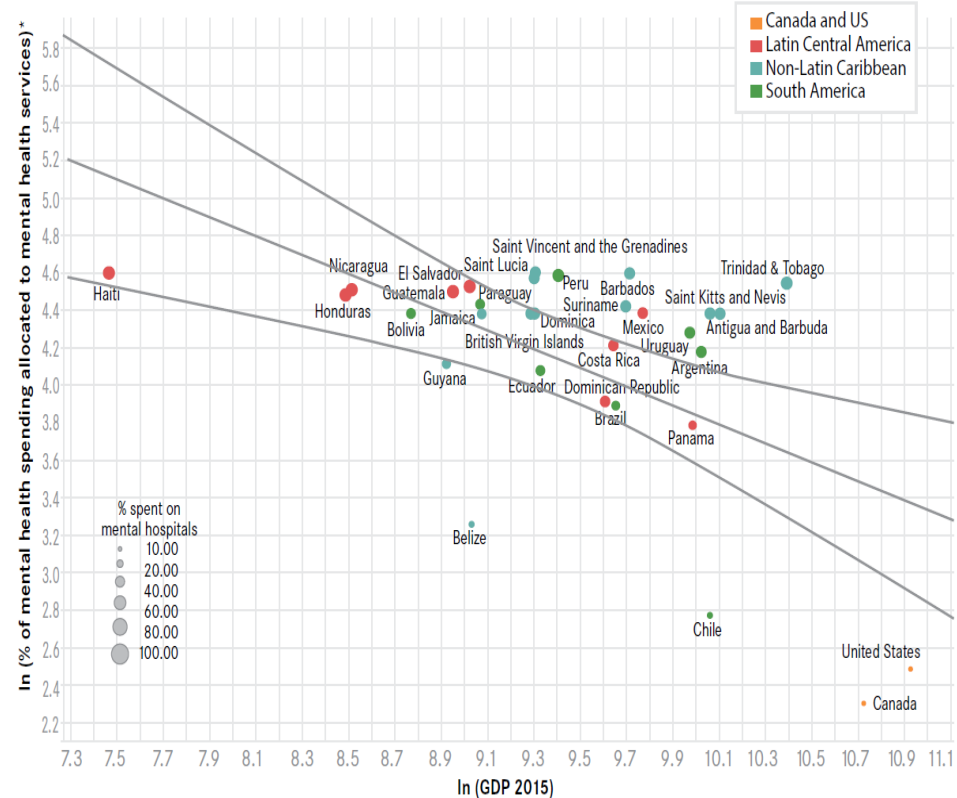
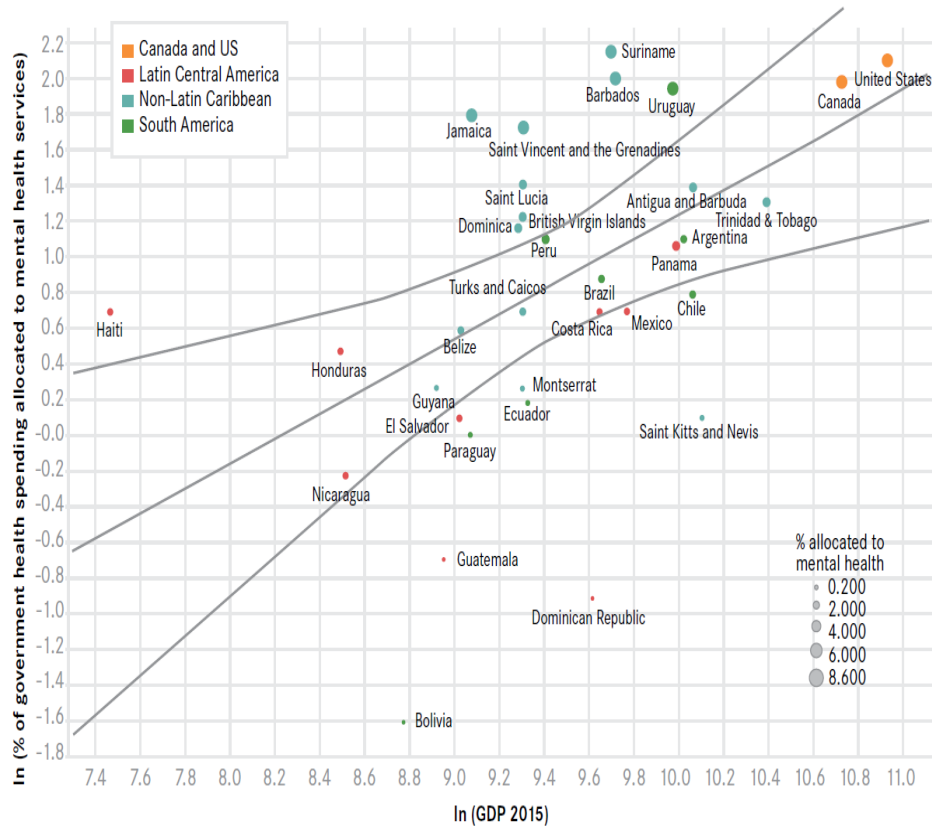


Neurocognitive disorders YLDs as a % of total disability



Health system response in the Americas

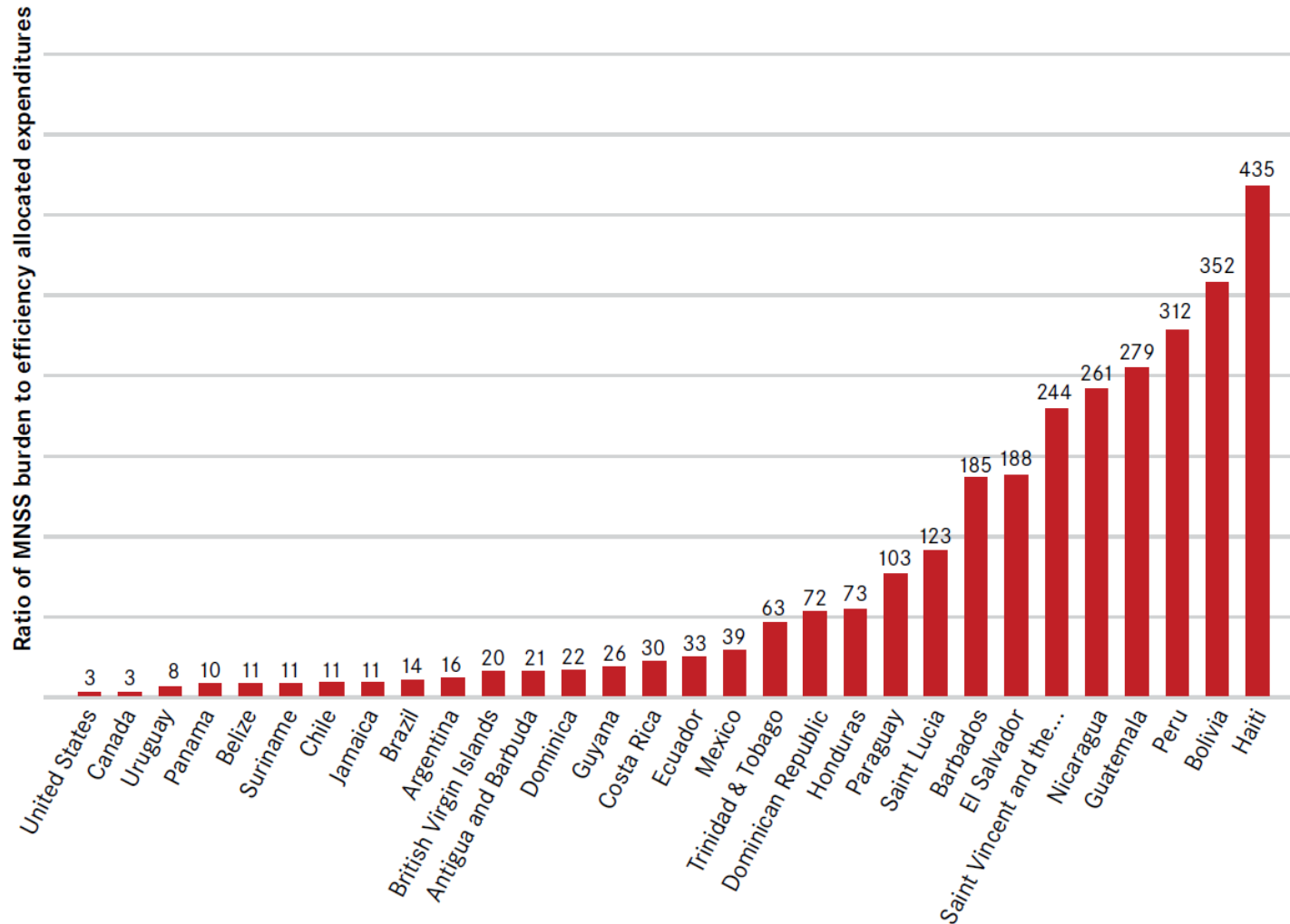
Higher GDP means higher % of health funds to MNSS, and less % of MNSS funds to mental hospitals



*Linear model: $\ln(\% \text{ of health expenditures spent on MNSS}) = 0.68 \cdot \ln(\text{GDP}) - 5.6$. $R^2=0.26$. $p=0.0036$. Confidence bands show upper and lower 95% confidence lines.

*Linear model: $\ln(\% \text{ MNSS expenditures spent on mental hospitals}) = -0.50 \cdot \ln(\text{GDP}) + 8.9$. $R^2=0.32$. $p=0.0012$. Confidence bands show upper and lower 95% confidence lines.

Health system response in the Americas



MNSS: Mental, neurological, substance use disorders and self-harm

Health system response in the Americas

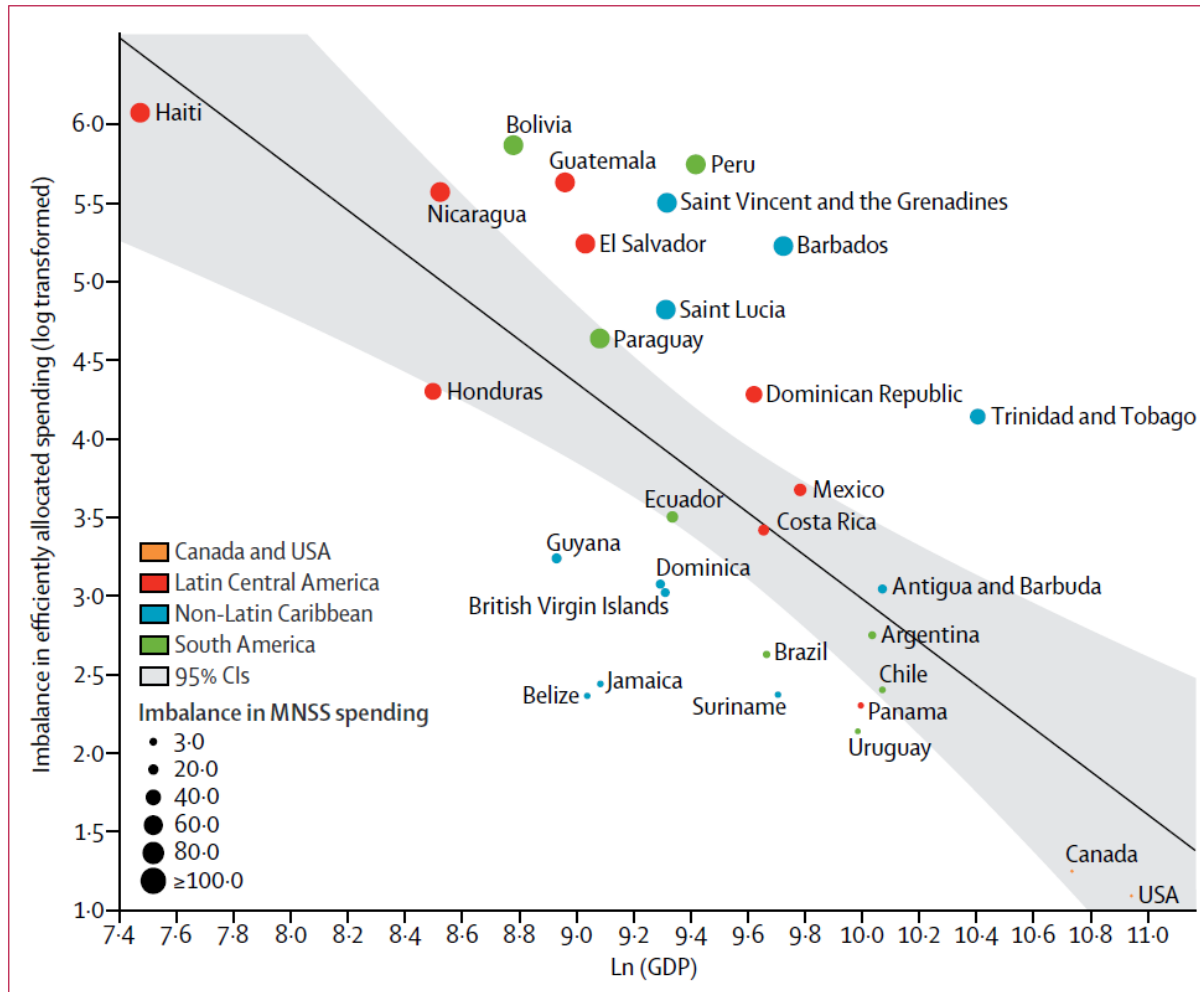


Figure 5: Imbalance in efficiently allocated spending vs GDP

$\beta_2 = -1.38$ (-1.97 to -0.78). Linear model: $\text{Ln}(\frac{\% \text{ MNSS DALYs} - 69\% \times \text{schizophrenia DALYs}}{\% \text{ mental health spending} - [\% \text{ mental health spending} \times \% \text{ psychiatric hospital spending}]}) = -1.38 \times \text{Ln}(\text{GDP2015}) + 16.1883$; $R^2 = 0.44$; $p = 0.0001$. MNSS=mental, neurological, and substance use disorders, and self-harm. GDP=gross domestic product.

Summary

- MNSS represent
 - 1/5th of total DALYs
 - Country spread of 9 to 23%
 - 1/3rd of total YLDs
 - Country spread of 28 to 36%
- Common mental illness:
 - >50% of MNSS burden throughout the working years
- Suicide: Sub-regional clusters
 - Guiana, Suriname, and Trinidad y Tobago
 - US & Canada
 - South America

Summary

- South America has higher proportions of disability due to common mental illness
- Central America has a larger proportion of disability due to bipolar and childhood onset disorders, as well as due to epilepsy
- USA and countries with higher income suffer a high toll of disability from schizophrenia and dementia, as well as from devastating rates of opioid-use disorder

Summary

- The health system's response to mental is correlated with GDP
- Higher income countries spend a larger share of their health budgets on mental health services, and allocate their spending more efficiently
- Lower-income settings compound scarcity of resources by allocating them to specialized neuropsychiatric hospitals
- Large imbalance between % of total burden caused by MNSS and % of health expenditures efficiently allocated to mental health:
 - Burden is three times the spending in the highest-income countries and 435 times the spending in lowest-income country
- There is potential to make meaningful improvements by prioritizing funding of community-based mental health services.

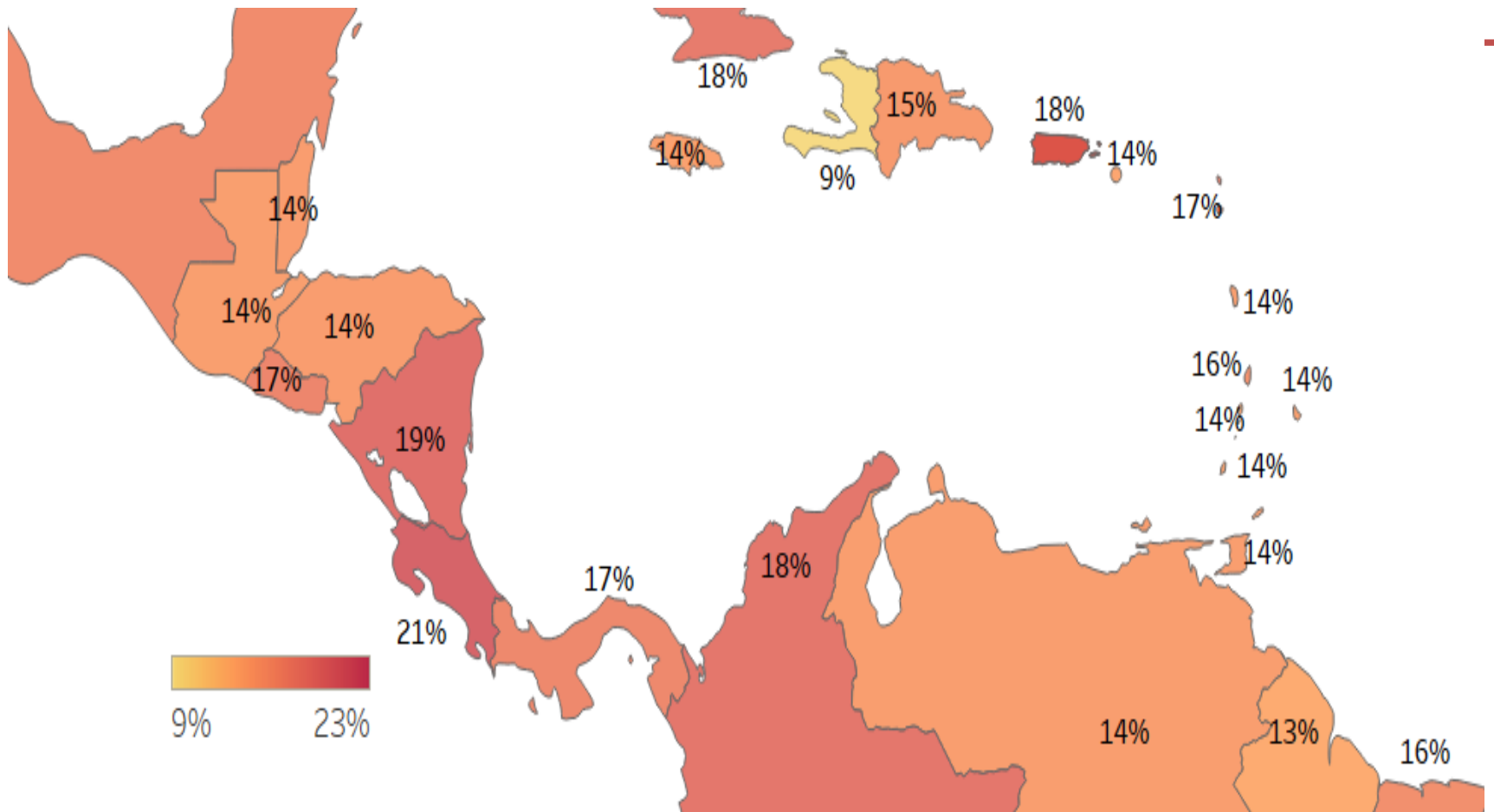
Thank you!

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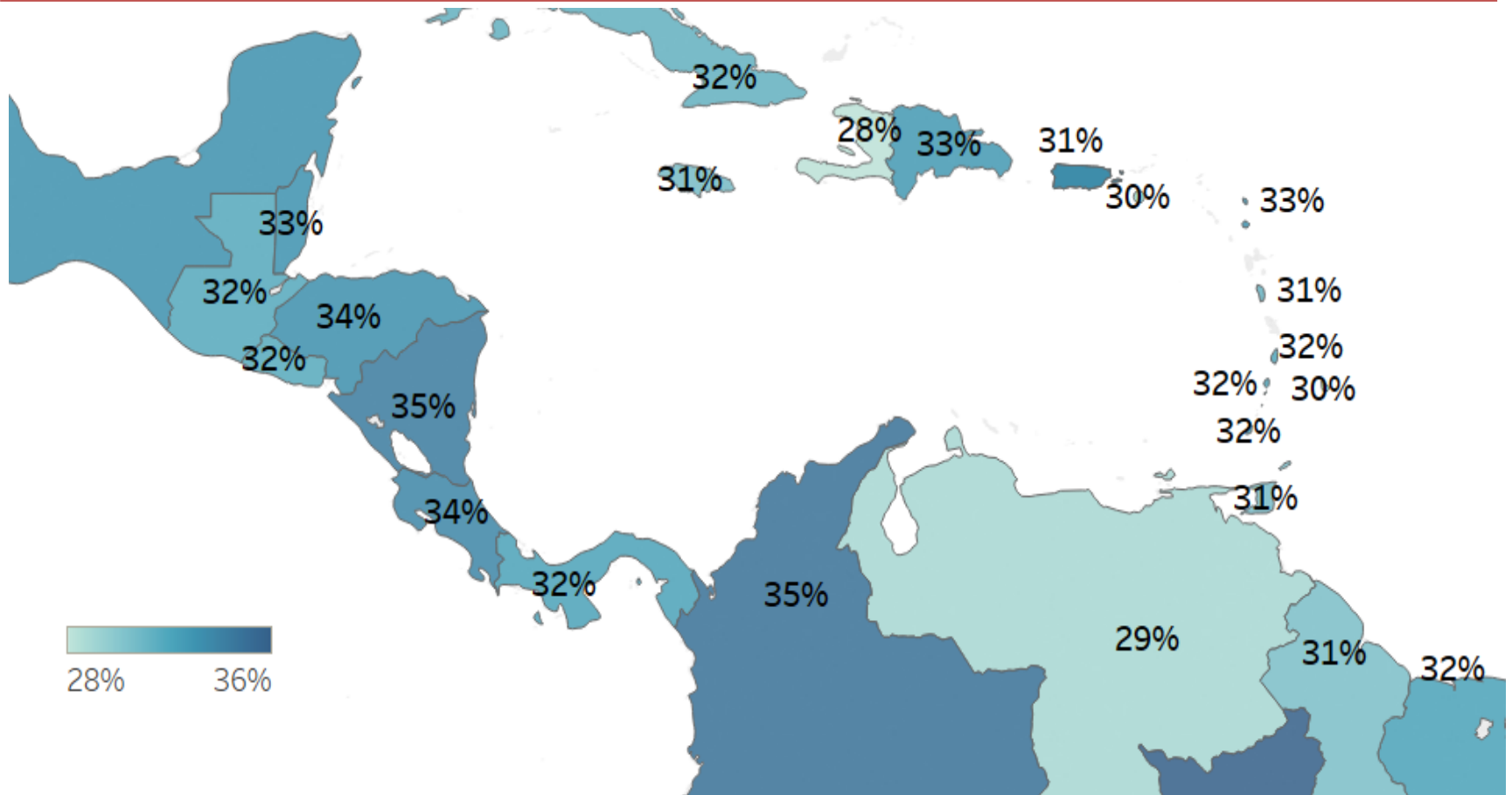




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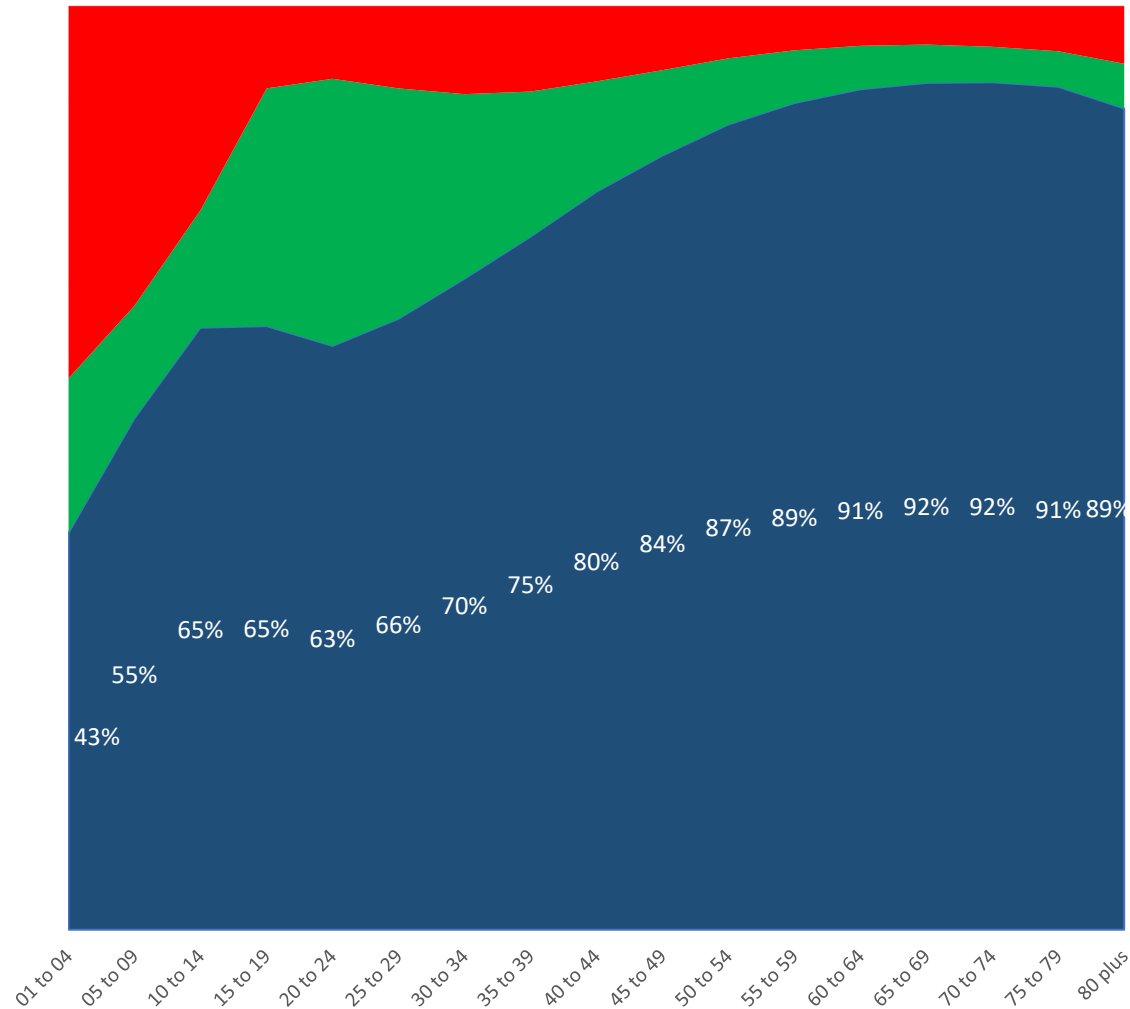


Next steps:

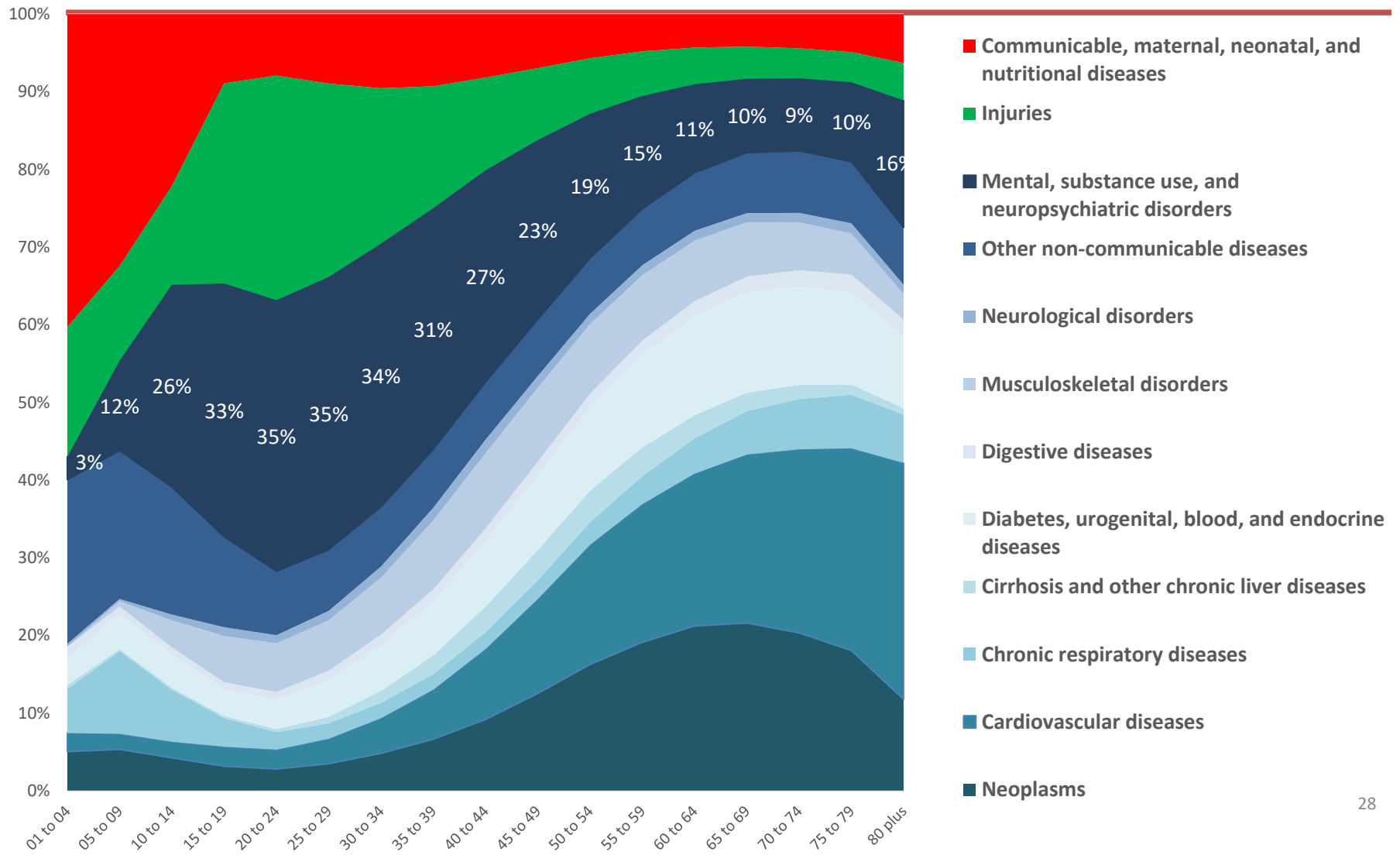
- Life course perspective

A life-course perspective: age-specific DALYs

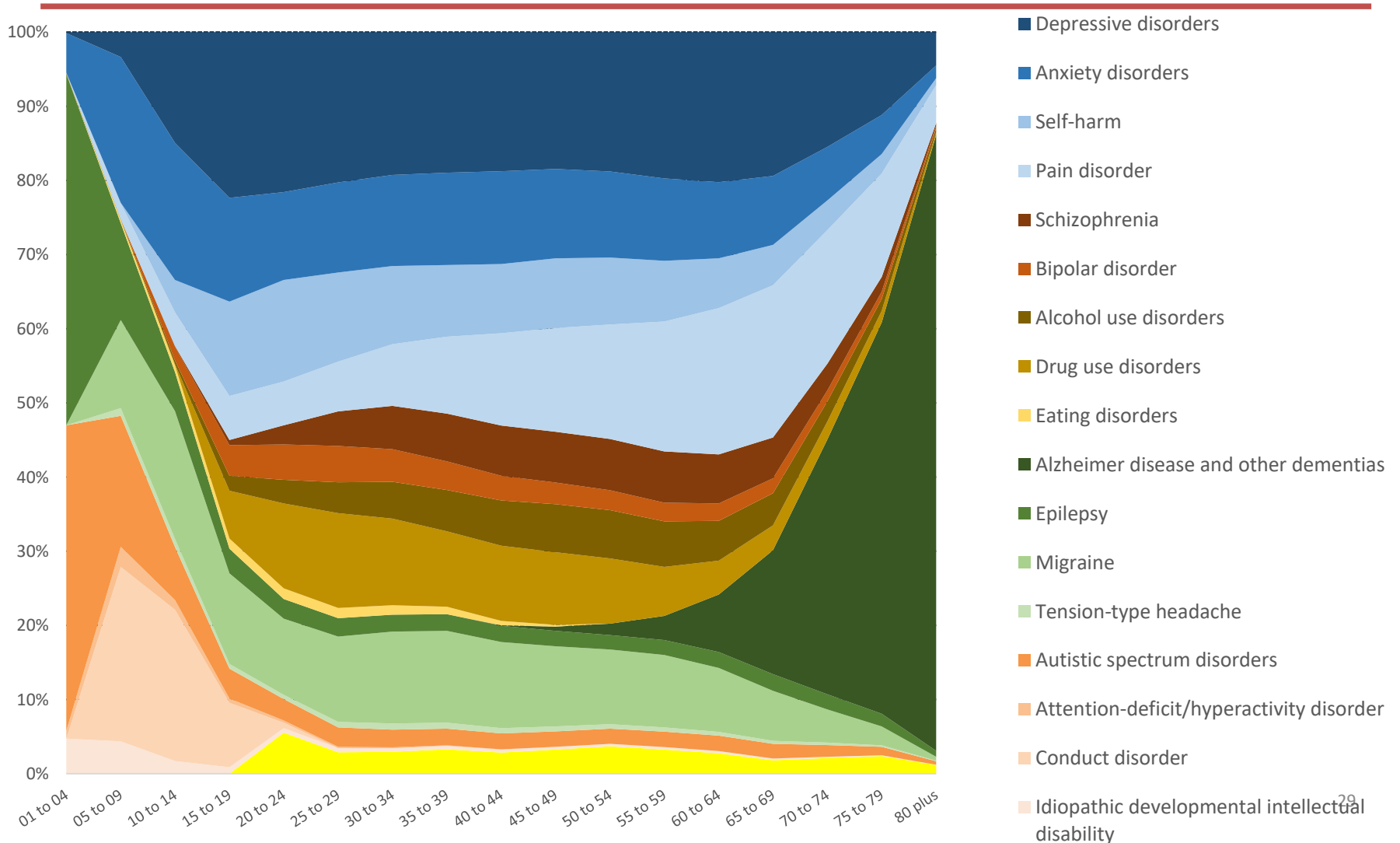
Communicable, maternal, perinatal, Injuries, NCDs



A life-course perspective: age-specific DALYs



A life-course perspective: age-specific DALYs



Next steps:

- Country specific reports:
 - Health priorities as determined by disease burden
 - Disability and mortality resulting from MNSS in relation to other health priorities
 - Disability and mortality across the life-course and across men and women