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Landscape of NCDs and their risk factors in the Caribbean



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**Every second, 28 lives
between the ages of 30
and 70 are cut short**

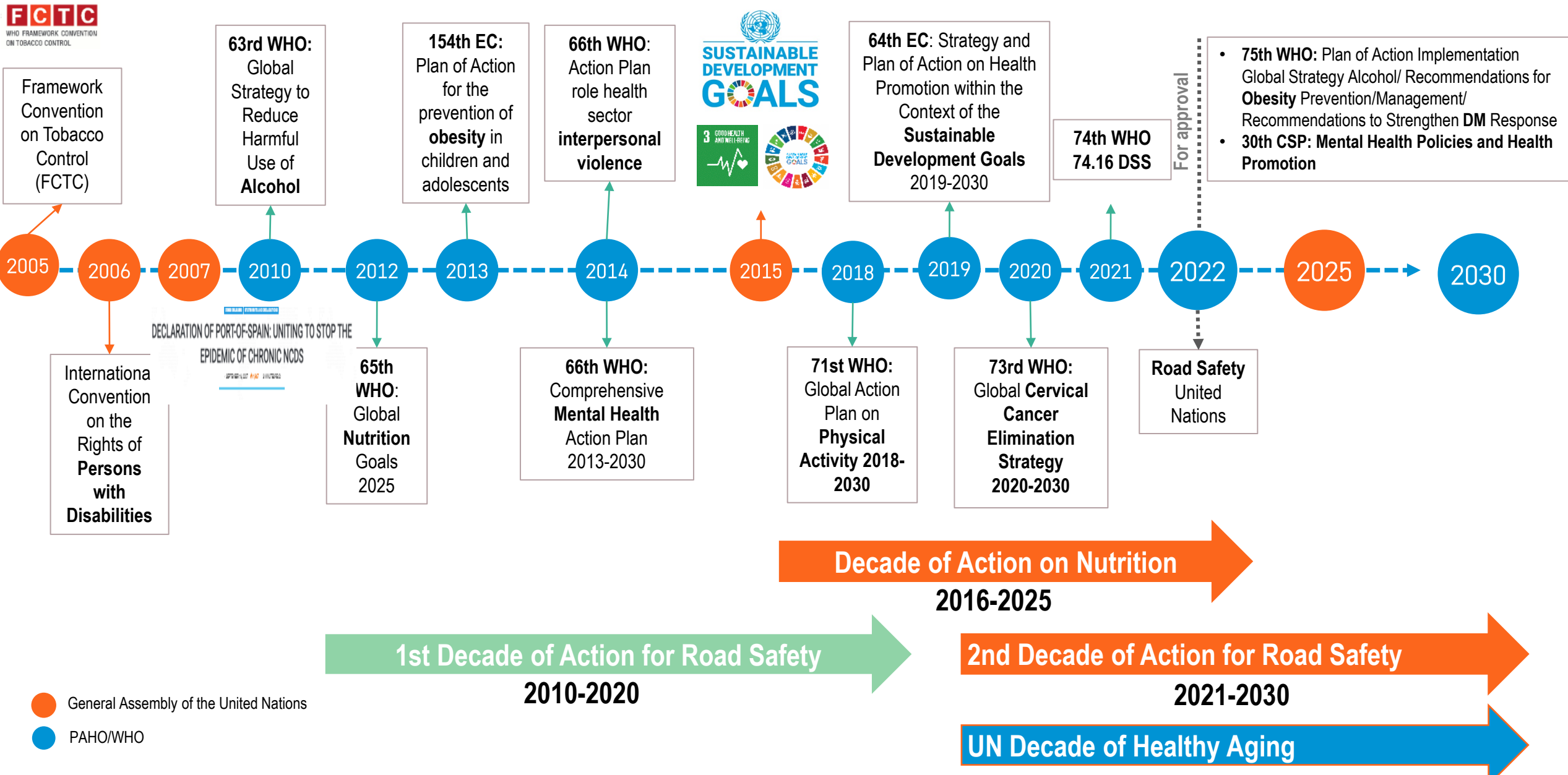
because countries have not taken policy, legislative and regulatory measures to respond to the needs of people living with or at risk of cardiovascular diseases, cancers, diabetes, chronic respiratory diseases, or mental health conditions, including preventive, curative, palliative, and specialized care.

**25 out of 28 lives lost each
second occur in low- and middle-
income countries**

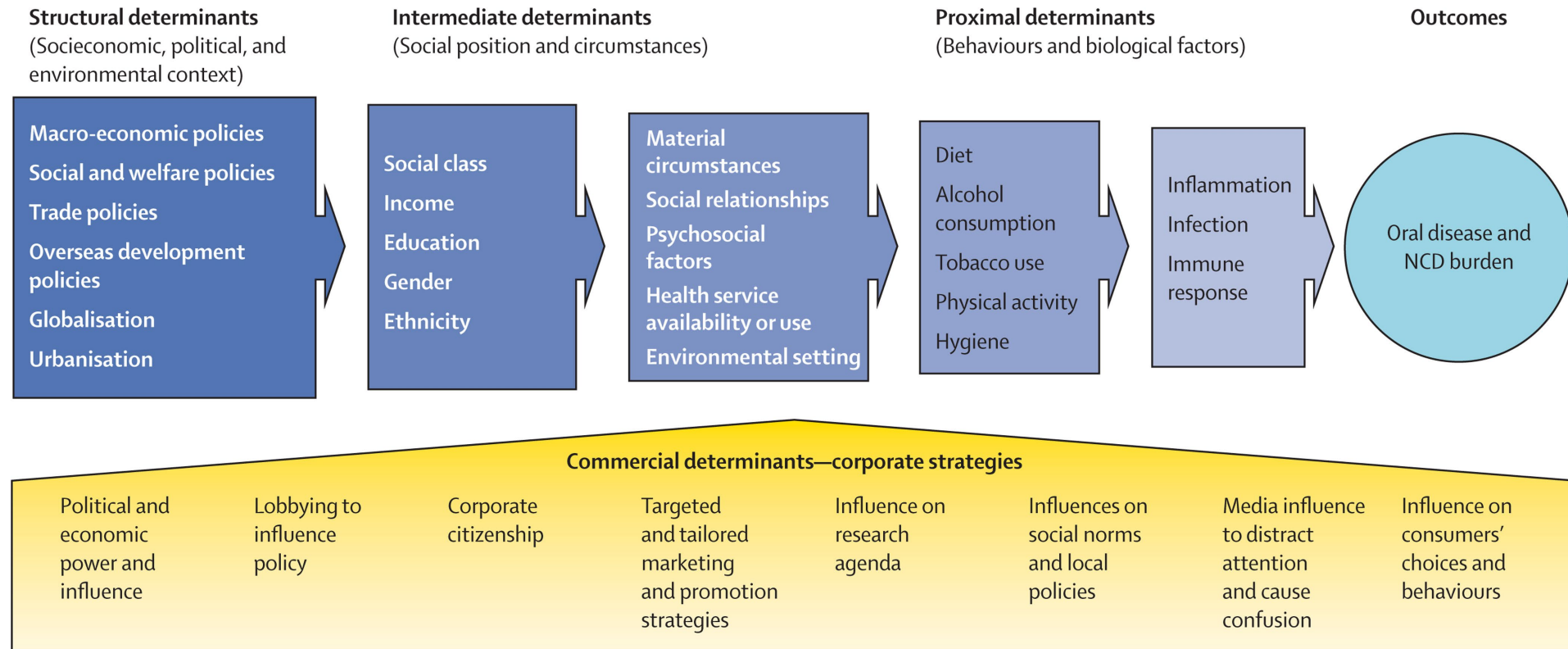
where the social, economic, and physical environments afford populations much lower levels of protection from the risks and consequences of NCDs than in high-income countries, including protection from tobacco use, the harmful use of alcohol, unhealthy diets, physical activity, and air pollution.



Mandates and commitments





Social and commercial determinants of NCDs [oral diseases]



Peres MA, Macpherson LMD, Weyant RJ, Daly B, Venturelli R, Mathur MR, Listl S, Celeste RK, Guarnizo-Herreño CC, Kearns C, Benzian H, Allison P, Watt RG. Oral diseases: a global public health challenge. *Lancet*. 2019 Jul 20;394(10194):249-260. doi: 10.1016/S0140-6736(19)31146-8.

Multiple behavioural risk factors of non-communicable diseases among adolescents in four Caribbean countries: prevalence and correlates

Supa Pengpid and Karl Peltzer  

From the journal [International Journal of Adolescent Medicine and Health](#)

Abstract

Objectives

The study assessed the prevalence and associated factors of behavioural risk factors of non-communicable diseases (NCDs) among adolescents in four Caribbean countries.

Content

In all 9,143 adolescents (15 years = median age) participated in the cross-sectional “2016 Dominican Republic, 2016 Suriname, 2017 Jamaica, and 2017 Trinidad and Tobago Global School-Based Student Health Survey (GSHS)”. Eight behavioural risk factors of NCDs were assessed by a self-administered questionnaire.

Summary

Prevalence of each behavioural NCD risk factor was physical inactivity (84.2%), inadequate fruit and vegetable intake (82.2%), leisure-time sedentary behaviour (49.6%), daily ≥ 2 soft drinks intake (46.8%), ever drunk (28.6%), twice or more days a week fast food consumption (27.6%), having overweight/obesity (27.4%), and current tobacco use (13.8%). Students had on average 3.6 (SD=1.4), and 79.0% had 3–8 behavioural NCD risk factors. In multivariable linear regression, psychological distress and older age increased the odds, and attending school and parental support decreased the odds of multiple behavioural NCD risk factors.

Outlook

A high prevalence and co-occurrence of behavioural risk factors of NCDs was discovered and several factors independently contributing to multiple behavioural NCD risk factors were identified.



Combined and individual model scenarios for decreasing diabetes and obesity prevalence in adults in Jamaica



Intensive upstream

The same interventions as the modest upstream, but with greater intensity.

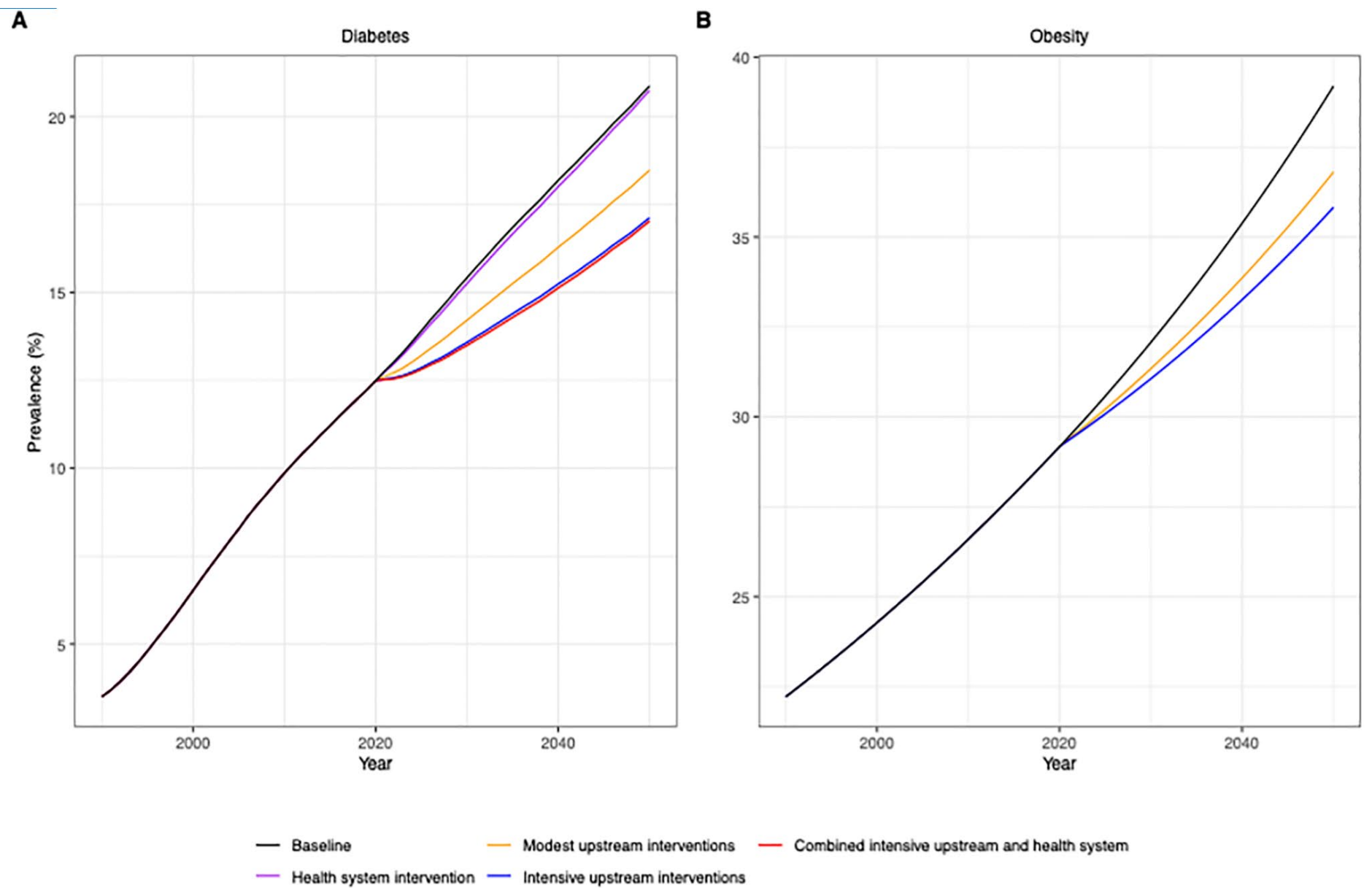
- A 25% reduction in SSBs consumption
- A 25% reduction in consumption other ultra processed foods
- A 25% increase in fruit and vegetable consumption
- Front-of-package warning labels (FOPL)
- An additional 30 minutes of MVPA per day
- Public information campaigns on physical activity and healthy diet

Combined downstream and intensive upstream

A combination of the downstream interventions and the intensive upstream interventions described above

Guariguata L, Garcia L, Sobers N, Ferguson TS, Woodcock J, Samuels TA, Guell C, Unwin N. Exploring ways to respond to rising obesity and diabetes in the Caribbean using a system dynamics model. PLOS Glob Public Health. 2022 May 19;2(5):e0000436. doi: 10.1371/journal.pgph.0000436. PMID: 36962372; PMCID: PMC10021196.







Complex System Dynamics Modeling



Guariguata L, Garcia L, Sobers N, Ferguson TS, Woodcock J, Samuels TA, Guell C, Unwin N. Exploring ways to respond to rising obesity and diabetes in the Caribbean using a system dynamics model. PLOS Glob Public Health. 2022 May 19;2(5):e0000436. doi: 10.1371/journal.pgph.0000436. PMID: 36962372; PMCID: PMC10021196.

Common Ground: Burden of Disease

ENLACE DATA PORTAL

EnglishTOPICS COUNTRIES RESOURCES NEWS ABOUT

Home / ENLACE: Data Portal on Noncommunicable Diseases, Mental Health, and External Causes / Risk of Dying Prematurely from NCDs

Risk of Dying Prematurely from NCDs

ENLACE **NCD PREMATURE MORTALITY** TECHNICAL NOTES ABOUT

Goal 3 of the [2030 UN Agenda for Sustainable Development \(SDG\)](#) is to "Ensure healthy lives and promote well-being for all at all ages". Target 3.4 is: By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being. Premature mortality from NCDs, measured as the unconditional probability of dying at exact ages of 30 to 70 years from any of the four major NCDs (cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases) is the indicator (3.4.1) to monitor progress on the prevention and control of noncommunicable diseases.

This visualization allows readers to explore the level, distribution, and trends of the probability of dying prematurely from all-noncommunicable diseases, the four major NCDs (cardiovascular diseases, cancers, diabetes mellitus, and chronic respiratory diseases) for two age ranges (from 30 to 70 years of age, and from birth to 80 years of age) by sex in countries of the Region of the Americas from 2000 to 2019.

<https://www.paho.org/en/enlace/risk-dying-prematurely-ncds>

Premature Mortality from Noncommunicable Diseases: trends over time

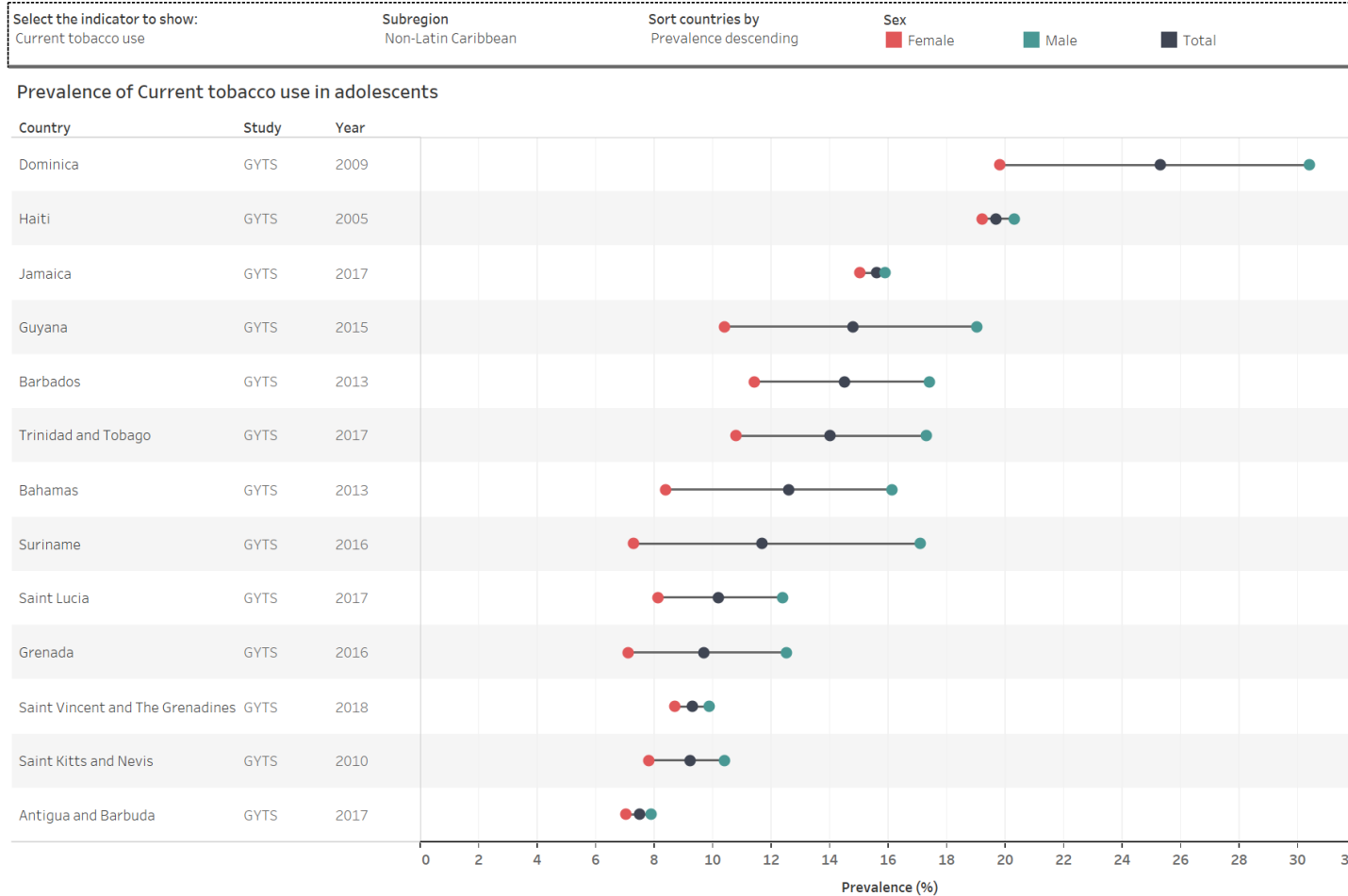
Unconditional probability of dying from noncommunicable diseases (expressed in percentage)

Cause Four major noncommunicable diseases (CVD, cancer, diabetes, and chronic respir..
Age group 30-70
Sex All
Location Multiple values
 WARNING: Multiple countries can be selected for comparison, however, it is recommended you select up to ten countries to avoid an overcrowded chart.



Estimates of prevalence of current tobacco use in adolescents (13 – 15 yr olds) by sex and country, Data from latest school-student based survey available

Prevalence of current tobacco use in adolescents (13-15 years old), countries of the Americas
Data from the latest school-student based survey available



Source: School-student based studies, such as the Global Youth Tobacco Survey from countries of the Americas. Updated March, 2020

Prevalence of current tobacco use in adolescents (13-15 years old), countries of the Americas

Data from the latest school-student based survey available

Select the indicator to show:

Current tobacco use

Subregion

Non-Latin Caribbean

Sort countries by

Prevalence descending

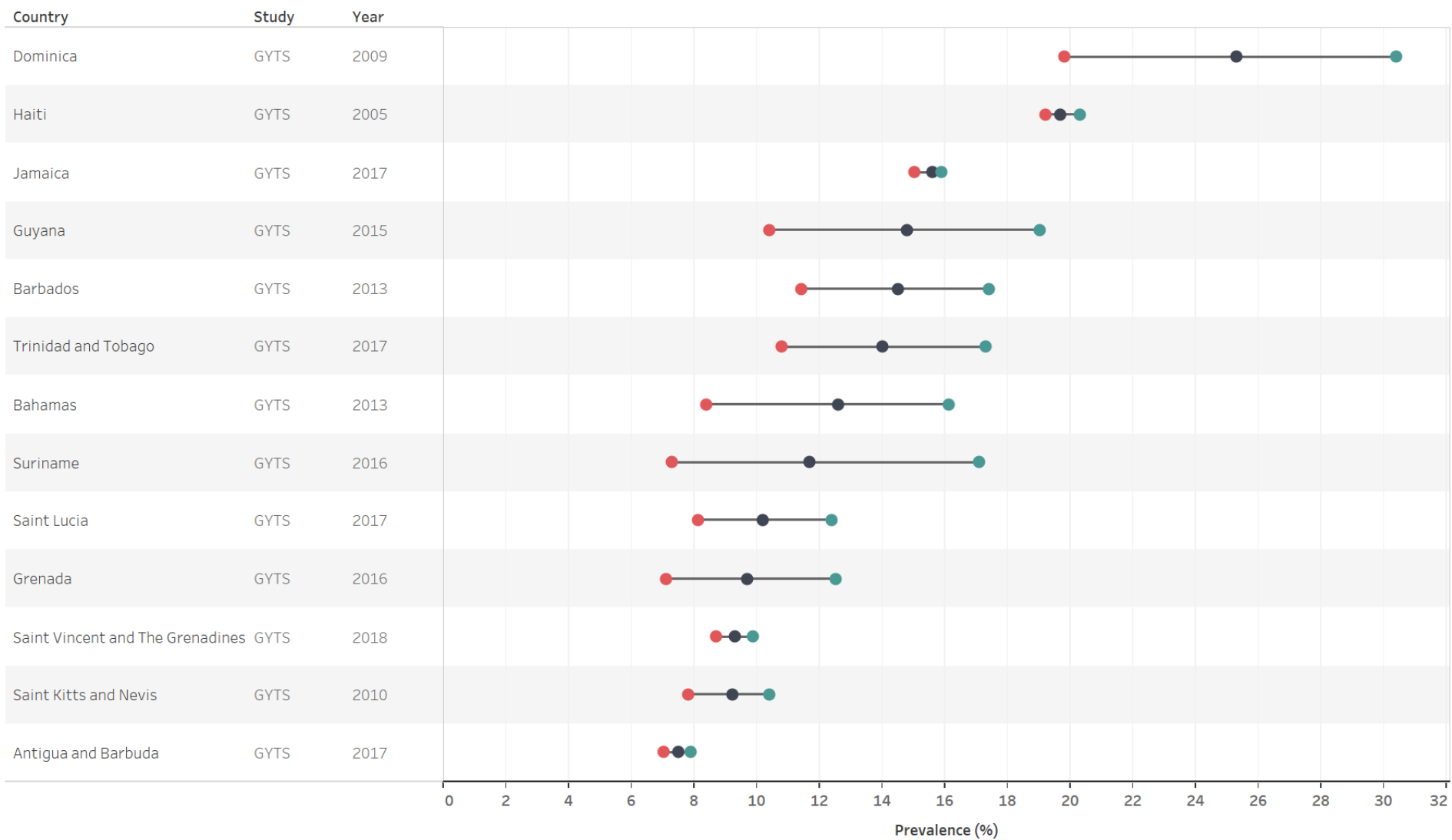
Sex

Female

Male

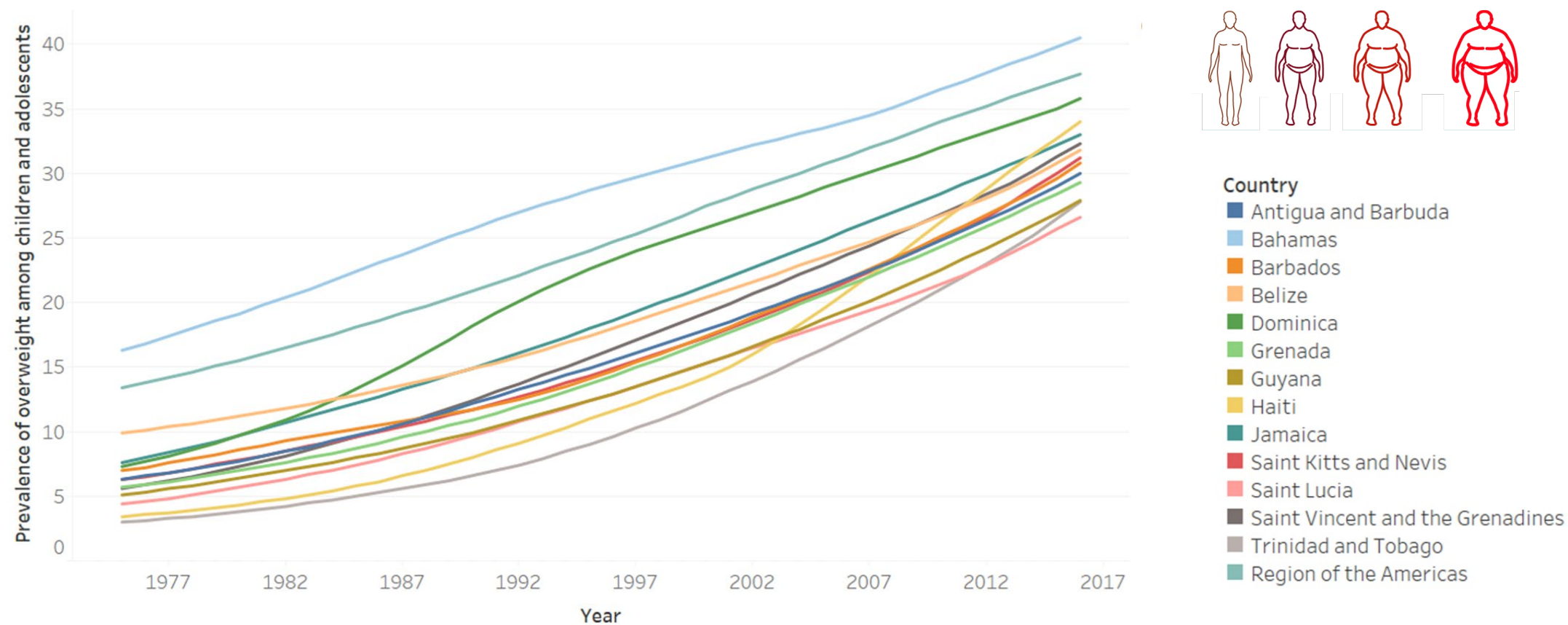
Total

Prevalence of Current tobacco use in adolescents

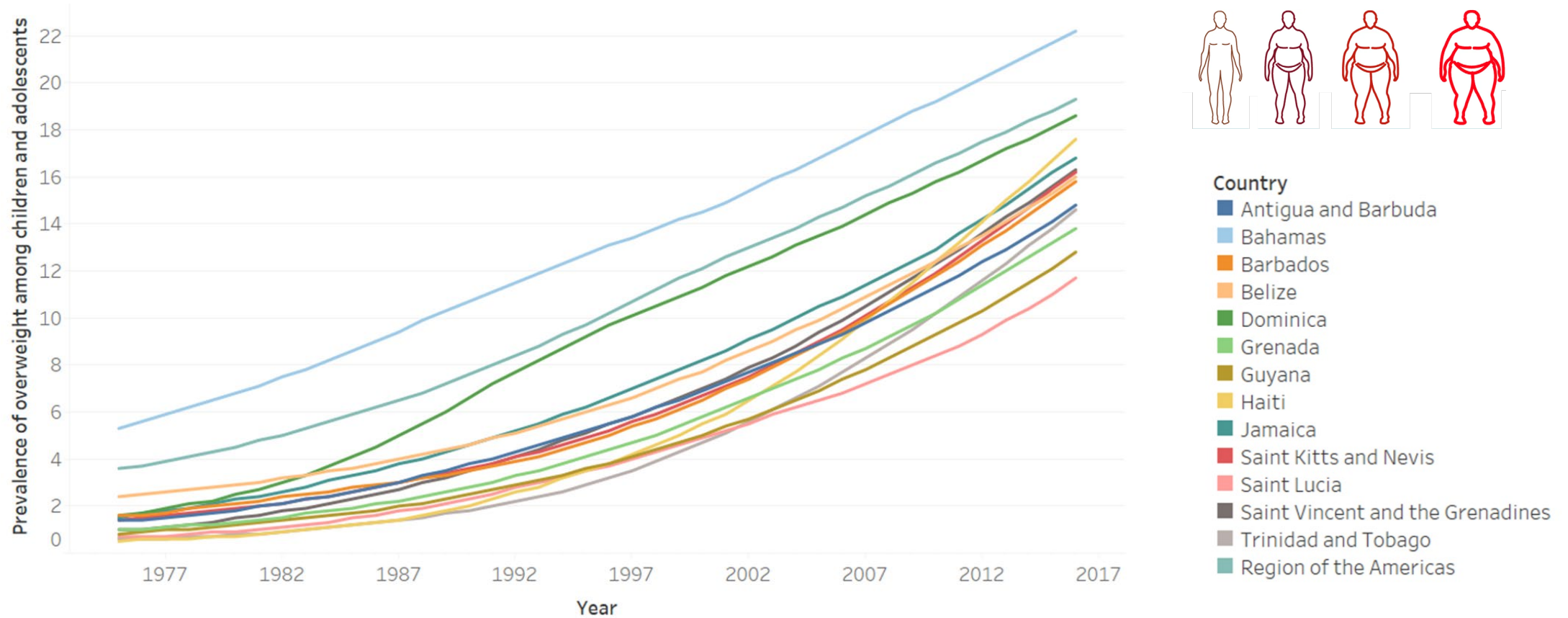


Source: School-student based studies, such as the Global Youth Tobacco Survey from countries of the Americas. Updated March, 2020

Prevalence of overweight among children and adolescents, BMI > +1 standard deviation above the median (crude estimate) (%)



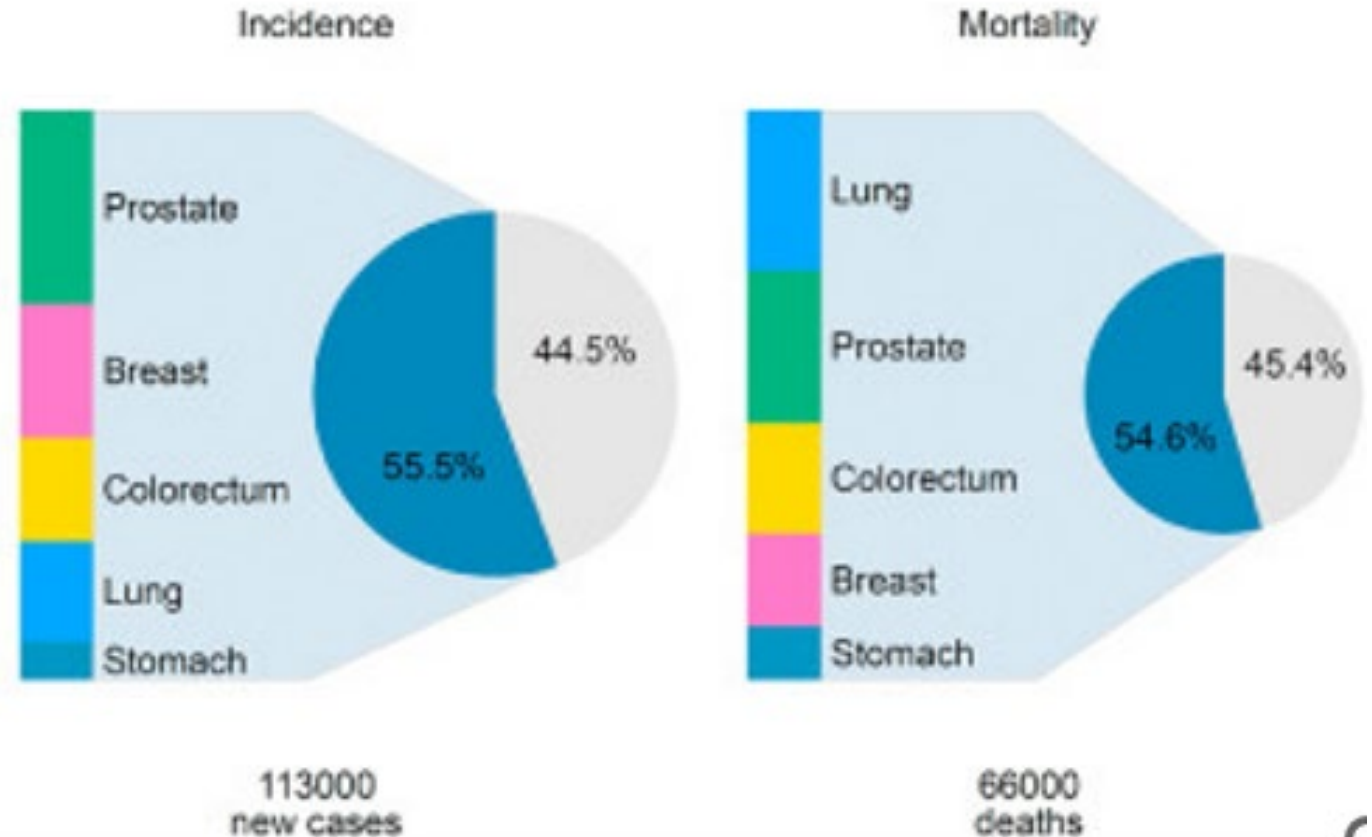
Prevalence of obesity among children and adolescents, BMI > +2 standard deviation above the median (crude estimate) (%)



Five most frequent cancers in the world and in LAC by subregions, both sexes combined, incidence and mortality, 2020.

- Marion Piñeros, Mathieu Laviersanne, Enrique Barrios, Marianna de Camargo Cancela, Esther de Vries, Constanza Pardo, Freddie Bray, An updated profile of the cancer burden, patterns and trends in Latin America and the Caribbean, The Lancet Regional Health - Americas, Volume 13,2022,

The Caribbean






Roadmap 2023–2030 for the Global Action Plan for the Prevention and Control of NCDs 2013–2030

Table 1. NCD Global Monitoring framework extended to 2030

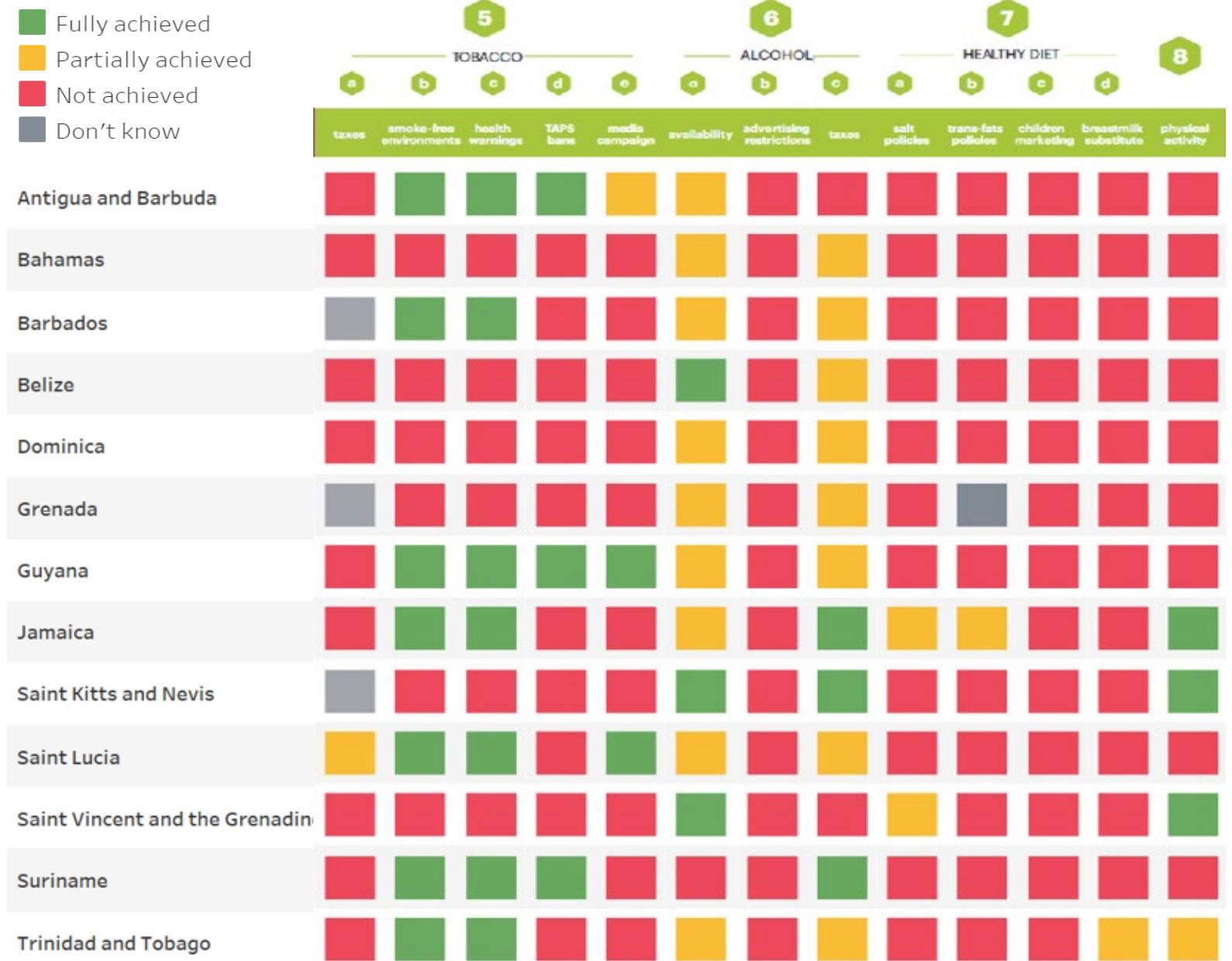
Domain	Outcome	Target 2025	Indicator	Extension to 2030
Mortality	Premature mortality from noncommunicable disease	A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	Target extended to a one third relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases . This target is adapted as per the SDG target on NCDs and with 2015 as the baseline and an extrapolation of the 25% relative reduction to 2030 making it 33.3%.
Behavioural risk factors	Harmful use of alcohol	At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context	Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context	Target extended to a 20% relative reduction in harmful use of alcohol . The proposed revision of the target is under the draft action plan on alcohol that will be considered by EB 150 and WHA75.
	Physical inactivity	A 10% relative reduction in prevalence of insufficient physical activity	Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	Target extended to a 15% relative reduction in prevalence of insufficient physical activity as part of the Global Action Plan on Physical Activity adopted by MS at WHA May 2018.
	Salt/sodium intake	A 30% relative reduction in mean population intake of salt/sodium	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years	Target extended to a 40% relative reduction in mean population intake of salt/sodium
	Tobacco use	A 30% relative reduction in prevalence of current tobacco use	Age-standardized prevalence of current tobacco use among persons aged 18+ years	Target extended to a 40% relative reduction in prevalence of current tobacco use

WHO 'Best Buys' NCD Risk Factor Interventions: Many based on legislation

Risk factor/disease	Interventions
 <p>Tobacco use</p>	<ul style="list-style-type: none"> • Tax increases • Smoke-free indoor workplaces and public places • Health information and warnings • Bans on tobacco advertising, promotion and sponsorship
 <p>Harmful alcohol use</p>	<ul style="list-style-type: none"> • Tax increases • Restricted access to related alcohol • Bans on alcohol advertising
 <p>Physical inactivity and unhealthy diet</p>	<ul style="list-style-type: none"> • Reduced salt intake on food • Replacement of trans fat with polyunsaturated fat • Public awareness through mass media on diet and physical activity

Progress to Implement the NCD Risk Factor 'Best Buys' is very limited

- Fully achieved
- Partially achieved
- Not achieved
- Don't know



THANK YOU

