

The Alcohol-Attributable Burden of Cancer in the Americas in 2012

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Alcohol and in the Americas: Working to beat a key risk factor

Web Presentation

February 26, 2018

Presentation outline

Cancer in the Americas in 2012

Alcohol Consumption and Cancer

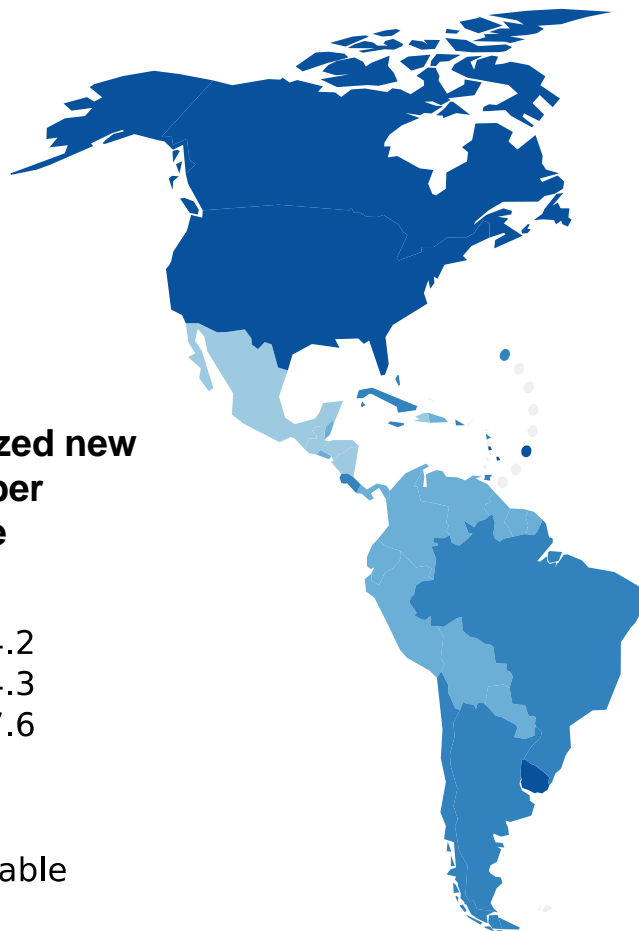
Alcohol Consumption in the Americas in 2002

Cancer Burden due to Alcohol in 2012

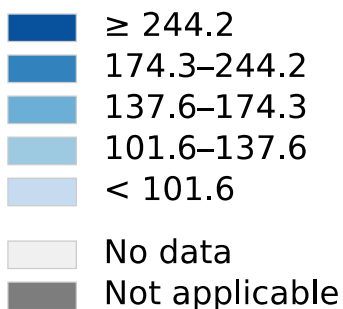
Cancer Prevention through Alcohol Policies

Cancer in the Americas - 2012

Cancer in the Americas: New Cancer Cases



Age-standardized new
cancer cases per
100,000 people



2,882,000 new cancer cases

Top 5 cancer sites: cases

Prostate

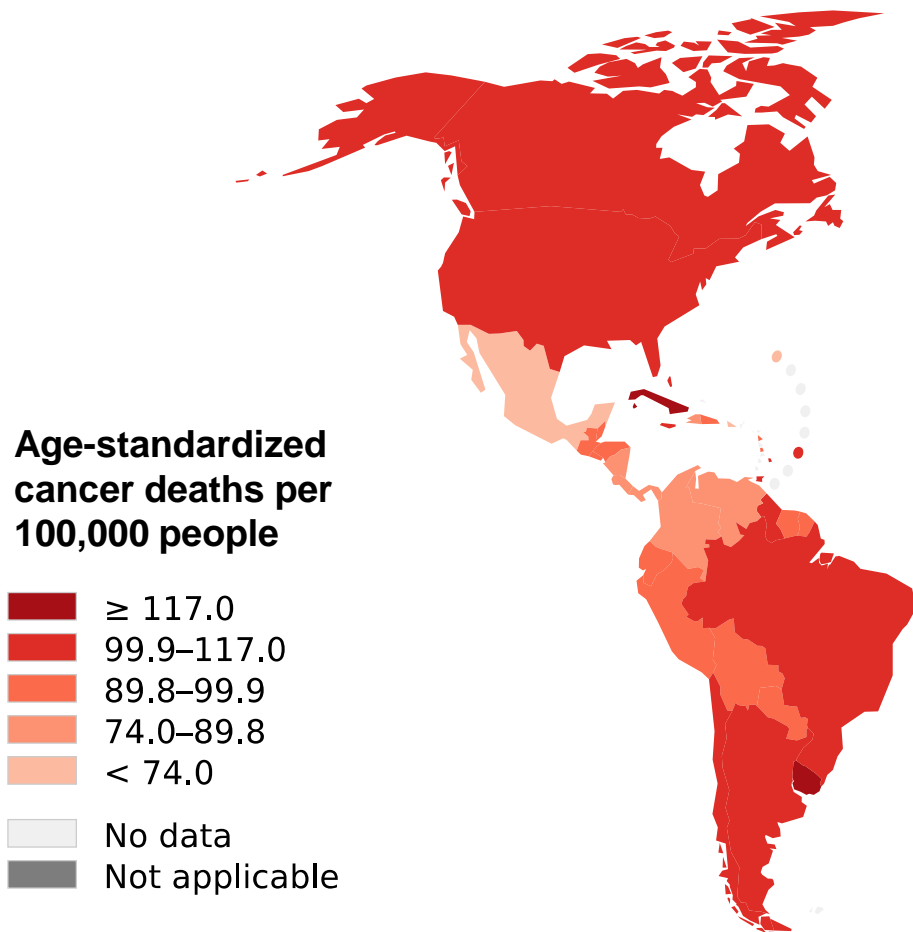
Breast

Lung

Colorectum

Bladder

Cancer in the Americas: Cancer Deaths



1,295,000 cancer deaths

Top 5 cancer sites: deaths

Lung

Colorectum

Breast

Prostate

Pancreas

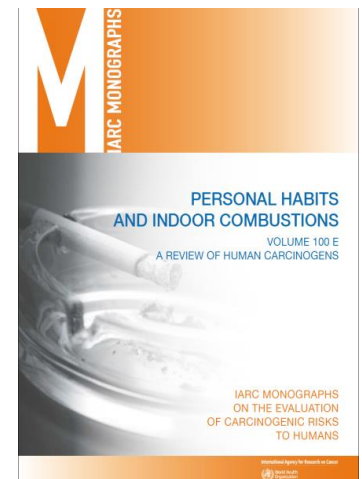
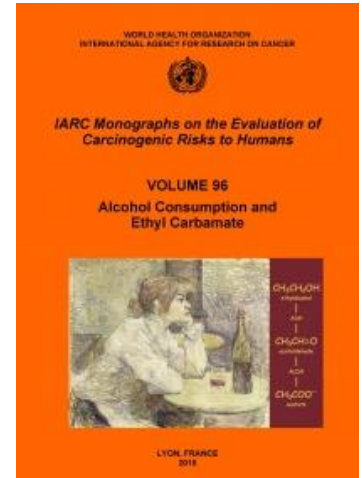
Alcohol Consumption and Cancer

A causal relationship between alcohol and the following cancers has been confirmed:

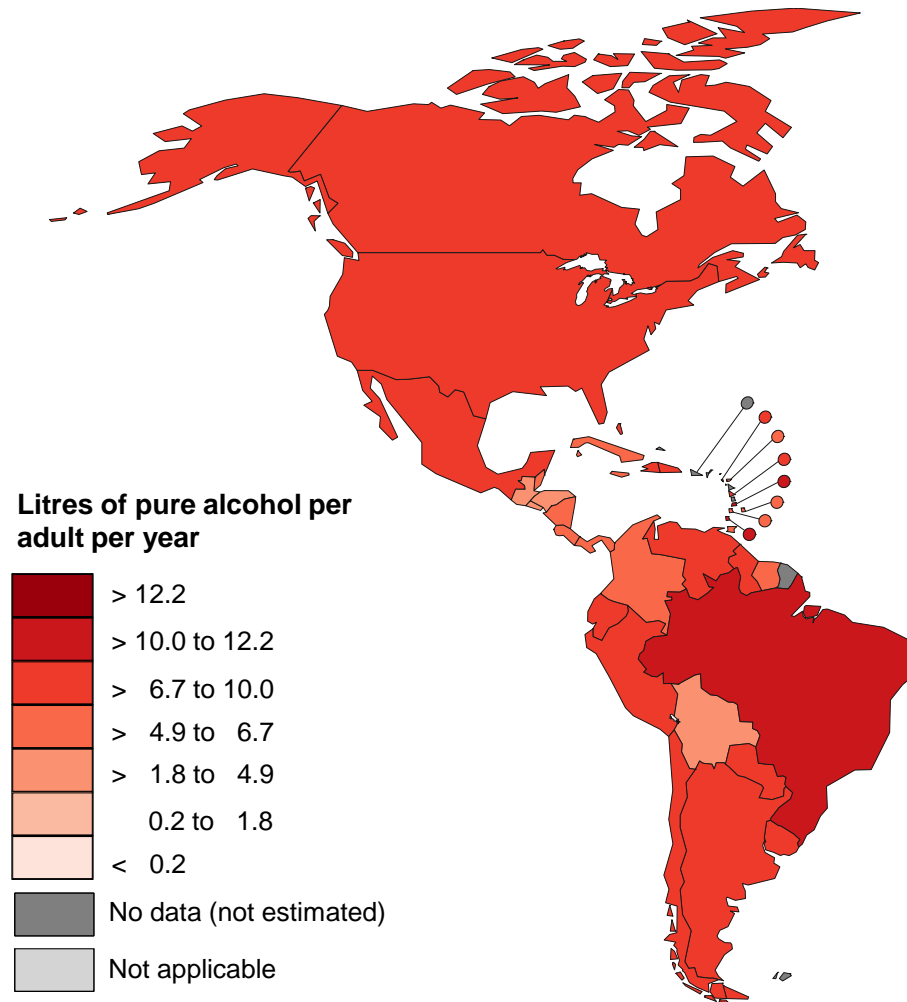
- Oral cavity and pharyngeal (excluding nasopharyngeal)
- Oesophageal (squamous cell carcinoma)
- Colorectal
- Liver
- Laryngeal
- Breast (female)

Biological pathways:

- Ethanol metabolism
- Inhibition of the one carbon metabolism pathway
- Modification of hormone levels and associated signaling pathways

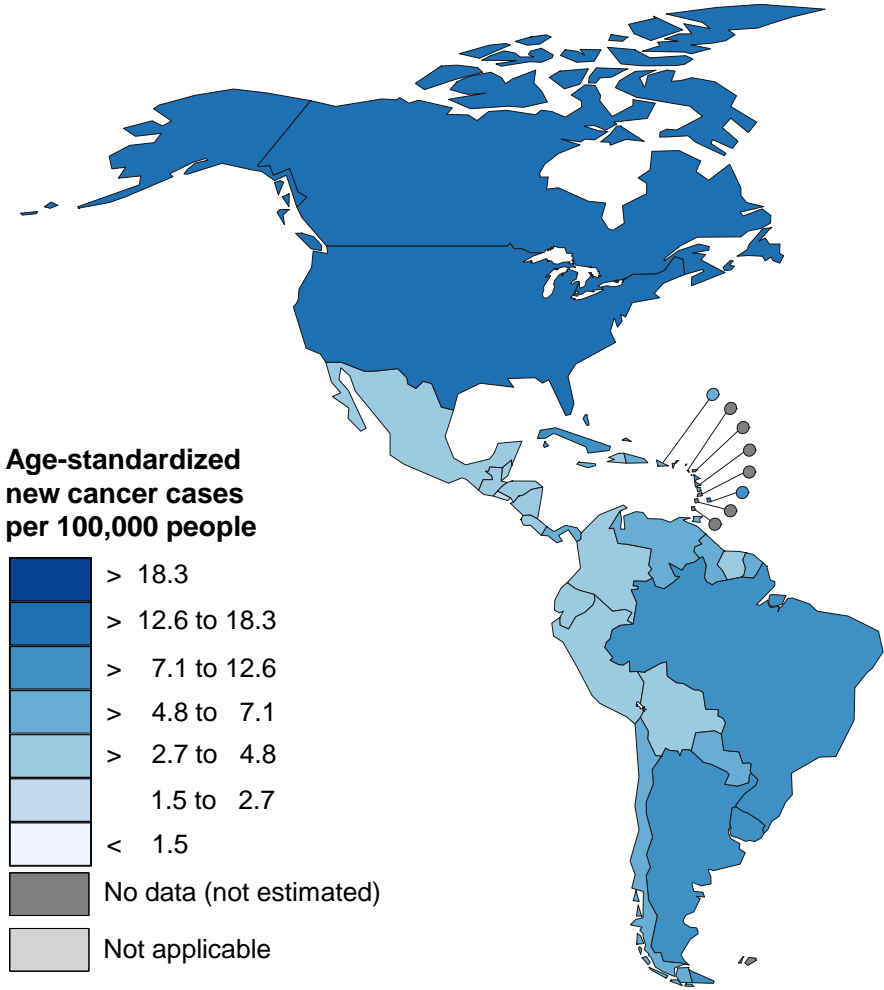


Global Alcohol Consumption in 2002



Cancers Attributable to Alcohol Consumption

Cancer Cases in 2012 due to Alcohol

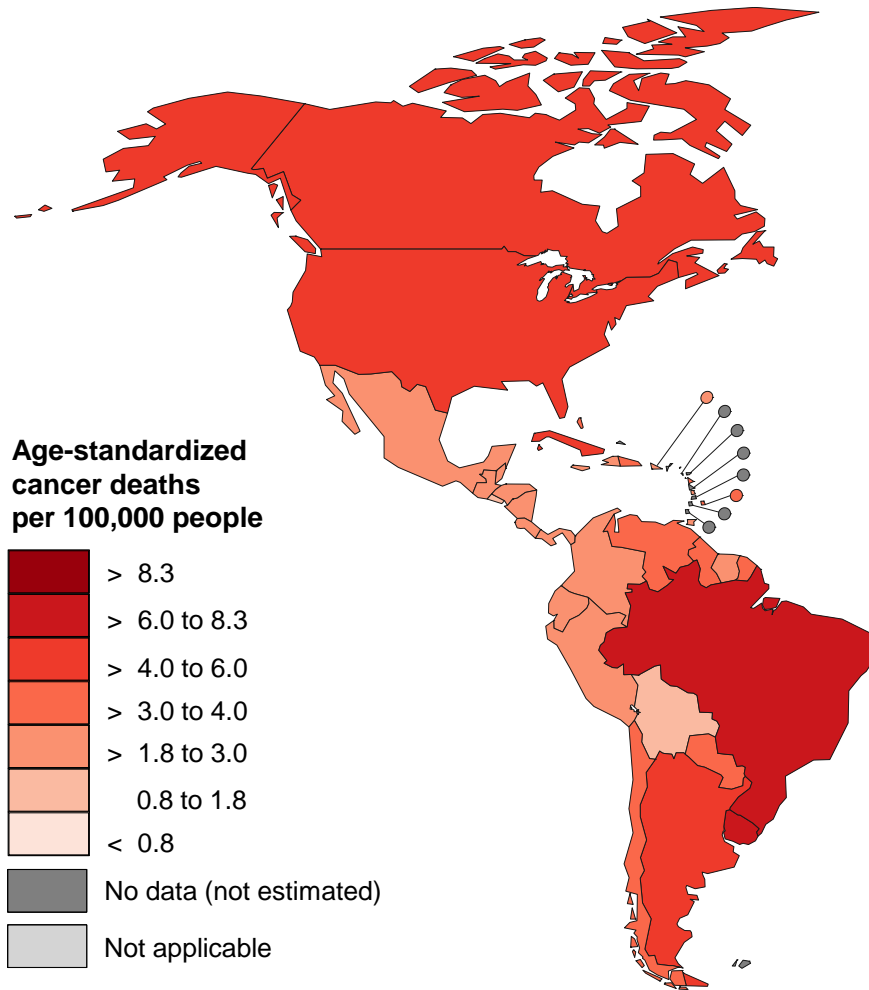


141,600 cancer cases per year



4.9%
of all cancer cases

Cancer Deaths in 2012 due to Alcohol



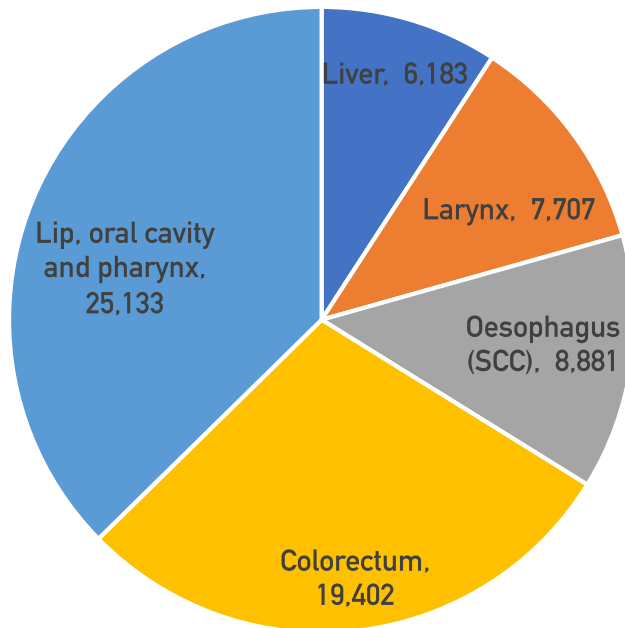
55,900 cancer deaths per year



4.3%
of all cancer deaths

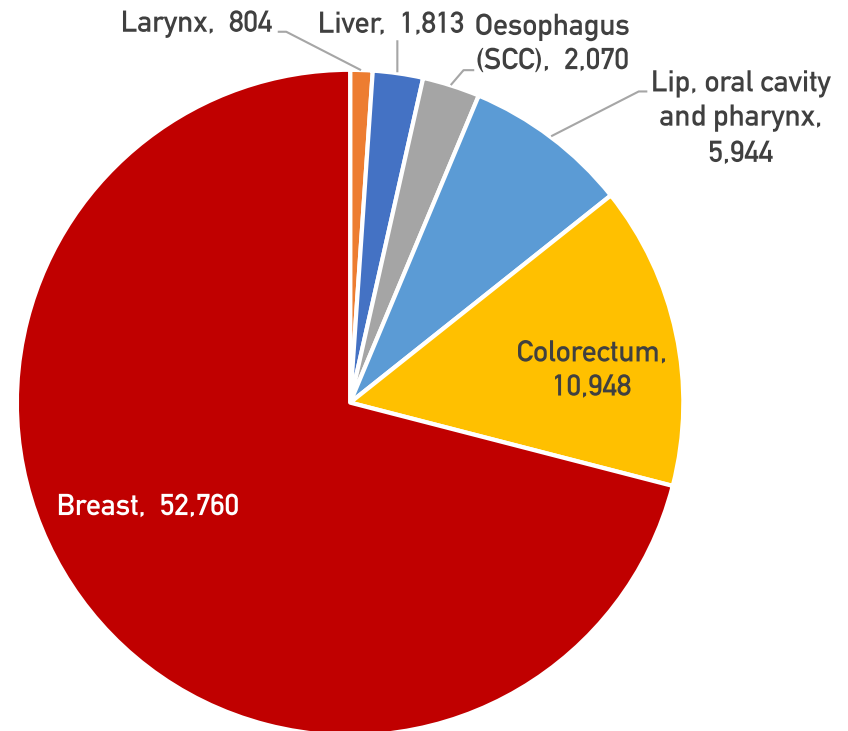
Cancer Cases in 2012 due to Alcohol, by Cancer Site

Men



67,300 cancer cases per year

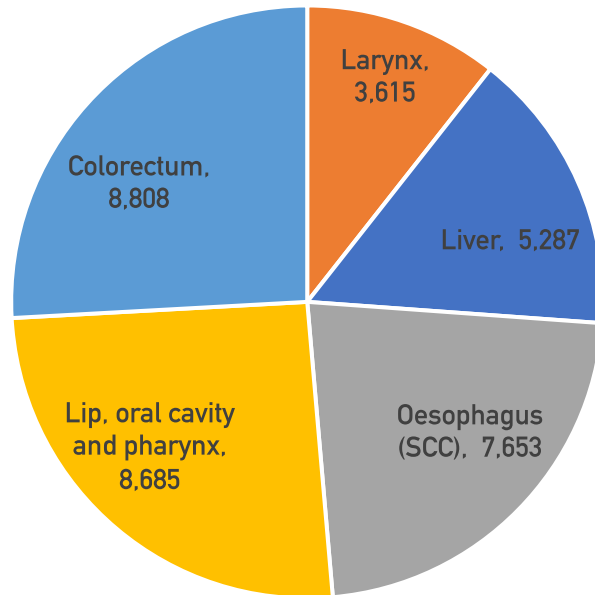
Women



74,300 cancer cases per year

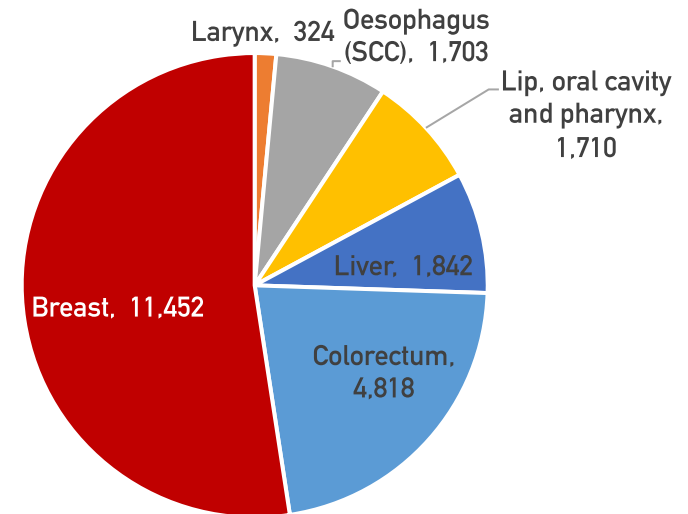
Cancer Deaths in 2012 due to Alcohol, by Cancer Site

Men



34,000 cancer deaths per year

Women



21,800 cancer deaths per year

Limitations and the Critical Need for Further Research

Biases in the data

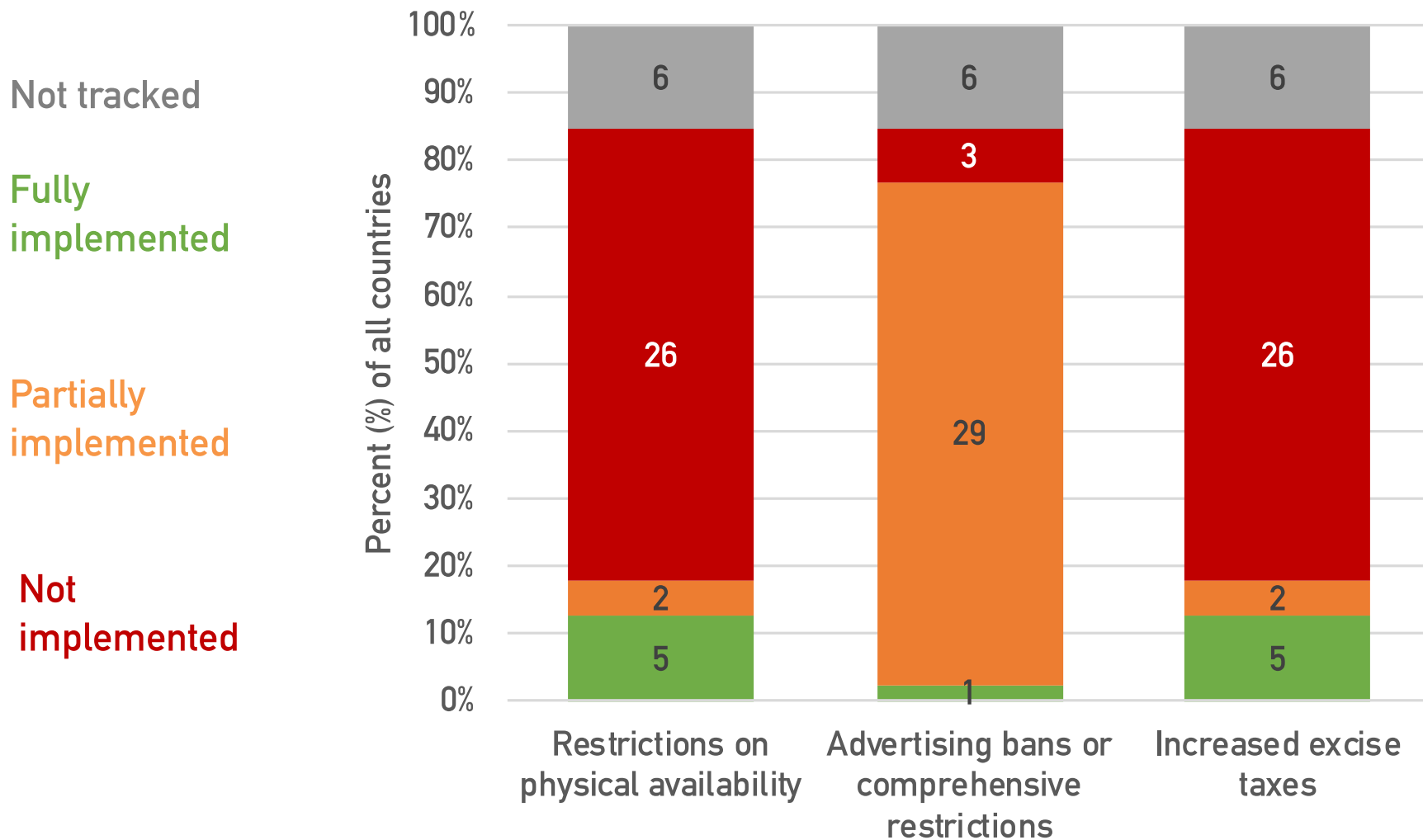
- *Relative risks*: grouping of former drinkers and lifetime abstainers
- *Survey biases*: drinking status

Areas of future research

- Risk relationships by genotype
 - e.g. 'Flushing gene' *ALDH2*
- Interaction between alcohol and tobacco smoke

Cancer Prevention Through Alcohol Policies

Alcohol Policies in the Americas



Alcohol and Cancer: A Large and Unequal Burden

- Alcohol consumption leads to a **large cancer burden** in the Americas
 - **4.9%** of all new cancer cases in 2012
 - **Breast (37.2%)** and **lip, oral cavity and pharyngeal cancers (21.9%)** were the largest contributors to cancer incidence
 - **4.3%** of all cancer deaths in 2012
 - **Colorectal (24.4%)** and **breast cancers (20.5%)** were the largest contributors to cancer deaths

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camh

TRANSFORMING LIVES
TRANSFORMER DES VIES