

SELF-INFLICTED YOUTH VIOLENCE IN LATIN AMERICA AND THE ENGLISH-SPEAKING CARIBBEAN

Self-inflicted violence is a significant health problem and one of the leading causes of death in Latin America and the

Caribbean. Suicide is the fourth leading cause of death in young people aged 10 to 19 (Pan American Health Organization, 2014). This fact sheet provides regional estimates of suicidal tendencies among youth aged 13-15 in Latin America and English-speaking Caribbean countries, using data from the Global School-based Student Health Survey (GSHS) data. The regional estimates are divided here into four subregions—namely: the Andean countries, Central America, the English-speaking Caribbean, and the Southern Cone. The estimates were drawn from the most recent GSHS survey data for each country, with survey years ranging between 2007 and 2013. The analysis shows that, in general, female students are more likely than males

to have suicidal tendencies, specifically seriously considering attempting suicide, suicide planning, and suicidal attempts. These behaviors are significantly influenced by alcohol use, parental relationship, and peer social support.³ This knowledge is important for devising comprehensive, context-specific prevention strategies that have been shown to be effective.

Prevalence of youth suicidal tendencies in the **Region.** Youth suicidal tendencies are a serious health problem throughout Latin America and the Englishspeaking Caribbean. In general, the GSHS data show that female youth across all subregions are more likely than males to have suicidal behaviors. The prevalence of seriously considering attempting suicide (ideation) ranged from about 11% for males in Central America and the Southern Cone and 19% for females in the Southern Cone to about 17% for males in the Englishspeaking Caribbean and 26% for females in the Andean countries. The prevalence of suicide planning ranged from about 9% for males in Central America and the Andean countries and 17% for females in Central America to about 16% for males and 24% for females in the English-speaking Caribbean. The prevalence of actual suicidal attempts ranged from 9% for males and 17% for females in Central America to 17% for males in English-speaking Caribbean and 23% for females in the Andean countries (Figure 1).

³ Suicidal tendencies may also be influenced by factors, such as feeling depressed, sad and/or hopeless continuously, that are not included in the GSHS database.



¹ The countries included in the analysis, by subregion, were: Bolivia, Colombia (subnational, capital city only), Ecuador (subnational, capital city only), Peru; Antigua and Barbuda, Bahamas, Barbados, Cayman Islands; Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago; Belize, Costa Rica, El Salvador, Guatemala, Honduras; and Argentina, Chile, Uruguay.

² The countries used a two-stage survey design to produce data representative of the entire population aged 13-15. The scientific sample selection process involved a two-stage cluster design. In the first stage the schools were selected based on probability proportional to school enrollment, and in the second stage the classes were selected at random. All the students in the sampled classes were eligible to participate. The students self-reported their responses to each question on a computer-scannable answer sheet. The school response rates for the regions ranged from 90% to 100%; the student response rates ranged from 70% to 93%; and overall response rates ranged from 60% to 90%.

Pan American Health Organization

Risk factors associated with an increase in prevalence of youth suicidal tendencies. Current alcohol use and poor peer social support appear to increase the prevalence of youth suicidal behaviors (considering attempting, planning, and actually attempting suicide) across the subregions. Although significant associations were not observed reported in every region by sex, the trends were consistent across all the different suicidal tendencies and were seen in most of the subregions. For example, being a current alcohol drinker almost doubled the overall prevalence of actually attempting suicide for female students in Central America and the Andean countries (Figure 2) and having poor peer

social support nearly quintupled the overall prevalence of seriously considering attempting suicide for male students in the Southern Cone (Figure 3).

Protective factors associated with a decrease in the prevalence of student suicidal tendencies. Having a strong parental relationship appears to be a protective factor in most of the subregions. For example, it decreased the prevalence of serious consideration of suicide by about one-third for male students in the English-speaking Caribbean and for female students in Central America (Figure 3).

Figure 1. Prevalence of suicidal thoughts, planning, and attempts among students aged 13-15, by sex, in the subregions of Latin America and the English-speaking Caribbean

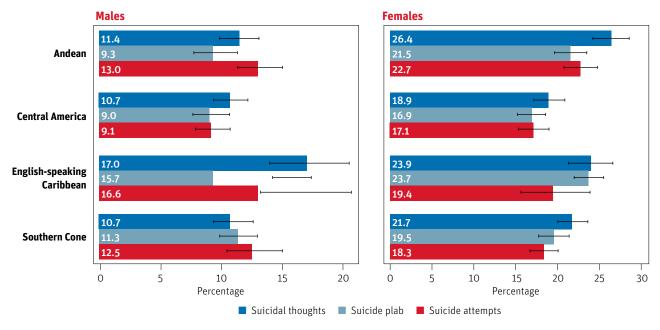


Figure 2. Prevalence of actual suicide attempts among female students aged 13-15, by current drinker and overall prevalence, in the subregions of Latin America and the English-speaking Caribbean

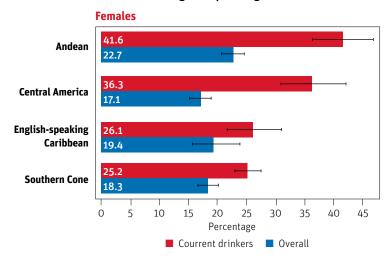
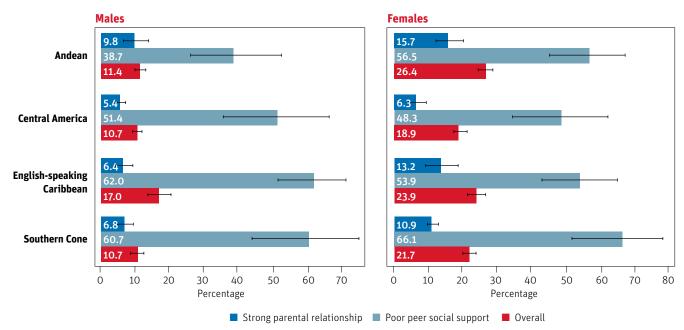


Figure 3. Prevalence of suicidal thoughts (ideation) among students aged 13-15, by strong parental relationship, poor peer social support, and overall prevalence, in the subregions of Latin America and the English-speaking Caribbean



Suicides are preventable. According to GSHS survey data, strategies that can help prevent self-inflicted youth violence include, developing safe, stable, and nurturing relationships between children and their parents and caregivers; developing life skills and nurturing peer social support in children and adolescents; and reducing the availability and harmful use of alcohol. In addition, WHO recommends restricting access to the most common means of suicide; incorporating suicide prevention as a central component of the health services; identifying and treating mental health and substance abuse disorders as early as possible; ensuring that the news media report suicide in a responsible manner; and training non-specialized health workers in the assessment and management of suicidal behavior (World Health Organization, 2014). In order for responses to be effective, prevention strategies must be context-specific, comprehensive, and evidence-based.

Andean Countries

Results for students aged 13-15 years	Total	Males	Females		
General					
Percentage of students who ever seriously considered suicide during the 12 months before the survey	18.9%	11.4%	26.4%		
	(17.1%-20.7%)*	(9.8%-13.1%)	(24.2%-28.6%)		
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	15.4%	9.3%	21.5%		
	(13.9%-17.1%)	(7.7%-11.3%)	(19.6%-23.5%)		
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	17.9%	13.0%	22.7%		
	(16.4%-19.4%)	(11.3%-15.0%)	(20.7%-24.7%)		
Among students who are cur	rent drinkers†				
Percentage of students who ever seriously considered suicide during the 12 months before the survey	33.2%	20.1%	47.7%		
	(28.7%-38.1%)	(16.0%-24.9%)	(42.3%-53.1%)		
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	27.1%	16.5%	38.6%		
	(23.2%-31.35%)	(12.7%-21.2%)	(33.7%-43.7%)		
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	30.6%	20.75	41.6%		
	(26.55%-35.0%)	(16.3%-25.9%)	(36.5%-46.9%)		
Among students with poor social support ⁵					
Percentage of students who ever seriously considered suicide during the 12 months before the survey	50.1%	38.7%	56.5%		
	(42.4%-57.8%)	(26.2%-52.8%)	(45.0%-67.3%)		
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	41.2%	29.2%	47.9%		
	(33.5%-49.3%)	(18.9%-42.3%)	(36.4%-59.6%)		
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	44.5%	41.9%	45.9%		
	(37.0%-52.2%)	(28.6%-56.4%)	(36.7%-55.5%)		
Among students with strong parental relationships¶					
Percentage of students who ever seriously considered suicide during the 12 months before the survey	13.1%	9.8%	15.7%		
	(10.6%-16.1%)	(6.8%-14.0%)	(11.9%-20.3%)		
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	9.0%	6.1%	11.2%		
	(7.0%-11.35%)	(4.1%-9.1%)	(8.3%-14.8%)		
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	11.35% (8.7%-14.45%)	**	12.75% (9.4%-17.1%)		

^{* 95%} confidence interval.

t Current drinker defined as having at least one drink containing alcohol on one or more of the past 30 days.

[§] The peer social support construct is composed of four questions related to respondents' perceptions of their relationships with their peers (how often the respondent feels lonely, the number of close friends they report, how often other students are kind and helpful, and how often they report being bullied).

[¶] The parental relationship construct is composed of three questions related to the respondents' perceptions of the behavior and attitudes of their parent/guardians (whether the parent/guardian (1) checks if homework is complete, (2) understands problems and worries, and (3) really knows what the respondent did in his or her their free time).

^{**} Not available.

Central America

Results for students aged 13-15 years	Total	Males	Females			
General						
Percentage of students who ever seriously considered suicide during the 12 months before the survey	14.8%	10.7%	18.9%			
	(13.7%-16.0%)*	(9.3%-12.2%)	(17.1%-20.9%)			
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	13.0%	9.0%	16.9%			
	(11.9%-14.2%)	(7.6%-10.7%)	(15.2%-18.6%)			
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	13.2%	9.1%	17.1%			
	(12.0%-14.5%)	(7.8%-10.7%)	(15.3%-19.0%)			
Among students who are cur	rent drinkers†					
Percentage of students who ever seriously considered suicide during the 12 months before the survey	30.5%	20.3%	40.4%			
	(26.7%-34.5%)	(16.2%-25.0%)	(35.1%-46.0%)			
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	26.9%	17.3%	36.1%			
	(23.6%-30.6%)	(13.7%-21.8%)	(31.4%-41.0%)			
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	26.5%	16.1%	36.3%			
	(23.0%-30.2%)	(12.6%-20.4%)	(30.9%-42.1%)			
Among students with poor social support ^s						
Percentage of students who ever seriously considered suicide during the 12 months before the survey	49.3% (38.6%-60.0%)	**	48.3% (34.6%-62.2%)			
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	41.8% (32.4%-51.8%)	**	43.4% (31.2%-56.5%)			
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	45.4%	43.4%	46.4%			
	(35.5%-55.6%)	(26.6%-62.0%)	(33.3%-60.1%)			
Among students with strong parental relationships¶						
Percentage of students who ever seriously considered suicide during the 12 months before the survey	5.8%	5.4%	6.3%			
	(4.5%-7.4%)	(4.0%-7.3%)	(4.2%-9.3%)			
Percentage of students who ever made a plan about how they would attempt suicide during the 12 months before the survey	5.7%	4.9%	6.6%			
	(4.5%-7.3%)	(3.4%-7.0%)	(4.8%-9.1%)			
Percentage of students who actually attempted suicide one or more times during the 12 months before the survey	6.4%	5.7%	7.1%			
	(5.0%-8.0%)	(4.0%-8.2%)	(5.1%-9.8%)			

- * 95% confidence interval.
- [†] Current drinker defined as having at least one drink containing alcohol on one or more of the past 30 days.
- § The peer social support construct is composed of four questions related to respondents' perceptions of their relationships with their peers (how often the respondent feels lonely, the number of close friends they report, how often other students are kind and helpful, and how often they report being bullied).
- ¶ The parental relationship construct is composed of three questions related to the respondents' perceptions of the behavior and attitudes of their parent/guardians (whether the parent/guardian (1) checks if homework is complete, (2) understands problems and worries, and (3) really knows what the respondent did in his or her their free time).
- ** Not available.

English-speaking Caribbean

Results for students aged 13-15 years	Total	Males	Females		
General					
Percentage of students who ever seriously considered	20.7%	17.0%	23.9%		
suicide during the 12 months before the survey	(19.5%-21.9%)*	(13.9%-20.5%)	(21.3%-26.6%)		
Percentage of students who ever made a plan about how they would	19.9%	15.7%	23.7%		
attempt suicide during the 12 months before the survey	(18.8%-21.1%)	(14.2%-17.4%)	(21.9%-25.5%)		
Percentage of students who actually attempted suicide one or more times	18.0%	16.6%	19.4%		
during the 12 months before the survey	(15.1%-21.4%)	(13.2%-20.7%)	(15.6%-23.9%)		
Among students who are cur	rent drinkers†				
Percentage of students who ever seriously considered	26.4%	21.7%	31.6%		
suicide during the 12 months before the survey	(24.6%-28.3%)	(16.7%-27.8%)	(26.2%-37.6%)		
Percentage of students who ever made a plan about how they would	25.0%	18.3%	32.1%		
attempt suicide during the 12 months before the survey	(23.4%-26.7%)	(15.1%-22.1%)	(29.2%-35.2%)		
Percentage of students who actually attempted suicide one or more times	23.8%	21.7%	26.1%		
during the 12 months before the survey	(19.3%-28.9%)	(14.5%-31.3%)	(21.7%-31.1%)		
Among students with poor social support [§]					
Percentage of students who ever seriously considered	57.5%	62.0%	53.9%		
suicide during the 12 months before the survey	(48.9%-65.6%)	(51.6%-71.4%)	(42.7%-64.7%)		
Percentage of students who ever made a plan about how they would	43.4%	37.4%	48.2%		
attempt suicide during the 12 months before the survey	(37.7%-49.2%)	(19.2%-59.9%)	(36.7%-59.9%)		
Percentage of students who actually attempted suicide one or more times	47.6%	48.9%	47.5%		
during the 12 months before the survey	(29.1%-66.8%)	(23.7%-74.6%)	(32.7%-62.7%)		
Among students with strong parental relationships¶					
Percentage of students who ever seriously considered	10.2%	6.4%	13.2%		
suicide during the 12 months before the survey	(7.6%-13.6%)	(4.2%-9.5%)	(9.1%-18.7%)		
Percentage of students who ever made a plan about how they would	10.9%	7.9%	13.1%		
attempt suicide during the 12 months before the survey	(8.7%-13.6%)	(4.4%-13.8%)	(10.6%-16.1%)		
Percentage of students who actually attempted suicide one or more times	11.5%	**	15.0%		
during the 12 months before the survey	(8.6%-15.2%)		(9.9%-21.9%)		

^{* 95%} confidence interval.

[†] Current drinker defined as having at least one drink containing alcohol on one or more of the past 30 days.

[§] The peer social support construct is composed of four questions related to respondents' perceptions of their relationships with their peers (how often the respondent feels lonely, the number of close friends they report, how often other students are kind and helpful, and how often they report being bullied).

¹ The parental relationship construct is composed of three questions related to the respondents' perceptions of the behavior and attitudes of their parent/guardians (whether the parent/guardian (1) checks if homework is complete, (2) understands problems and worries, and (3) really knows what the respondent did in his or her their free time).

^{**} Not available.

Southern Cone

Results for students aged 13-15 years	Total	Males	Females		
General					
Percentage of students who ever seriously considered	16.5%	10.7%	21.7%		
suicide during the 12 months before the survey	(14.9%-18.3%)*	(9.1%-12.6%)	(20.0%-23.6%)		
Percentage of students who ever made a plan about how they would	15.7%	11.3%	19.5%		
attempt suicide during the 12 months before the survey	(14.2%-17.3%)	(9.8%-13.0%)	(17.7%-21.4%)		
Percentage of students who actually attempted suicide one or more times	15.7%	12.5%	18.3%		
during the 12 months before the survey	(14.4%-17.1%)	(10.4%-15.0%)	(16.7%-20.1%)		
Among students who are cur	rent drinkers†				
Percentage of students who ever seriously considered	22.6%	14.0%	30.1%		
suicide during the 12 months before the survey	(20.4%-24.8%)	(11.5%-17.0%)	(27.6%-37.6%)		
Percentage of students who ever made a plan about how they would	21.7%	15.0%	27.3%		
attempt suicide during the 12 months before the survey	(19.7%-23.8%)	(12.3%-18.2%)	(25.0%-29.8%)		
Percentage of students who actually attempted suicide one or more times	20.6%	15.2%	25.2%		
during the 12 months before the survey	(19.1^%-22.3%)	(11.9%-19.2%)	(23.0%-27.6%)		
Among students with poor s	ocial support§				
Percentage of students who ever seriously considered	64.4%	60.7%	66.1%		
suicide during the 12 months before the survey	(50.8%-76.1%)	(44.0%-75.2%)	(51.5%-78.2%)		
Percentage of students who ever made a plan about how they would	52.2%	39.4%	60.0%		
attempt suicide during the 12 months before the survey	(39.1%-65.1%)	(26.2%-54.2%)	(44.5%-73.7%)		
Percentage of students who actually attempted suicide one or more times	45.2%	30.9%	54.3%		
during the 12 months before the survey	(35.9%-54.9%)	(24.3%-38.4%)	(38.0%-69.7%)		
Among students with strong parental relationships¶					
Percentage of students who ever seriously considered	9.1%	6.8%	10.9%		
suicide during the 12 months before the survey	(8.0%-10.3%)	(4.8%-9.7%)	(9.3%-12.7%)		
Percentage of students who ever made a plan about how they would	8.9%	6.3%	11.1%		
attempt suicide during the 12 months before the survey	(7.4%-10.7%)	(4.7%-8.6%)	(8.7%-14.1%)		
Percentage of students who actually attempted suicide one or more times	9.5%	7.8%	10.9%		
during the 12 months before the survey	(7.9%-11.3%)	(6.0%-10.0%)	(8.4%-14.1%)		

- * 95% confidence interval.
- [†] Current drinker defined as having at least one drink containing alcohol on one or more of the past 30 days.
- § The peer social support construct is composed of four questions related to respondents' perceptions of their relationships with their peers (how often the respondent feels lonely, the number of close friends they report, how often other students are kind and helpful, and how often they report being bullied).
- ¶ The parental relationship construct is composed of three questions related to the respondents' perceptions of the behavior and attitudes of their parent/guardians (whether the parent/guardian (1) checks if homework is complete, (2) understands problems and worries, and (3) really knows what the respondent did in his or her their free time).
- ** Not available.

References

Pan American Health Organization (2014). Suicide mortality in the Americas: Regional report. Available at: http://www.paho.org/hq/index.php?option=com_content&view=article&id=10114:new-paho-report-more-than-7-suicides-per-hour-in-the-americas&Itemid=1926&lang=en.

World Health Organization (2014). Preventing suicide: a global perspective. Available at: http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/.

Acknowledgments

We would like to thank Jaclyn Berecz, consultant for the Pan American Health Organization (PAHO) and author of this document; and Molly Hogan, her colleague, who assisted in the statistical analysis. We also wish to acknowledge and thank the following persons who contributed with their technical support to the development, revision, and approval of the document: Ashley Ambrose, Roberta Caixeta, María del Carmen Calle, Alfonso Contreras, and Marcelo Korc of PAHO; Laura Kann of the Centers for Disease Control and Prevention (CDC); and Leanne Margaret Riley of the World Health Organization (WHO).

We also wish to thank PAHO country offices and partners for their dedication to successfully implement the Global Student Health Survey, as well as the Kingdom of Norway for its financial contribution.

www.paho.org

For additional information, please contact:

Devora Kestel, MSc., MPH

Mental Health and Substance Use, Unit Chief Pan American Health Organization/ World Health Organization kesteld@paho.org

Marcelo Korc, Ph.D, MPH

Sustainable Development and Human Security Regional Advisor Pan American Health Organization/ World Health Organization korcmar@paho.org





525 Twenty-third St., N.W. Washington, D.C. 20037