POPULATION REFERENCE BUREAU

Explanation of Cutoffs 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 LatinAmerica and the Caribbean: Youth Are Key to Prevention*. The data sheet is available at www.prb.org.

Guidance exists on the acceptable and unacceptable levels of risk behaviors for individuals but it is very challenging to translate those risks to a population. For example, if a young person smokes cigarettes, it is clear that in order to protect their health, they should quit. However, at what level should a larger group identify youth/adolescent smoking as a problem? The Global Tobacco Atlas has divided countries into four groups; low, medium, high, and exceedingly high prevalence. The population levels of smoking (for all ages) are below 7%, 7-15%, 16-29.9%, and 30% and above. Virtually no countries – and none in LAC – are in the high-prevalence category, so we used three levels of smoking for populations to identify low, medium, and high prevalence on our data sheet.

While the risk from alcohol use is typically described as from drinking excessively, we propose that risk is conferred by any alcohol use (use in the past 30 days) among youth and adolescents. Our lowest category (20% prevalence and under) includes all the countries the Report on Drug Use in the Americas labeled low prevalence as well. Our highest prevalence code is for those countries at 40% and includes all of the countries the Report on Drug Use in the Americas identified as high prevalence. In labeling 20-39% as medium, we did not include any countries that were very close to either of the endpoints of low or high risk.

Obesity is similarly challenging. If an individual has a BMI of over 25 they are classified as overweight and if it is over 30, obese. Some groups use the measure of standard deviation to identify those who are 1+ SD above the age adjusted distribution of weight for age in a country, which is helpful but not widely measured. Our cutoffs of low prevalence include those with overweight percentages under 10%, 10-19.9% as medium and 20% and above as high prevalence. In some cases we looked at other research conclusions. For example, in The Lancet, LAC is described as having “substantial rates of overweight” (and the US and Canada have “notably higher rates of overweight”), the range for countries was from 16% to 27%. The International Obesity Taskforce also generated five levels of prevalence: under 6%, 6-12%, 12-18%, 18-24% and over 24%. In Harvard University’s School of Public Health Obesity Prevention Source, obesity is identified as a “sizeable and serious” problem in LAC and highlights the rates in Mexico (33% overweight and 10% obese) and Argentina (35% overweight or obese). Our chart set low prevalence as below 10%, although no country in LAC with usable data was that low. Additionally, the weight of other research descriptions of overweight/obesity in LAC does not lead us to suspect any countries could be considered low prevalence. The Harvard report also says that by using adult cutoffs for BMI in LAC, they still likely “underestimate the true rates of overweight and obesity in adolescents.”

Physical activity is the most challenging risk factor to measure. Most studies rely on self-reported data and may or may not ask about different domains of activity. For example, people may be sedentary at work, in activities around the house, in their leisure time, or in the ways they get around their community. In the Lancet Physical Activity Series it was noted that, “no country had more than 50% of either boys or girls (ages 13 to 15) achieve the recommended exercise level meeting international standards for physical activity.” Our categories allow those countries with up to 50% physically active to be considered low prevalence of physical inactivity. Countries with 50-69.9% of young people engaged in appropriate levels of physical activity are considered medium prevalence; and those with 70% or more who miss the international guidelines equate to countries identified as high prevalence of physical inactivity. The overall picture is clear, few young people are meeting international guidelines for physical activity, and in some cases the levels are alarming. The story we present is, if anything, conservative about the risks that physical inactivity present for today’s youth. Even in countries that are doing fairly well in meeting guidelines, levels of activity tend to fall as young people move through the adolescent years. In the Lancet’s summary of their review on global physical inactivity they reiterate, “The situation with adolescents is even more worrying; with a worldwide estimate that 4 of every 5 adolescents aged 13-15 years do not meet present guidelines.”

Overall, the countries of LAC provide a wide array of data to help us portray the risks young people face for later NCDs. There is, unfortunately, no simple measure of population level risks that reflect the risks individuals face. Countries differ in the proportion of their population who face risks of NCDs, and the accompanying data sheet gives us an overview of how those risks are arrayed in LAC.

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