



# POPULATION REFERENCE BUREAU

## Technical Notes for

### Noncommunicable Diseases in Latin America and the Caribbean:

#### Youth Are Key to Prevention

(June 2013) These technical notes accompany the PRB data sheet *Noncommunicable Diseases in Latin America and the Caribbean: Youth Are Key to Prevention*. The data sheet is available at [www.prb.org](http://www.prb.org).

#### Country Selection

Countries are selected based on the availability of recent data on four key NCD risk factors among adolescents/youth: smoking, drinking, physical inactivity, and unhealthy diet measured with overweight/obesity status. Only those countries with data on at least three of the four risk factors for any age group from 10-to-24-years-old, and from 2006 or later, are included in the data sheet.

#### Definitions and Sources

**Total Population and Percent Living in Urban Areas.** Estimates from *2012 World Population Data Sheet* (PRB 2012). <http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/data-sheet.aspx>

**Percent of Population Ages 10-24.** Medium variant projections for 2012 from *World Population Prospects: The 2010 Revision* (UN Population Division 2011). <http://esa.un.org/unpd/wpp/Documentation/publications.htm>

**Secondary School Net Enrollment Rate.** Estimates from UNESCO Institute for Statistics. [http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=143&IF\\_Language=eng](http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=143&IF_Language=eng)

**Adolescent Fertility Rate.** Estimates from most recent waves of *Demographic and Health Surveys* (ICF International) where available. For other countries, medium variant projections for 2010-2015 from *World Population Prospects: The 2010 Revision* (UN Population Division 2011). <http://esa.un.org/unpd/wpp/Excel-Data/fertility.htm>

**GNI PPP per Capita.** Estimates from *World Development Indicators* (World Bank). [http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD?order=wbapi\\_data\\_value\\_2011+wbapi\\_data\\_value+wbapi\\_data\\_value-last&sort=asc](http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD?order=wbapi_data_value_2011+wbapi_data_value+wbapi_data_value-last&sort=asc)

**Age-standardized Death Rate for All NCDs and Percent of All Deaths Due to NCDs.** Estimates from *Global Status Report on Noncommunicable Diseases* (WHO 2011). [http://www.who.int/nmh/publications/ncd\\_report2010/en/](http://www.who.int/nmh/publications/ncd_report2010/en/)

**Hypertension Prevalence in Adults and Type 2 Diabetes Prevalence in Adults:** Data source varies across countries and includes clinical measures and self-reported data. Data for some countries come from sub-national surveys (see PAHO source for more details). Estimates are from *Non Communicable*

*Diseases in the Americas, Basic Indicators 2011* (PAHO 2011).

[http://new.paho.org/hq/index.php?option=com\\_content&view=article&id=1930&Itemid=1708](http://new.paho.org/hq/index.php?option=com_content&view=article&id=1930&Itemid=1708)

## NCD Risks

The data sheet focuses on four specific behaviors—cigarette use, harmful use of alcohol, physical inactivity, and unhealthy diet—identified by WHO to be the key NCD risk factors. There are uneven data on these risk factors among adolescents/youth. Data that are available are typically not directly comparable across a large number of countries. They may measure the levels of risk using different indicators, at different geographical levels (national, regional), for different age groups, and from different settings (all children, children in schools). To facilitate the cross-country comparison of risk levels and to focus attention on the broader picture, the risk levels are presented as high (red), medium (yellow), or low (green).

Risk levels are assessed by first identifying the core indicator per risk factor that is suitable and for which data are available consistently for as many countries as possible. For countries without data on the core indicators, alternative indicators that still enable comparisons using similar standards are used when available. The risk levels are assessed using the standards listed below under each risk factor. These standards are based on literature reviews (more information is available at [www.prb.org](http://www.prb.org)). The standards are adjusted when assessed using alternative indicators or data that are otherwise not directly comparable (such as different age groups or aggregate levels). Data on any age groups within ages 10 to 24 from 2006 or later are considered in the coding. Because there are well-documented sex differences in the prevalence of all risk factors, the risk levels are coded by sex where possible. Specific data points underlying the coding per country are available on our website.

Surveys conducted among secondary school students, such as the Global School-based Student Health Survey and the Global Youth Tobacco Survey, cover the most countries. These and other surveys, including country-specific ones, serve as the data source for the coding of NCD risks. (Data sources for each indicator per country can be accessed on our website). The main caveat for using data from school-based surveys is the selectivity of the survey participants and how that limits our ability to generalize the results to all youth in the country, although it is not always clear whether being in school raises or lowers risks. Another caveat is the relatively young age groups (for example, 13-to-15-year-olds), for which the survey results are consistently tabulated across countries from these surveys. All of the four risk behaviors are age-graded and the prevalence level increases for subsequent age groups. However, while the measures we use do not capture risk levels for all youth, they do set the lower boundaries for the prevalence of risky behaviors.

**Cigarette Use.** The core indicator is the percent reporting any cigarette use in the past 30 days. The standard used for coding: high $\geq$ 16%; medium=7%-15.9%; and low $<$ 7% among 13-to-15-year-old students. Estimates from *Global Youth Tobacco Survey* (WHO and CDC), *Global School-based Student Health Survey* (WHO and CDC), and country-specific surveys.

While tobacco comes in various forms, cigarettes are the most common type of tobacco products in the Americas.

**Alcohol Use.** The core indicator is the percent reporting any alcohol use in the past 30 days. The standard used for coding: high $\geq$ 40%; medium=20%-39.9%; and low $<$ 20% among 14-to-17-year-old students. Estimates from the *Report on Drug Use in the Americas 2011* (Inter-American Drug Abuse Control Commission (CICAD)) that presented data obtained from National Drug Commissions (NDCs) through their National Drug Observatories (NDOs) in each member state of the Organization of American States. Estimates for other countries from *Global School-based Student Health Survey* (WHO and CDC) and country-specific surveys.

While heavy drinking constitutes a health risk in adults, any amount of drinking presents risk at younger ages because of the greater health impact of alcohol on younger people and the link between the age of onset and likelihood of lifetime alcohol dependency.

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**Physical Inactivity.** The core indicator is the percent who report not engaging in any type of physical activity for at least 60 minutes a day for five days in the past seven days. The standard used for coding: high $\geq$ 70%; medium=50%-69.9%; and low $<$ 50% among 13-to-15-year-old students. Estimates from *Global School-based Student Health Survey* (WHO and CDC) and country-specific surveys.

**Unhealthy Diet/Obesity.** The core indicator is the percent reported as overweight or obese. The standard used for coding: high $\geq$ 20%; medium=10%-19.9%; and low $<$ 10% among 13-to-15-year-old students. Estimates from *Demographic and Health Surveys* (ICF International), *Global School-based Student Health Survey* (WHO and CDC), and country-specific surveys.

Unhealthy diet includes low consumption of fruits and vegetables and high consumption of foods high in saturated fats, trans-fatty acids, and sodium, or other high-energy foods. Due to scarcity of comparable data on dietary intake across countries, unhealthy diet is measured with the prevalence of overweight and obesity, a physiological change resulting from high caloric consumption (and partly also from physical inactivity). Overweight/obese status is assessed with the Body Mass Index (BMI), a measure of weight relative to height, although the standards used to classify overweight/obese status vary across surveys (specific standards used per country are available on our website).

Levels of overweight/obesity status are presented only for females because of limited availability of data for males. Furthermore, because muscle mass weighs more than body fat, measuring overweight/obesity with BMI is more challenging among males, who generally have higher muscle mass on average than females.

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