



## POPULATION REFERENCE BUREAU

### Background Data for Noncommunicable Diseases in Latin America and the Caribbean: Youth Are Key to Prevention

(June 2013) This background data 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).

#### Alcohol Use

The core indicator: percent with any alcohol use in the past 30 days.

The standard used for coding: high (red) $\geq$ 40%; medium (yellow)=20%-39.9%; and low (green) $<$ 20% among 14-17 year old students.

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#### Data Source

CADUMS	Canadian Alcohol and Drug Use Monitoring Survey 2011 (Health Canada)
CAMDI	The Central America Diabetes Initiative (CAMDI): Survey of Diabetes, Hypertension and Chronic Disease Risk Factors, Belize 2009 (PAHO)
CCHS	Canadian Community Health Survey (Statistics Canada)
ENSANUT	Encuesta Nacional de Salud y Nutrición 2012, Mexico [National Survey of Health and Nutrition] (Instituto Nacional de Salud Publica)

GSHS	Global School-based Student Health Survey (varying survey years per country) (Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO))
PENSE	Pesquisa Nacional de Saúde do Escolar 2009 (National Survey of School Health 2009), Brazil (IBGE, Diretoria de Pesquisa, Coordenação de População e Indicadores Sociais)
RDUА	Report on Drug Use in the Americas 2011 (Inter-American Drug Abuse Control Commission (CICAD))
STEPS	STEPwise Approach to Chronic Disease Risk Factor Surveillance Survey (varying survey years per country) (WHO)
YRBS	Youth Risk Behavior Survey (varying survey years per country) (CDC)

### Alcohol Use Among Males

Country	Region	Year	Age	Prevalence	Sample Size	Source
<b>NORTH AMERICA</b>						
<b>Canada</b>	(data pertain to both sexes, see notes)	2011	15-24	51.9	671	CADUMS, CCHS
<b>United States</b>		2011	14-18 <sup>1</sup>	39.5	6,861	YRBS
<b>Puerto Rico</b>		2011	14-18 <sup>1</sup>	29.2	591	YRBS
<b>CENTRAL AMERICA</b>						
<b>Belize</b>		2009	20-39	52.7	41,607	CAMDI
<b>Costa Rica</b>		2009	13-15	23.4	2,679	GSHS
<b>El Salvador</b>		2008	14-17	12.7		RDUА
<b>Guatemala</b>		2009	13-15	18.1	5,592	GSHS
<b>Mexico</b>	(see notes)	2012	10-19	28.8	10,824	ENSANUT
		2009	14-17	29.1		RDUА
<b>CARIBBEAN</b>						
<b>Antigua and Barbuda</b>		2009	13-15	43.8	1,266	GSHS
<b>British Virgin Islands</b>		2009	13-15	30.5	1,664	GSHS

<b>Cayman Islands</b>		2007	13-15	41.4	1,299	GSHS
<b>Dominica</b>		2009	13-15	54.9	1,642	GSHS
<b>Grenada</b>		2008	13-15	49.1	1,542	GSHS
<b>Jamaica</b>		2010	13-15	57.8	1,623	GSHS
<b>St. Kitts-Nevis</b>		2008	25-34	36.2	149	STEPS
<b>Saint Lucia</b>		2007	13-15	59.2	1,276	GSHS
<b>St. Vincent and the Grenadines</b>		2007	13-15	52.6	1,333	GSHS
<b>Trinidad and Tobago</b>		2011	13-15	38.0	2,811	GSHS
<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2009	14-17	47.8		RDUА
<b>Brazil</b>		2009	14-15 <sup>5</sup>	26.5	30,487	PENSE
<b>Chile</b>		2009	14-17	35.6		RDUА
<b>Colombia</b>	<b>Santander</b>	2010	15-24	64.0	290	STEPS
	<b>Bogota, private schools</b>	2007	13-15	60.5	567	GSHS
	<b>Manizales</b>	2007	13-15	58.9	2,037	GSHS
	<b>Bogota</b>	2007	13-15	56.8	1,737	GSHS
	<b>Bogota, official schools</b>	2007	13-15	55.8	1,170	GSHS
	<b>Bucaramanga City</b>	2007	13-15	55.6	2,093	GSHS
	<b>Cali City</b>	2007	13-15	52.9	1,945	GSHS
	<b>Valledupar City</b>	2007	13-15	35.6	2,095	GSHS
<b>Ecuador</b>	<b>Guayaquil</b>	2007	13-15	28.6	2,669	GSHS
	<b>Quito</b>	2007	13-15	33.3	2,215	GSHS
	<b>Zamora</b>	2007	13-15	42.4	640	GSHS
<b>Guyana</b>		2010	13-15	44.1	2,392	GSHS
<b>Peru</b>		2010	13-15	28.4	2,882	GSHS
<b>Suriname</b>		2009	13-15	35.6	1,698	GSHS
<b>Uruguay</b>		2009	14-17	53.0		RDUА

## Alcohol Use Among Females

Country	Region	Year	Age	Value	Sample Size	Source
<b>NORTH AMERICA</b>						
<b>Canada</b>	(data pertain to both sexes, see notes)	2011	15-24	51.9	671	CADUMS, CCHS
<b>United States</b>		2011	14-18 <sup>1</sup>	37.9	7,032	YRBS
<b>Puerto Rico</b>		2011	14-18 <sup>1</sup>	31.4	707	YRBS
<b>CENTRAL AMERICA</b>						
<b>Belize</b>		2009	20-39	18.6	43,215	CAMDI
<b>Costa Rica</b>		2009	13-15	23.6	2,679	GSHS
<b>El Salvador</b>		2008	14-17	10.6		RDUА
<b>Guatemala</b>		2009	13-15	14.2	5,592	GSHS
<b>Mexico</b>	(see notes)	2012	10-19	21.1	10,695	ENSANUT
		2009	14-17	30.4		RDUА
<b>CARIBBEAN</b>						
<b>Antigua and Barbuda</b>		2009	13-15	45.7	1,266	GSHS
<b>British Virgin Islands</b>		2009	13-15	35.5	1,664	GSHS
<b>Cayman Islands</b>		2007	13-15	36.9	1,299	GSHS
<b>Dominica</b>		2009	13-15	54.0	1,642	GSHS
<b>Grenada</b>		2008	13-15	43.0	1,542	GSHS
<b>Jamaica</b>		2010	13-15	47.1	1,623	GSHS
<b>St. Kitts-Nevis</b>		2008	25-34	17.3	289	STEPS
<b>Saint Lucia</b>		2007	13-15	52.2	1,276	GSHS
<b>St. Vincent and the Grenadines</b>		2007	13-15	53.5	1,333	GSHS
<b>Trinidad and Tobago</b>		2011	13-15	34.7	2,811	GSHS

<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2009	14-17	45.3		RDUА
<b>Brazil</b>		2009	14-15 <sup>5</sup>	28.1	30,487	PENSE
<b>Chile</b>		2009	14-17	35.5		RDUА
<b>Colombia</b>	<b>Santander</b>	2010	15-24	44.7	388	STEPS
	<b>Manizales</b>	2007	13-15	71.1	2,037	GSHS
	<b>Bogota, private schools</b>	2007	13-15	60.5	567	GSHS
	<b>Bogota</b>	2007	13-15	59.7	1,737	GSHS
	<b>Bogota, official schools</b>	2007	13-15	58.6	1,170	GSHS
	<b>Cali City</b>	2007	13-15	58.0	1,945	GSHS
	<b>Bucaramanga City</b>	2007	13-15	56.3	2,093	GSHS
	<b>Valledupar City</b>	2007	13-15	39.6	2,095	GSHS
<b>Ecuador</b>	<b>Guayaquil</b>	2007	13-15	29.8	2,669	GSHS
	<b>Quito</b>	2007	13-15	30.1	2,215	GSHS
	<b>Zamora</b>	2007	13-15	40.2	640	GSHS
<b>Guyana</b>		2010	13-15	34.3	2,392	GSHS
<b>Peru</b>		2010	13-15	26.0	2,882	GSHS
<b>Suriname</b>		2009	13-15	30.0	1,698	GSHS
<b>Uruguay</b>		2009	14-17	52.6		RDUА

### Notes

CANADA: Prevalence of current alcohol use (51.9%) is available only for both sexes combined from CADUMS for youth (15-24 year olds). Only data on heavy drinking, defined as 5 or more drinks on one occasion at least once a month in the past year, are available by sex from CCHS for 12-19 year olds and are 15% for boys and 11.3% for girls. We used the US data on comparable indicators as reference in estimating sex differences in current drinking among Canadian youth. While the overall levels of heavy drinking differ between two countries (the US rates are higher at 23.8% for boys and 19.8% for girls partly due to the less stringent definition of heavy drinking used), the relative sex differences observed were relatively small and comparable across the two countries (3.7% for Canada and 4% for US). The US prevalence on current drinking, however, shows even smaller sex differences (1.6%). We therefore

also assume a smaller sex difference in the prevalence of current drinking than in the prevalence of heavy drinking among Canadian youth. We therefore code the risk of alcohol use in Canada to be high for both sexes.

MEXICO: Most recent data available on alcohol use among adolescents come from ENSANUT conducted in 2012. Prevalence is reported only for any use in the past year among 10-19 year olds, which include those who had alcoholic drinks daily, weekly, monthly, or occasionally. We thus also present monthly prevalence data reported in RDUA for 14-17 year olds from 2009. Regardless of the data sources used, the risk of alcohol use in Mexico for both boys and girls are coded as medium.

### Footnotes

\*Sample sizes for Global Youth Tobacco Survey (GYTS) are for both sexes combined. Sample sizes for Global School-based Student Health Survey (GSHS) are for both sexes combined and for all ages included in the survey (not limited to 13-15 year olds).  
<sup>1</sup>grades 9-12, <sup>2</sup>grade 9

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### Background Data for Noncommunicable Diseases in Latin America and the Caribbean: Youth Are Key to Prevention

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#### Cigarette Use

The core indicator: percent with any cigarette use in the past 30 days.

The standard used for coding: high (red) $\geq$ 16%; medium (yellow)=7%-15.9%; and low (green) $<$ 7% among 13-15 year old students.

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#### Data Source

ENSC	Encuesta Nacional de Salud Chile 2009-2010 [Chile National Health Survey 2009-2010] (Ministerio de Salud, Chile)
GYTS	Global Youth Tobacco Survey (varying survey years per country) (US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO))
GSHS	Global School-based Student Health Survey (varying survey years per country) (US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO))

PENSE	Pesquisa Nacional de Saúde do Escolar 2009 [National Survey of School Health 2009], Brazil (IBGE, Diretoria de Pesquisa, Coordenação de População e Indicadores Sociais)
STEPS	STEPwise Approach to Chronic Disease Risk Factor Surveillance Survey 2010, Santander, Colombia (WHO)
VIGITEL	Vigilância de Fatores de Risco e Proteção para Doenças Crônicas por Inquérito Telefônico 2010, Brazil [Surveillance of Risk and Protective Factors for Chronic Diseases Telephone Interviews 2010] (Ministério da Saúde)
YRBS	Youth Risk Behavior Survey (varying survey years per country) (CDC)
YSS	Youth Smoking Survey 2010-2011, Canada (Propel Centre for Population Health Impact, University of Waterloo)

### Cigarette Use Among Males

Country	Region	Year	Age	Prevalence	Sample Size*	Source
<b>NORTH AMERICA</b>						
<b>Canada</b>		2010/2011	11-15 <sup>1</sup>	2.2	805	YSS
		2010/2011	12-15 <sup>2</sup>	2.8	616	YSS
		2010/2011	15-18 <sup>3</sup>	11.3	639	YSS
<b>United States</b>		2011	14-18 <sup>4</sup>	19.9	7,242	YRBS
<b>Puerto Rico</b>		2011	14-18 <sup>4</sup>	3.6	626	YRBS
<b>CENTRAL AMERICA</b>						
<b>Belize</b>		2008	13-15	11.7	1,751	GYTS
<b>Costa Rica</b>		2009	13-15	10.4	2,679	GSHS
<b>El Salvador</b>		2009	13-15	11.2		GYTS
<b>Guatemala</b>		2008	13-15	13.7	3,838	GYTS
<b>Mexico</b>		2011	13-15	15.8	1,825	GYTS
<b>CARIBBEAN</b>						
<b>Antigua and Barbuda</b>		2009	13-15	8.2	1,266	GSHS



		2009	13-15	5.2	1,068	GYTS
<b>British Virgin Islands</b>		2009	13-15	7.3	1,664	GSHS
<b>Cayman Islands</b>		2007	13-15	13.5	1,299	GSHS
<b>Dominica</b>		2009	13-15	13.8		GYTS
<b>Grenada</b>		2009	13-15	9.9		GYTS
<b>Jamaica</b>		2010	13-15	31.0	1,623	GSHS
		2010	13-15	21.5		GYTS
<b>St. Kitts-Nevis</b>		2010	13-15	4.8		GYTS
<b>Saint Lucia</b>		2011	13-15	13.3	858	GYTC
<b>St. Vincent and the Grenadines</b>		2011	13-15	16.6	1,102	GYTS
<b>Trinidad and Tobago</b>		2011	13-15	10.9	1,760	GYTS
		2011	13-15	13.6	2,811	GSHS
<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2007	13-15	21.1	4,926	GYTS
		2007	13-15	19.8	1,980	GSHS
<b>Brazil</b>	(see notes)	2010	18-24	12.7	4,528	VIGITEL
		2009	14-15 <sup>5</sup>	6.4	30,487	PENSE
<b>Chile</b>		2009/2010	15-24	48.3	363	ENSC
<b>Colombia</b>	Santander	2010	15-24	22.7	290	STEPS
	Bogota	2007	13-15	25.4	1,235	GYTS
	Bogota	2007	13-15	20.2	1,737	GSHS
	Bogota, official schools	2007	13-15	20.8	1,170	GSHS
	Bogota, private schools	2007	13-15	19.9	567	GSHS
	Bucaramanga City	2007	13-15	14.4	2,093	GSHS
	Cali City	2007	13-15	25.0	1,945	GSHS
	Manizales	2007	13-15	24.8	2,037	GSHS
	Valledupar City	2007	13-15	4.3	2,095	GSHS
<b>Ecuador</b>	Guayaquil	2007	13-15	13.6	2,669	GSHS

	Quito	2007	13-15	14.5	2,215	GSHS
	Zamora	2007	13-15	32.7	640	GSHS
<b>Guyana</b>		2010	13-15	13.3		GYTS
<b>Peru</b>		2010	13-15	22.9	2,882	GSHS
<b>Suriname</b>		2009	13-15	14.0		GYTS
		2009	13-15	12.5	1,698	GSHS
<b>Uruguay</b>		2007	13-15	16.4	2,483	GYTS

### Cigarette Use Among Females

Country	Region	Year	Age	Prevalence	Sample Size*	Source
<b>NORTH AMERICA</b>						
<b>Canada</b>		2010/2011	11-15 <sup>1</sup>	2.1	776	YSS
		2010/2011	12-15 <sup>2</sup>	2.7	590	YSS
		2010/2011	15-18 <sup>3</sup>	8.7	593	YSS
<b>United States</b>		2011	14-18 <sup>4</sup>	16.1	7,450	YRBS
<b>Puerto Rico</b>		2011	14-18 <sup>4</sup>	2.5	756	YRBS
<b>CENTRAL AMERICA</b>						
<b>Belize</b>		2008	13-15	4.4	1,751	GYTS
<b>Costa Rica</b>		2009	13-15	8.4	2,679	GSHS
<b>El Salvador</b>		2009	13-15	7.1		GYTS
<b>Guatemala</b>		2008	13-15	9.1	3,838	GYTS
<b>Mexico</b>		2011	13-15	12.9	1,825	GYTS
<b>CARIBBEAN</b>						
<b>Antigua and Barbuda</b>		2009	13-15	6.1	1,266	GSHS
		2009	13-15	4.3	1,068	GYTS
<b>British Virgin Islands</b>		2009	13-15	4.3	1,664	GSHS
<b>Cayman Islands</b>		2007	13-15	7.8	1,299	GSHS

<b>Dominica</b>		2009	13-15	8.9		GYTS
<b>Grenada</b>		2009	13-15	6.2		GYTS
<b>Jamaica</b>		2010	13-15	16.9	1,623	GSHS
		2010	13-15	14.3		GYTS
<b>St. Kitts-Nevis</b>		2010	13-15	3.2		GYTS
<b>Saint Lucia</b>		2011	13-15	8.5	858	GYTC
<b>St. Vincent and the Grenadines</b>		2011	13-15	8.5	1,102	GYTS
<b>Trinidad and Tobago</b>		2011	13-15	7.0	1,760	GYTS
		2011	13-15	6.9	2,811*	GSHS
<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2007	13-15	27.3	4,926	GYTS
		2007	13-15	21.9	1,980	GSHS
<b>Brazil</b>	(see notes)	2010	18-24	12.4	4,528	VIGITEL
		2009	14-15 <sup>5</sup>	6.3	30,487	PENSE
<b>Chile</b>		2009/2010	15-24	42.6	438	ENSC
<b>Colombia</b>	Santander	2010	15-24	5.4	388	STEPS
	Bogota	2007	13-15	26.6	1,235	GYTS
	Bogota	2007	13-15	20.1	1,737	GSHS
	Bogota, official schools	2007	13-15	20.3	1,170	GSHS
	Bogota, private schools	2007	13-15	21.2	567	GSHS
	Bucaramanga City	2007	13-15	8.5	2,093	GSHS
	Cali City	2007	13-15	17.0	1,945	GSHS
	Manizales	2007	13-15	25.4	2,037	GSHS
	Valledupar City	2007	13-15	4.1	2,095	GSHS
<b>Ecuador</b>	Guayaquil	2007	13-15	7.2	2,669	GSHS
	Quito	2007	13-15	10.6	2,215	GSHS
	Zamora	2007	13-15	12.3	640	GSHS
<b>Guyana</b>		2010	13-15	5.6		GYTS

Peru		2010	13-15	11.9	2,882	GSHS
Suriname		2009	13-15	10.1		GYTS
		2009	13-15	8.6	1,698	GSHS
Uruguay		2007	13-15	22.9	2,483	GYTS

### Notes

BRAZIL: The most recent data on smoking prevalence available for Brazil are from VIGITEL in 2010 for 18-24 year olds that show medium risk for Brazil for both sexes (12.7% for males and 12.4% for females). The prevalence in 2009 among 14-15 year olds available from PENSE, however, falls under low risk for both boys and girls (6.4% for boys and 6.3% for girls). Considering the age groups associated with these two data points—the 2010 VIGITEL data are from much older age group than the 2009 PENSE data and the reference age group in the standard used (13-15 year olds)—we code Brazil’s risk for smoking among youth as low for both sexes.

### Footnotes

\*Sample sizes for Global Youth Tobacco Survey (GYTS) are for both sexes combined. Sample sizes for Global School-based Student Health Survey (GSHS) are for both sexes combined and for all ages included in the survey (not limited to 13-15 year olds).  
<sup>1</sup>grades 6-9, <sup>2</sup>grades 7-9, <sup>3</sup>grades 10-12, <sup>4</sup>grades 9-12, <sup>5</sup>grade 9

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#### Physical Inactivity

The core indicator: percent not engaged in any type of physical activity for at least 60 minutes a day for 5 of the past 7 days.

The standard used for coding: high (red) $\geq$ 70%; medium (yellow)=50%-69.9%; and low (green) $<$ 50% among 13-15 year old students.

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#### Data Source

CAMDI	The Central America Diabetes Initiative (CAMDI): Survey of Diabetes, Hypertension and Chronic Disease Risk Factors, Belize 2009 (PAHO)
CHMS	Canadian Health Measures Survey 2007-2009 (Statistics Canada)
ENSANUT	Encuesta Nacional de Salud y Nutrición 2012, Mexico [National Survey of Health and Nutrition] (Instituto Nacional de Salud Publica)
ENSC	Encuesta Nacional de Salud Chile 2009-2010 [Chile National Health Survey 2009-2010] (Ministerio de Salud, Chile)

GSHS	Global School-based Student Health Survey (varying survey years per country) (US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO))
JHLS	Jamaica Health and Lifestyle Survey 2007-2008 (Epidemiology Research Center, University of the West Indies)
PENSE	Pesquisa Nacional de Saúde do Escolar 2009 [National Survey of School Health 2009], Brazil (IBGE, Diretoria de Pesquisa, Coordenação de População e Indicadores Sociais)
STEPS	STEPwise Approach to Chronic Disease Risk Factor Surveillance Survey 2010, Colombia (WHO)
YRBS	Youth Risk Behavior Survey (varying survey years per country) (CDC)

### Physical Inactivity Among Males

Prevalence data in bold are based on an alternative definition of physical inactivity (percent not engaged in any type of physical activity for at least 60 minutes every day for the past 7 days. See notes for more details).

Country	Region	Year	Age	Prevalence	Sample Size	Source
<b>NORTH AMERICA</b>						
<b>Canada</b>	(see notes)	2007/2009	15-19	55.0		CHMS
<b>United States</b>		2011	13-15 <sup>1</sup>	40.1	7,431	YRBS
		2011	13-15 <sup>1</sup>	<b>61.7</b>	7,431	YRBS
<b>Puerto Rico</b>		2011	13-15 <sup>1</sup>	70.9	677	YRBS
		2011	13-15 <sup>1</sup>	<b>84.1</b>	677	YRBS
<b>CENTRAL AMERICA</b>						
<b>Belize</b>	(see notes)	2009	20-39	74.6	41,340	CAMDI
<b>Costa Rica</b>		2009	13-15	<b>64.1</b>	2,679	GSHS
<b>El Salvador</b>						
<b>Guatemala</b>		2009	13-15	<b>71.4</b>	5,592	GSHS
<b>Mexico</b>	(data pertain to both sexes, see notes)	2012	15-18	<b>41.0</b>	2,307	ENSANUT

<b>CARIBBEAN</b>						
<b>Antigua and Barbuda</b>		2009	13-15	<b>63.5</b>	1,266	GSHS
<b>British Virgin Islands</b>		2009	13-15	66.8	1,664	GSHS
<b>Cayman Islands</b>		2007	13-15	80.2	1,299	GSHS
<b>Dominica</b>		2009	13-15	<b>75.2</b>	1,642	GSHS
<b>Grenada</b>		2008	13-15	81.9	1,542	GSHS
<b>Jamaica</b>	(see notes)	2007/2008	15-24	46.0		JHLS
<b>St. Kitts-Nevis</b>		2011	13-15	<b>70.7</b>	1,740	GSHS
<b>Saint Lucia</b>		2007	13-15	82.6	1,276	GSHS
<b>St. Vincent and the Grenadines</b>		2007	13-15	84.4	1,333	GSHS
<b>Trinidad and Tobago</b>		2011	13-15	64.0	2,811	GSHS
<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2007	13-15	81.8	1,980	GSHS
<b>Brazil</b>	(see notes)	2009	14-15 <sup>2</sup>	43.8	30,487	PENSE
<b>Chile</b>	(see notes)	2009-2010	15-24	12.5	355	ENSC
<b>Colombia</b>	<b>Manizales</b>	2007	13-15	84.0	2,037	GSHS
	<b>Bogota, official schools</b>	2007	13-15	82.9	1,170	GSHS
	<b>Valledupar City</b>	2007	13-15	82.2	2,095	GSHS
	<b>Bogota</b>	2007	13-15	81.9	1,737	GSHS
	<b>Cali City</b>	2007	13-15	80.3	1,945	GSHS
	<b>Bucaramanga City</b>	2007	13-15	80.2	2,093	GSHS
	<b>Bogota, private schools</b>	2007	13-15	80.0	567	GSHS
<b>Ecuador</b>	<b>Guayaquil</b>	2007	13-15	87.8	2,669	GSHS
	<b>Zamora</b>	2007	13-15	82.5	640	GSHS
	<b>Quito</b>	2007	13-15	81.1	2,215	GSHS
<b>Guyana</b>		2010	13-15	<b>76.2</b>	2,392	GSHS
<b>Peru</b>		2010	13-15	<b>73.0</b>	2,882	GSHS
<b>Suriname</b>		2009	13-15	<b>69.5</b>	1,698	GSHS

Uruguay		2006	13-15	73.4	3,406	GSHS
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### Physical Inactivity Among Females

Prevalence data in bold are based on an alternative definition of physical inactivity (percent not engaged in any type of physical activity for at least 60 minutes every day for the past 7 days. See notes for more details).

Country	Region	Year	Age	Prevalence	Sample Size	Source
<b>NORTH AMERICA</b>						
Canada	(see notes)	2007/2009	15-19	75.0		CHMS
United States		2011	13-15	61.5	7,559	YRBS
		2011	13-15	<b>81.5</b>	7,559	YRBS
Puerto Rico		2011	13-15	83.0	808	YRBS
		2011	13-15	<b>91.6</b>	808	YRBS
<b>CENTRAL AMERICA</b>						
Belize	(see notes)	2009	20-39	84.4	43,226	CAMDI
Costa Rica		2009	13-15	<b>81.0</b>	2,679	GSHS
El Salvador						
Guatemala		2009	13-15	<b>80.8</b>	5,592	GSHS
Mexico	(data pertain to both sexes, see notes)	2012	15-18	<b>41.0</b>	2,307	ENSANUT
<b>CARIBBEAN</b>						
Antigua and Barbuda		2009	13-15	<b>73.0</b>	1,266	GSHS
British Virgin Islands		2009	13-15	77.3	1,664	GSHS
Cayman Islands		2007	13-15	88.3	1,299	GSHS
Dominica		2009	13-15	<b>77.4</b>	1,642	GSHS
Grenada		2008	13-15	86.9	1,542	GSHS
Jamaica	(see notes)	2007/2008	15-24	77.5		JHLS
St. Kitts-Nevis		2011	13-15	<b>78.1</b>	1,740	GSHS



<b>Saint Lucia</b>		2007	13-15	86.0	1,276	GSHS
<b>St. Vincent and the Grenadines</b>		2007	13-15	88.6	1,333	GSHS
<b>Trinidad and Tobago</b>		2011	13-15	77.1	2,811	GSHS
<b>SOUTH AMERICA</b>						
<b>Argentina</b>		2007	13-15	92.1	1,980	GSHS
<b>Brazil</b>	(see notes)	2009	14-15 <sup>2</sup>	68.7	30,487	PENSE
<b>Chile</b>	(see notes)	2009-2010	15-24	28.9	432	ENSC
<b>Colombia</b>	<b>Manizales</b>	2007	13-15	90.9	2,037	GSHS
	<b>Bogota, private schools</b>	2007	13-15	89.9	567	GSHS
	<b>Valledupar City</b>	2007	13-15	88.3	2,095	GSHS
	<b>Bogota</b>	2007	13-15	87.2	1,737	GSHS
	<b>Bucaramanga City</b>	2007	13-15	86.1	2,093	GSHS
	<b>Bogota, official schools</b>	2007	13-15	85.5	1,170	GSHS
	<b>Cali City</b>	2007	13-15	85.0	1,945	GSHS
<b>Ecuador</b>	<b>Guayaquil</b>	2007	13-15	94.2	2,669	GSHS
	<b>Quito</b>	2007	13-15	89.2	2,215	GSHS
	<b>Zamora</b>	2007	13-15	88.0	640	GSHS
<b>Guyana</b>		2010	13-15	<b>80.9</b>	2,392	GSHS
<b>Peru</b>		2010	13-15	<b>77.8</b>	2,882	GSHS
<b>Suriname</b>		2009	13-15	<b>76.4</b>	1,698	GSHS
<b>Uruguay</b>		2006	13-15	87.9	3,406	GSHS

#### Notes

ANTIGUA & BARBUDA, COSTA RICA, DOMINICA, GUATEMALA , GUYANA, PERU, ST.KITTS & NEVIS, and SURINAME: Physical inactivity in these countries is measured using a more stringent definition (prevalence rates for these countries are in bold). Being physically inactive is defined in these countries as not engaging in any type of physical activity for at least 60 minutes a day for 7 days, instead of 5 days, for the past 7 days. YRBS conducted in the United States and Puerto Rico report the levels of physical inactivity using both the 5 day and 7 day definitions and show differences of around 10% to 20% in the levels of physical inactivity

between them. We therefore adjust the standard used for coding in the countries employing the 7 day definition accordingly to account for possible differences resulting from the different definitions used across countries.

**BELIZE:** The youngest age group for which the results are presented from CAMDI is 20-39, much older than the 13-15 age group used in our standard. Because the prevalence of physical inactivity rises with age, we expect the level of inactivity for the 20-39 year olds to be much higher than the 13-15 year olds for any comparable measures. We would ordinarily adjust this age bias by lowering our risk level coding for Belize. However, CAMDI defines physically active status using a much less stringent definition compared to our core indicator. Physical activity levels are categorized into three groups--sedentary, moderate, and active--and being active is defined as having 150 minutes or more of physical activity per week on average. This is roughly half the requirement used in the core indicator. Given these two factors that influence the levels of physical inactivity in opposite directions, we apply the same standard we use for other countries to code physical inactivity levels in Belize and code them to be high for both males and females.

**BRAZIL:** In PENSE, being physically active is defined as engaging in 300 minutes or more of activity in the past 7 days. While this is not exactly equivalent to the definition used in our core indicator of 60 minutes a day of activity for 5 or more days in the past 7 days, we apply the same standard as we expect the results to be sufficiently comparable.

**CANADA:** CHMS used accelerometers to collect objective measures of physical activity. Percentages of adolescents with at least 60 minutes of moderate to vigorous physical activity on at least 3 days a week were 51% for boys and 33% for girls aged 11-14, and 45% for boys and 25% for girls aged 15-19. Percentages of adolescents with the above activity levels on at least 6 days a week are below 10% for all the groups above. We therefore code the risk of physical inactivity as medium for males and high for females.

**CHILE:** In ENSC, prevalence of physical activity is reported for 15-24 year olds only for low activity-level based on the Global Physical Activity Questionnaire (GPAQ). Low activity is defined as not meeting any of the following criteria: 3 or more days of vigorous-intensity activity of at least 20 minutes per day; 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day; or 5 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 600 MET-minutes per week. While these definitions are much more lenient compared to the standard we use, still, only 12.5% and 28.9% of boys and girls, respectively, have low physical activity-levels. Furthermore, because the age group examined is substantially older than the 13-15 year old used in our standard, we expect these percentages for 13-15 year olds would be even lower. We therefore code the risk of physical inactivity in Chile as low for both sexes.

**JAMAICA:** In JHLS, physical activity levels are categorized into four groups—high, moderate, low, and inactive. High activity level is defined as being engaged in work that involves much muscular activity, exercise, or leisure time activity for at least 20 minutes in one sitting more than 3 times a week. Although this definition is much more lenient compared to the standard we use, only 54% of men and 22.5% of women aged 15-24 are classified as having high activity level. We therefore code the risk of physical inactivity as high for both males and females.

MEXICO: ENSANUT provides data on physical activity among 15-18 year olds only for both sexes combined. Since no activity-related information among youth by sex are available to assess sex differences in physical activity levels in Mexico, we present the risk for both sexes combined. Adolescents are classified as being active (59.0%), moderately active (18.3%), and inactive (22.7%). Being active is defined as having at least 7 hours per week of moderate and/or vigorous activity, which we expect to be sufficiently comparable to using our alternative standard of 60 minutes a day for 7 days. Furthermore, being moderately active is defined as having less than 7 hours but more than 4 hours a week of moderate and/or vigorous activity, so some of the adolescents in this category are likely considered physically active using our core indicator. We therefore code the risk of physical inactivity for Mexico to be low for both sexes.

#### Footnotes

<sup>1</sup>Sample sizes for Global Youth Tobacco Survey (GYTS) are for both sexes combined. Sample sizes for Global School-based Student Health Survey (GSHS) are for both sexes combined and for all ages included in the survey (not limited to 13-15 year olds).  
<sup>1</sup>grades 9-12, <sup>2</sup>grade 9

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**POPULATION REFERENCE BUREAU**  
Background Data for  
**Noncommunicable Diseases in Latin America and the Caribbean:  
Youth Are Key to Prevention**

(June 2013) This background data 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).

**Unhealthy Diet (Overweight or Obese Status)**

The core indicator: percent overweight or obese.

The standard used for coding: high (red) $\geq$ 20%; medium (yellow)=10%-19.9%; and low (green) $<$ 10% among 13-15 year old students.

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Data Source

CAMDI	The Central America Diabetes Initiative (CAMDI): Survey of Diabetes, Hypertension and Chronic Disease Risk Factors, Belize 2009 (PAHO).
CCHS	Canadian Community Health Survey (Statistics Canada)
DHS	Demographic and Health Surveys (varying survey years per country) (ICF International).
ENSANUT	Encuesta Nacional de Salud y Nutrición 2006, 2012, Mexico [National Survey of Health and Nutrition] (Instituto Nacional de Salud Publica)

ENSC	Encuesta Nacional de Salud Chile 2009-2010 [Chile National Health Survey 2009-2010] (Ministerio de Salud, Chile)
GSHS	Global School-based Student Health Survey (varying survey years per country) (US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO))
RHS	Reproductive Health Survey (varying survey years per country) (US Centers for Disease Control and Prevention (CDC))
VIGITEL	Vigilância de Fatores de Risco e Proteção para Doenças Crônicas por Inquérito Telefônico 2010, Brazil [Surveillance of Risk and Protective Factors for Chronic Diseases Telephone Interviews 2010] (Ministério da Saúde)
YRBS	Youth Risk Behavior Survey (varying survey years per country) (CDC)

#### Overweight/obesity Definitions Used Across Surveys

- (1) Overweight, including those who are obese, is measured as BMI of 25 or higher, and obesity is measured as BMI of 30 or higher (used in CAMDI, DHS, ENSC, RHS, and VIGITEL).
- (2) Overweight and obesity are measured as BMI of 1 standard deviation above the mean and obesity as BMI of 2 standard deviations above the mean (used in GSHS).
- (3) Overweight or obesity is measured as BMI of 85<sup>th</sup> percentile or higher, and obesity is measured as BMI of 95<sup>th</sup> percentile or higher for age and sex (used in YRBS).
- (4) Overweight and obesity are measured with the age- and sex-specific BMI cut-off points developed by the International Obesity Task Force (IOTC) (Cole et al. 2000). They are based on pooled BMI data from six countries with a wide range of obesity prevalences and available for 2-18 year olds (used in CCHS and ENSANUT).

## Overweight or Obese Status Among Females

Country	Region	Year	Age	Prevalence (overweight or obese)				Sample Size	Source
				BMI $\geq$ 25	BMI $>$ +1SD	BMI $\geq$ 85 <sup>th</sup> percentile	IOTC standards		
<b>Definition Used</b>									
<b>NORTH AMERICA</b>									
Canada		2008	12-17				24.8		CCHS
United States		2011	13-15 <sup>1</sup>			25.2		7,164	YRBS
Puerto Rico		2011	13-15 <sup>1</sup>			28.7		772	YRBS
<b>CENTRAL AMERICA</b>									
Belize		2009	20-39	68.7				43,200	CAMDI
Costa Rica		2009	13-15		27.3			2,679	GSHS
El Salvador		2008	15-19	23.4				942	DHS
		2008	20-24	41.1				1,208	DHS
Guatemala		2009	13-15		27.3			5,592	GSHS
Mexico		2012	12-19	35.8				6,951	ENSANUT
<b>CARIBBEAN</b>									
Antigua and Barbuda									
British Virgin Islands		2009	13-15		37.8			1,644	GSHS
Cayman Islands									
Dominica		2009	13-15		25.9			1,642	GSHS
Grenada									
Jamaica		2010	13-15		25.2			1,623	GSHS
St. Kitts-Nevis		2011	13-15		32.5			1,740	GSHS
Saint Lucia									
St. Vincent and the Grenadines									
Trinidad and Tobago		2011	13-15		25.0			2,811	GSHS
<b>SOUTH AMERICA</b>									
Argentina		2007	13-15		17.6			1,980	GSHS

<b>Brazil</b>		2010	18-24	27.6				33,573	VIGITEL
<b>Chile</b>		2009/ 2010	15-24	37.7				404	ENSC
<b>Colombia</b>		2010	15-19	17.5				8,020	DHS
		2010	20-24	28.9				6,421	DHS
<b>Ecuador</b>	<b>Quito</b>	2007	13-15		26.0			2,215	GSHS
<b>Guyana</b>		2009	15-19	17.6				917	DHS
<b>Peru</b>		2011	15-19	21.1				3,884	DHS
<b>Suriname</b>		2009	13-15		19.2			1,698	GSHS
<b>Uruguay</b>		2006	13-15		16.2			3,406	GSHS

#### Footnotes

\*Sample sizes for Global Youth Tobacco Survey (GYTS) are for both sexes combined. Sample sizes for Global School-based Student Health Survey (GSHS) are for both sexes combined and for all ages included in the survey (not limited to 13-15 year olds).  
<sup>1</sup>grades 9-12

#### Reference

Cole, TJ and Bellizzi, MC and Flegal, KM and Dietz, WH. 2000. Establishing a Standard Definition for Child Overweight and Obesity Worldwide: International Survey. *British Medical Journal* 320(7244):1240-1243.

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