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NONCOMMUNICABLE DISEASES IN THE MIDDLE EAST AND NORTH AFRICA:

Addressing Risk Factors Among Young People Is Key to Curbing the Epidemic

DATA SHEET

DECEMBER 2017

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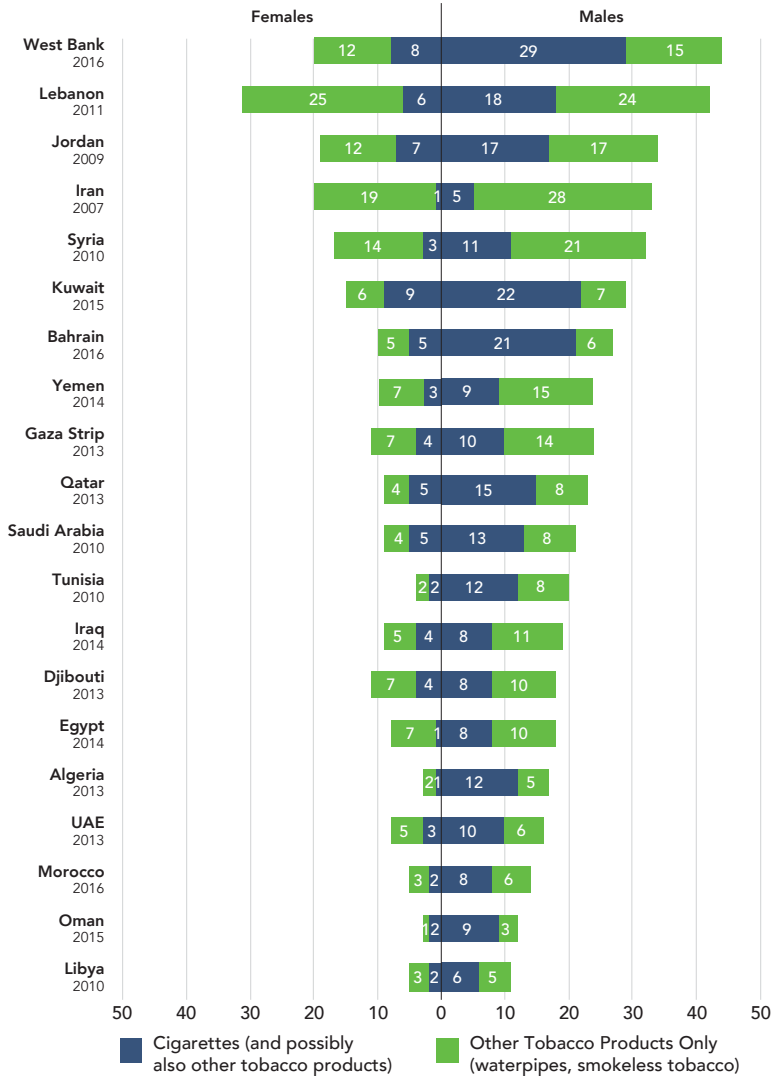
Tobacco Use Is Widespread Among Youth Across MENA Countries

Tobacco use is the leading preventable cause of death globally, and is the only behavioral risk factor that contributes to all four main noncommunicable diseases (NCDs) (cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases). In the majority of the countries in the region, 20 percent or more of male secondary school students (ages 13 to 15) reported current use of tobacco products. In more than half the MENA countries, cigarette smoking was more common than the use of other tobacco products among boys. Tobacco use among girls is typically half or less than that of boys, especially cigarette smoking, but overall use is increasing in some countries with changing norms and greater access to different products. The increasing use of water pipes (such as shisha and nargile) is a growing concern as it is more harmful than cigarette smoking, typically initiated earlier than cigarettes, and can act as a gateway for cigarette smoking.

Percent of 13-to-15-Year-Old Secondary School Students Who Smoked Cigarettes or Used Other Tobacco Products in the Past 30 Days, by Sex



Source: World Health Organization and Centers for Disease Control and Prevention, Global Youth Tobacco Survey.

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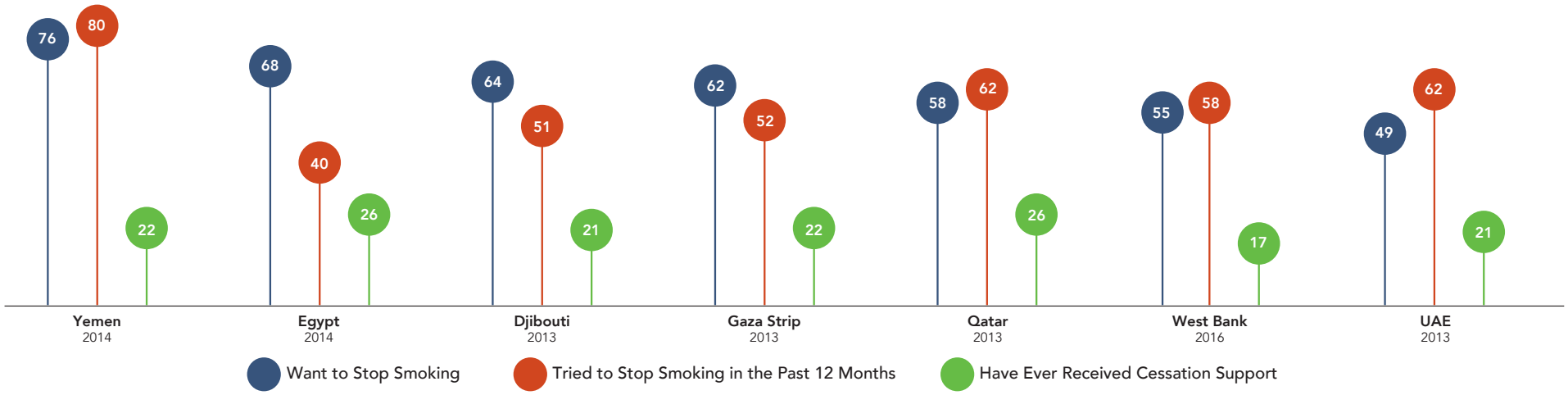
Many Youth Want to Stop Smoking But Have No Access to Cessation Support

In all seven countries with data available on smoking cessation, a half to three-quarters of the secondary school students (ages 13 to 15) who were current smokers reported wanting to stop smoking at the time of the survey. More than half of the students who were current smokers in all but one country also reported that they tried to stop smoking in the past 12 months. In all seven countries, the share of those who have ever received support from a cessation program or professional to stop smoking was about one quarter or less. These data suggest that barriers to accessing cessation support exist among youth, including limited availability of services, unaffordable cost, and distance.

Among 13-to-15-Year-Old Secondary School Students Who Currently Smoke, Percent Who Want to Stop Smoking, Who Tried to Stop Smoking, and Who Have Ever Received Cessation Help



Source: World Health Organization and Centers for Disease Control and Prevention, Global Youth Tobacco Survey.

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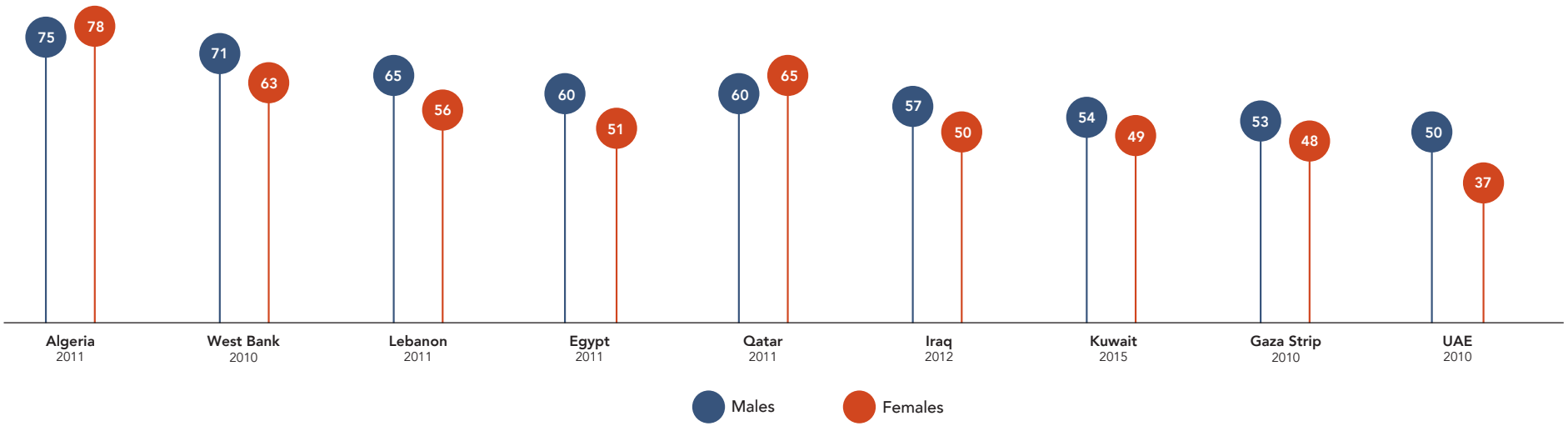
Many Youth in MENA Drink Carbonated Soft Drinks Daily

More than half of secondary school students (ages 13 to 15) in a number of countries in the region reported drinking sugary carbonated soft drinks once or more per day during the past 30 days. Globalization and socioeconomic development have led to a shift in diet away from the healthier, traditional diet in the region, generally consisting of vegetables, fruits, whole grains, and moderate or small amounts of fat and meat. The diets of young people in MENA today consist increasingly of calorie-dense, highly processed food with large amounts of sugar, salt, and saturated fat. Young people also have greater access to soft drinks and other sugar-sweetened beverages that add substantially to their calorie intake.

Percent of 13-to-15-Year-Old Secondary School Students Who Usually Drank Carbonated Soft Drinks One or More Times Per Day During the Past 30 Days, by Sex



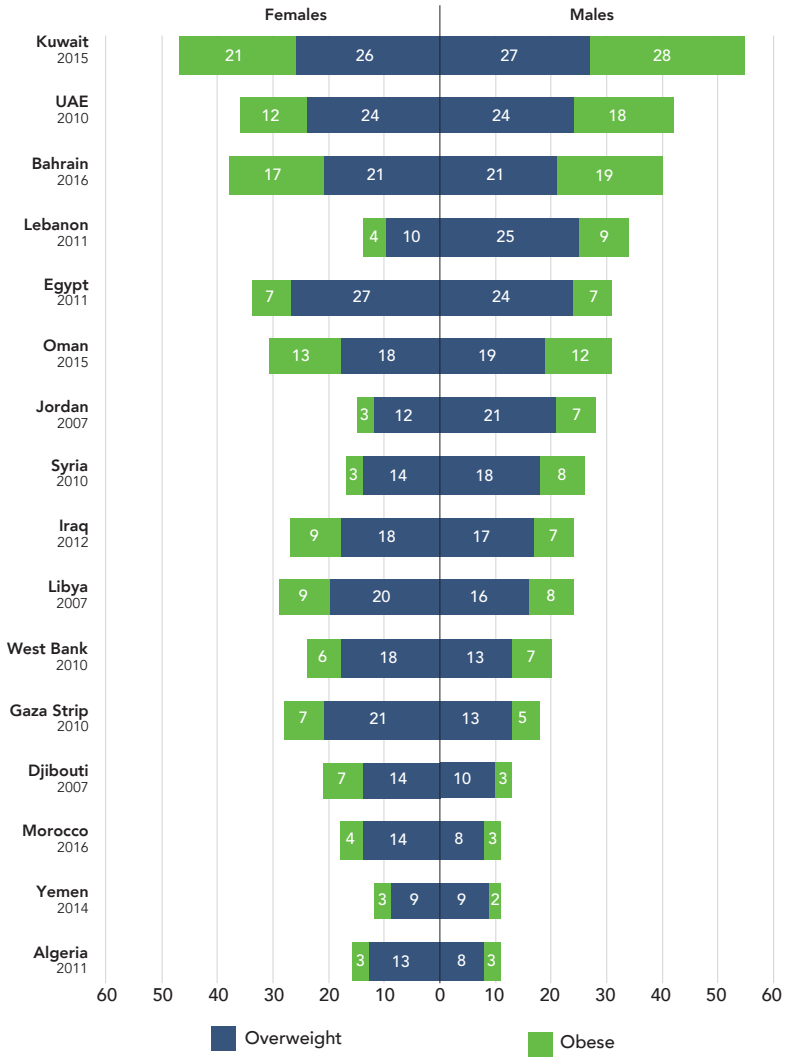
Source: World Health Organization and Centers for Disease Control and Prevention, Global School-Based Student Health Survey.

See Technical Notes on page 9

MENA Faces Overweight and Obesity Epidemic Among Youth

While rates of overweight and obesity are rising among youth worldwide, the rates are particularly high in parts of MENA. More than 30 percent of both male and female secondary school students (ages 13 to 15) in Bahrain, Egypt, Kuwait, Oman, and the United Arab Emirates (UAE) were either overweight or obese. More than a quarter of male secondary school students were either overweight or obese in Jordan, Lebanon, and Syria, and so were more than a quarter of female secondary school students in Gaza Strip, Iraq, and Libya. Unhealthy diets and physical inactivity contribute to overweight and obesity, and globally account for about 12 million NCD deaths annually.

Percent of 13-to-15-Year-Old Secondary School Students Who Are Overweight or Obese, by Sex



Note: Totals may not match the table below due to rounding.
Source: World Health Organization and Centers for Disease Control and Prevention, Global School-Based Student Health Survey.

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	Population and Youth							NCD Mortality		
	Mid-Year Population (millions)		Youth Ages 10-24, Percent of Population, 2017	Percent Enrolled in Secondary School (Net Enrollment Ratio), 2007/2015[1]		Percent of Total Population Living in Urban Areas, 2017	GNI per Capita, PPP (Current International $), 2016[2]	Age-Standardized Death Rate for All NCDs (per 100,000), 2015	Percent of Total Deaths due to NCDs, 2015	Probability of Premature Deaths From NCDs Between Ages 30-70, 2015[3]
	2017	2050		Male	Female					
NORTH AFRICA										
Algeria	42.2	64.8	23	–	–	71	14,720	457	74	15
Djibouti	1.0	1.3	30	29	21	77	–	604	43	19
Egypt	93.4	163.5	26	81	82	43	11,110	794	83	24
Libya	6.4	8.1	26	–	–	79	*11,210*	649	76	20
Morocco	35.1	40.2	25	59	53	60	7,700	552	78	17
Tunisia	11.5	15.3	22	–	–	68	11,150	561	85	17
MIDDLE EAST										
Bahrain	1.5	2.1	19	91	91	100	*44,690*	544	85	16
Iran	80.6	92.9	21	73	73	73	*17,370*	557	81	15
Iraq	39.2	76.5	31	49	40	70	17,240	671	54	22
Jordan	9.7	12.7	30	79	84	84	8,980	612	78	20
Kuwait	4.1	5.6	18	79	91	98	*83,420*	663	77	18
Lebanon	6.2	5.6	26	65	65	88	13,860	573	89	18
Oman	4.7	7.3	20	90	99	75	*41,320*	463	70	18
Qatar	2.7	3.8	19	69	90	99	*124,740*	447	66	14
Saudi Arabia	32.6	44.6	22	82	79	83	55,760	558	72	16
Syria	18.3	34.0	34	47	46	58	–	683	48	24
United Arab Emirates	9.4	13.2	15	–	–	86	72,850	498	76	17
Yemen	28.3	48.3	33	50	33	35	2,490	899	61	31
West Bank and Gaza	4.9	8.7	33	77	85	75	3,290	–	–	–

(-) Indicates data unavailable or inapplicable.

1 Data are from the most recent year for which they are available between 2007 and 2015.

2 Data prior to 2016 are shown in italics.

3 The estimated probability of dying between ages 30 and 70 years from the four main NCDs—cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases.

NCD Risk Factors Among Youth

	Current Tobacco Use								Current Alcohol Use			Physical Inactivity				Overweight or Obese			
	Any Products		Cigarettes		Other Products														
	Male	Female	Male	Female	Male	Female	Year		Male	Female	Year	Male	Female	Year		Male	Female	Year	
NORTH AFRICA																			
Algeria	17	3	12	1	6	1	2013	7	–	–		69	89	2011		11	16	2011	
Djibouti	18	11	8	4	6	6	2013	7	–	–		81	91	2007	8	13	21	2007	
Egypt	18	8	8	1	9	2	2014	7	–	–		77	90	2011		31	34	2011	
Libya	11	5	6	2	8	4	2010		–	–		79	89	2007	8	23	29	2007	
Morocco	14	5	8	2	–	–	2016		6	2	2006	86	91	2016	8	12	18	2016	
Tunisia	20	4	12	2	12	3	2010		–	–		74	89	2008	8			2009-10	11
MIDDLE EAST																			
Bahrain	27	10	21	5	–	–	2016		–	–		73	86	2016	8	40	39	2016	
Iran	33	20	5	1	32	20	2007		–	–				[2013]	8,9			2011-12	12
Iraq	19	9	8	4	11	4	2014	7	–	–		75	86	2012		24	27	2012	
Jordan	34	19	17	7	28	17	2009		–	–		82	89	2007	8	28	14	2007	
Kuwait	29	15	22	9	–	–	2015		–	–		81	85	2015	8	55	47	2015	
Lebanon	42	31	18	6	42	31	2011	7	37	22	2011	58	72	2011		34	14	2011	
Oman	12	3	9	2	–	–	2015		–	–		83	90	2015	8	31	32	2015	
Qatar	23	9	15	5	11	3	2013	7	–	–		80	90	2011		–	–		
Saudi Arabia	21	9	13	5	15	7	2010		–	–				2009-10	8,10			2009-10	13
Syria	32	17	11	3	29	17	2010		12	3	2010	81	89	2010		26	18	2010	
United Arab Emirates	16	8	10	3	11	6	2013	7	–	–		66	77	2010		42	36	2010	
Yemen	24	10	9	3	12	6	2014	7	–	–		85	92	2014	8	12	12	2014	
West Bank and Gaza																			
West Bank	44	20	29	8	31	15	2016	7	–	–		77	87	2010		21	24	2010	
Gaza Strip	24	11	10	4	12	6	2013	7	–	–		71	81	2010		17	28	2010	
UNRWA CAMPS[6]																			
Jordan	32	16	19	7	20	10	2014	7	–	–		69	80	2010		28	20	2010	
Lebanon	33	18	19	5	22	16	2013	7	–	–		75	89	2010		29	28	2010	
Syria	50	34	20	6	43	31	2008		–	–		71	84	2010		-	-		
West Bank	48	25	31	13	31	15	2014	7	–	–		69	82	2010		23	28	2010	
Gaza Strip	21	14	14	8	13	6	2013	7	–	–		74	83	2010		18	23	2010	

See Notes and Definitions on page 8

Definition of Risk Levels

High Risk Medium Risk Low Risk

Current Tobacco Use

Percent using cigarettes/other tobacco products/ any products in the past 30 days among 13 to 15-year-old secondary school students.[4]

16% or Above 7% to 15% Below 7%

Current Alcohol Use

Percent having any drinks with alcohol in the past 30 days among 13 to 15-year-old secondary school students.[5]

40% or Above 20% to 39% Below 20%

Physical Inactivity

Percent not engaging in physical activity for at least 60 minutes per day on five out of the last seven days among 13 to 15-year-old secondary school students.[5]

70% or Above 50% to 69% Below 50%

Overweight or Obese

Percent who are overweight or obese among 13 to 15-year-old secondary school students.[5]

20% or Above 10% to 19% Below 10%

4 Based on the Global Youth Tobacco Survey and the Global School-Based Student Health Survey.
5 Based on the Global School-Based Student Health Survey.
6 Surveys were conducted in secondary schools in the refugee camps for Palestinian refugees in the respective countries by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).
7 Data refer to current use of other smoked tobacco products.
8 Data refer to physical inactivity level in seven (not five) out of the last seven days.
9 Sanaeinasab et al. (2013).
10 Al-Hazzaa et al. (2011).
11 Maatoug et al. (2015).
12 Kelishadi et al. (2013).
13 Al-Hazzaa et al. (2014).

Country and subregional surveys:

Hazzaa M. Al-Hazzaa et al., "Prevalence of Overweight, Obesity, and Abdominal Obesity Among Urban Saudi Adolescents: Gender and Regional Variations," *Journal of Health, Population, and Nutrition* 32, no. 4 (2014): 634.

Hazzaa M. Al-Hazzaa et al., "Physical Activity, Sedentary Behaviors, and Dietary Habits Among Saudi Adolescents Relative to Age, Gender and Region," *International Journal of Behavioral Nutrition and Physical Activity* 8, no. 1 (2011): 140.

Hormoz Sanaeinasab et al., "Descriptive Analysis of Iranian Adolescents' Stages of Change for Physical Activity Behavior," *Nursing & Health Sciences* 15, no. 3 (2013): 280-5.

Jihene Maatoug et al., "Peer Reviewed: School-Based Intervention as a Component of a Comprehensive Community Program for Overweight and Obesity Prevention, Sousse, Tunisia, 2009–2014," *Preventing Chronic Disease* 12 (2015).

Roya Kelishadi et al., "Methodology and Early Findings of the Fourth Survey of Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease in Iran: The CASPIAN IV Study," *International Journal of Preventive Medicine* 4, no. 12 (2013): 1451-60.

This data sheet accompanies the policy report entitled *Curbing the Noncommunicable Disease Epidemic in the Middle East and North Africa: Prevention Among Young People Is the Key,* available at www.prb.org/Publications/Datasheets/2017/ncd-risk-youth-mena.aspx.

Technical Notes

This data sheet presents the prevalence of behavioral risk factors for noncommunicable diseases (NCDs) among young people and background data on key demographic, socioeconomic, and epidemiological factors for selected countries in MENA.

Noncommunicable Disease Risk Factors

The data sheet focuses on the four key behavioral risk factors for NCDs: tobacco use, harmful use of alcohol (alcohol use), physical inactivity, and unhealthy diet. These account for the majority of deaths from the four main NCDs: cardiovascular diseases (CVDs), cancers, diabetes, and chronic respiratory diseases. To facilitate the cross-country comparison of risk factor levels, the levels are presented here as high (red), medium (yellow), or low (green).

Risk factor levels are assessed by first identifying the core indicator for each risk factor that is suitable and for which data are consistently available for the largest number of countries. For countries with data on the core indicators, both risk factor levels and data points are presented. For countries without data on the core indicators, only the color coding for risk factor levels are presented. These levels are based on alternative indicators or data that are otherwise not directly comparable (such as different age groups, indicator definitions) but that still enable assessment of risk factor levels using similar standards. References for all the data sources appear in the Data Sources section.

The risk factor levels are assessed using the standards described below. Due to the lack of preexisting standards to assess population-level risks for these behaviors, cut-offs were developed for each risk factor based on a review of previous literature. The standards were adjusted up or down to determine the risk factor levels when the indicator used differed from the core indicators described below. Data on any age groups between ages 10 and 24 from 2006 or later are considered in the coding. Data points rounded to their nearest whole numbers are used for coding risk factor levels.

Tobacco Use. The core indicators are the percent reporting use in the past 30 days of each of the following: any tobacco products, cigarettes, and other tobacco products (products other than cigarettes) among 13-to-15-year-old students, available in Global Youth Tobacco Survey (GYTS) (World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC)) and Global School-Based Student Health Survey (GSHS) (WHO and CDC). The standard used for coding is high ≥ 16%; medium = 7%-15%; and low < 7%. In some countries, the measure for the use of other tobacco products pertains only to other "smoked" tobacco products (see footnotes).

Alcohol Use. The core indicator is the percent reporting any alcohol use in the past 30 days among 13-to-15-year-old students available in GSHS (WHO and CDC). The standard used for coding is high ≥ 40%; medium = 20%-39%; and low < 20%. We examine any amount of alcohol use instead of harmful use, since any amount of drinking presents risk among youth both because of the greater health impact of alcohol on young people and the link between the age of onset and likelihood of lifetime alcohol dependency.

Physical Inactivity. The core indicator is the percent reporting not engaging in any type of physical activity for at least 60 minutes a day for five days in the past seven days among 13-to-15- year-old students available in GSHS (WHO and CDC). The standard used for coding is high ≥ 70%; medium = 50%-69%; and low < 50%. Surveys usually report physical activity levels rather than inactivity levels, so data presented here are 100 percent minus the percent reported to be physically active. In some countries, the measure pertains to the activity level in seven out of the past seven days (see footnotes). For those countries, the standards used to code risk factor levels were adjusted. For example, while the percent physically inactive is displayed as 73 among boys in Bahrain, it is coded as medium rather than high risk as the measure pertains to the activity level over the past seven days.

Overweight/Obesity (Unhealthy Diet). The core indicator is the percent reporting overweight or obese among 13-to-15-year-olds available in GSHS (WHO and CDC). The standard used for coding is high ≥ 20%; medium = 10%-19%; and low < 10%. The overweight/obesity measure is used as a proxy for unhealthy diet due to the scarcity of comparable data on dietary intake to assess nutrition levels across countries. Overweight/obesity is a physiological change resulting from high caloric consumption and physical inactivity and is assessed using the Body Mass Index (BMI), a measure of weight relative to height. Overweight and obesity statuses are defined in GSHS as one standard deviation and two standard deviations above median for BMI by age and sex, respectively.

Data Sources

Population and Youth

Toshiko Kaneda and Genevieve Dupuis, *2017 World Population Data Sheet* (Washington, DC: Population Reference Bureau, 2017).

United Nations (UN) Population Division, *World Population Prospects: The 2017 Revision* (New York: UN, 2017).

UNESCO Institute for Statistics, online database, accessed at www.uis.unesco.org/Pages/default. aspx.

World Bank, World Development Indicators, online database, accessed at http://data.worldbank.org/ data-catalog/world-development-indicators.

NCD Mortality

World Health Organization (WHO), *World Health Statistics 2017* (Geneva: WHO, 2017).

WHO, *Noncommunicable Diseases Progress Monitor 2017* (Geneva: WHO, 2017).

NCD Risk Factors Among Youth

WHO and the Centers for Disease Control and Prevention (CDC), Global School-Based Student Health Surveys, accessed at www.who.int/chp/gshs/en/.

WHO and CDC, Global Youth Tobacco Surveys, accessed at http://nccd.cdc.gov/GTSSData/ Ancillary/DataReports.aspx?CAID=1.

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