



DATA APPENDIX

YOUNG PEOPLE ARE ASIA'S KEY TO CURBING THE RISE OF NONCOMMUNICABLE DISEASES

MAY 2016

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ACKNOWLEDGMENTS

This data appendix was produced by Toshiko Kaneda, Ph.D., senior research associate at the Population Reference Bureau (PRB). The author thanks PRB staff, Kristin Bietsch, research associate, Hanna Christianson and Matthew Rigsby, program assistants; Hania El Banhawi and Liselot Koenen, PRB interns; Haena Lee at University of Chicago, and Dier Hu for their assistance with data.

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www.younghealthprogrammeyhp.com



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Data Appendix to

Young People Are Asia's Key to Curbing the Rise of Noncommunicable Diseases

This data appendix provides data sources and all the data points underlying the noncommunicable diseases (NCD) risk-level coding for young people across Asia presented in the accompanying data sheet, *Young People Are Asia's Key to Curbing the Rise of Noncommunicable Diseases*, and policy report, *Addressing Noncommunicable Disease Risk Factors Among Young People: Asia's Window of Opportunity to Curb a Growing Epidemic*. The data description provides the information on source, year, age, and size of the sample per risk factor, when data are available, for the 28 countries included in the above publications.

Data points presented for each risk factor are for the indicators listed below. When the indicator definitions differ from those listed below, they are specified in the data description.

TOBACCO USE:

Cigarettes: Percent smoking cigarettes in the past 30 days.

Other tobacco products: Percent using other tobacco products in the past 30 days.

Any products: Percent using any tobacco products in the past 30 days.

ALCOHOL USE:

Percent having any drink containing alcohol in the past 30 days.

PHYSICAL INACTIVITY:

Percent NOT engaging in physical activity for at least 60 minutes per day on five out of the last seven days. In some countries, the measure pertains to seven out of the last seven days, which is indicated as "7-day cut-off" in the data description. 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.

OVERWEIGHT:

Percent overweight or obese. The standard used to classify overweight status—which also includes those who are obese—varies across data sources. When no definition appears in the data description, overweight status is classified as Body Mass Index (BMI) greater than one standard deviation from the median for the BMI for age and sex according to the World Health Organization (WHO) Child Growth Standards. This overweight standard is used in the Global School-Based Student Health Survey (GSHS), the source most frequently used to document the overweight status in this publication.

LIST OF ACRONYMS FOR DATA SOURCES:

Multi-Country Surveys

DHS Demographic and Health Surveys

GSHS Global School-Based Student Health Survey

GYTS Global Youth Tobacco Survey

Country-Specific Surveys

CASPIAN Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease Study, Iran

CNSSCH Chinese National Survey on Students' Constitution and Health, China

HEACPFTC Healthy Exercise for All Campaign—Physical Fitness Test for the Community, Hong Kong, China

KYRBWS Korea Youth Risk Behavior Web-Based Survey, South Korea

NHS National Health Survey, Singapore

NPFHS National Physical Fitness and Health Surveillance, China

NSPACEH National Survey of Physical & Athletic Capacity and Exercise Habit, Japan

SDUS Survey of Drug Use Among Students, Hong Kong, China

SHS Students' Health Survey, Singapore

SRUSDS Survey Research on Underage Smoking and Drinking Situation, Japan

STEPS-N STEPwise Approach to Chronic Disease Risk Factor Surveillance in Nepal, Nepal

DATA YEAR:

The data sheet and data appendix include the most recent data available since 2005 with sample sizes larger than 400. Exceptions are when data from GYTS are used, even when they are older than the data available on tobacco use from other surveys, if the latter do not provide details on tobacco use.

NATIONAL DATA:

All data refer to nationally representative sample (or similar) of the young people in the age group specified who are in schools (if from school-based surveys) or in the population (if from household survey), unless otherwise noted. *(Asterisk) next to the risk factor name in the data description indicates subnational data. The name of the city/region where the subnational data are collected appears in brackets in the data description.

AGE GROUP:

The age groups for the sample used are 13-to-15-year-olds for all the risk factors whenever possible. When data are not available for this age group, data for the age groups (or grade levels or schools) closest are presented to facilitate comparison across countries.

SAMPLE SIZE:

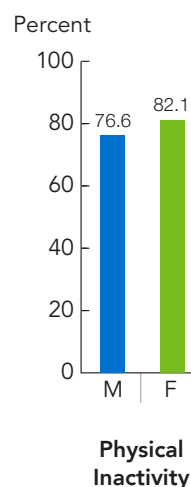
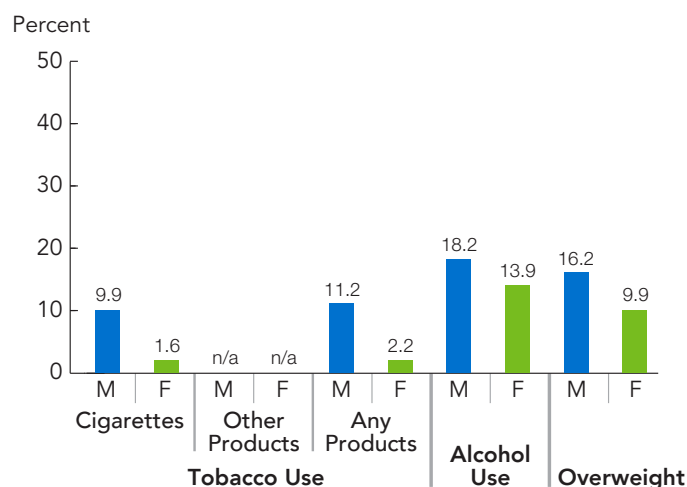
The sample size presented is for the age group specified. However, the sample size for the GSHS data points are for ages 13-17.

SURVEY TYPE:

GYTS and GSHS are both school-based surveys. DHS is a household survey. Types of surveys for other data sources appear in the data description.

For full citations, see Data Sources, page 13.

China



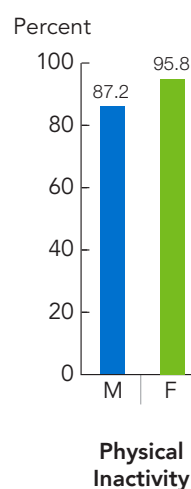
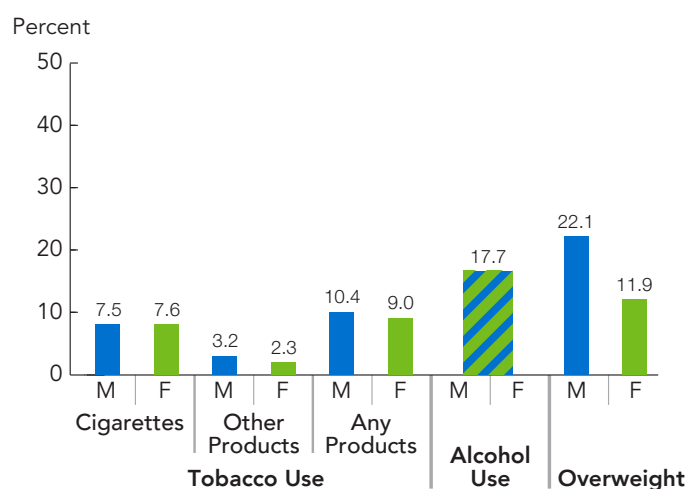
Tobacco Use: GYTS, 2014, ages 13-15, n=155,117

Alcohol Use*: [Beijing, Shanghai, and Guangzhou], Lu et al. (2015), 2013, grades 7 & 8, n=6,575

Overweight: CNSSCH, 2010, ages 13-18, n=297,062 (for ages 7-18), Working Group on Obesity in China Criteria¹

Physical Inactivity: NPFHS, 2010, ages 13-16, n=52,080, 7-day cut-off

China, Hong Kong



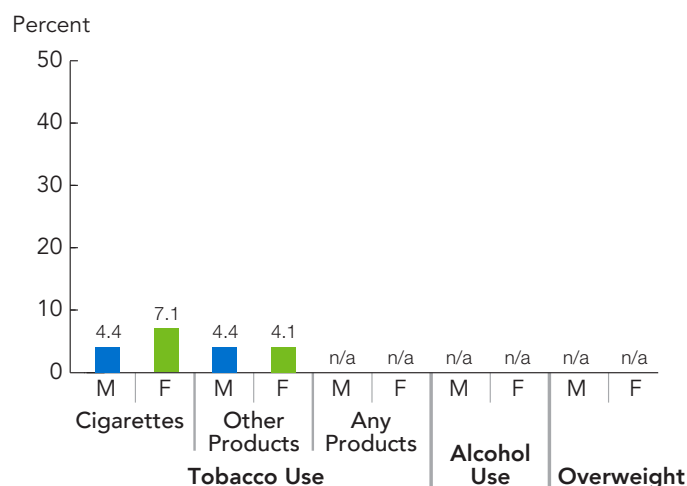
Tobacco Use: GYTS, 2009, ages 13-15, n=637

Alcohol Use: SDUS, 2014/15, secondary school ages, n=77,271, no data by sex

Overweight: HEACPFTC, 2014/15, ages 13-15, n=2,517 (for ages 13-19), International Obesity Task Force Criteria²

Physical Inactivity: HEACPFTC, 2011/12, ages 13-19, n=2,517, 7 day cut-off

China, Macau



Tobacco Use: GYTS, 2010, ages 13-15, n=1,064

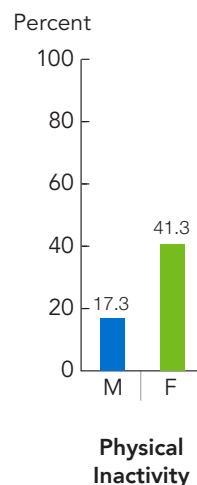
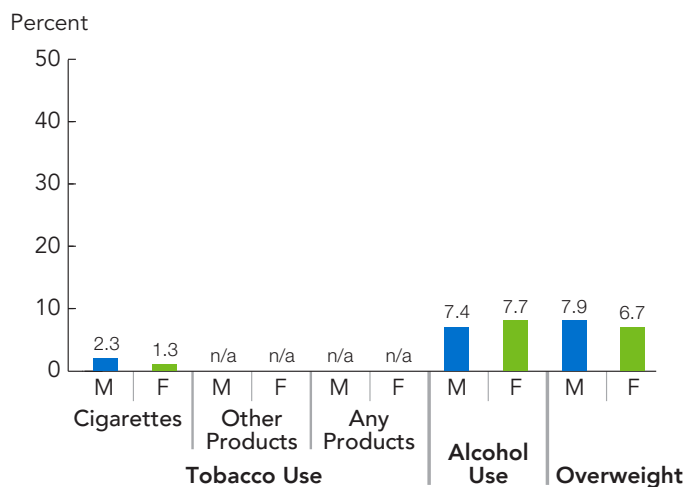
Alcohol Use: n/a

Overweight: n/a

Physical Inactivity: n/a

Data Appendix

EAST ASIA



Japan

Tobacco Use: SRUSDS, 2012, ages 12-14, n=8,804

Alcohol Use: SRUSDS, 2012, ages 12-14, n=8,804

Overweight: NSPACEH, 2014, ages 12-14, n=1,055,154, Percentage Overweight Criteria³

Physical Inactivity: NSPACEH, 2014, ages 12-14, n=1,013,159, 7-day cut-off

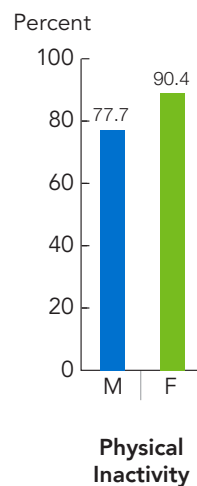
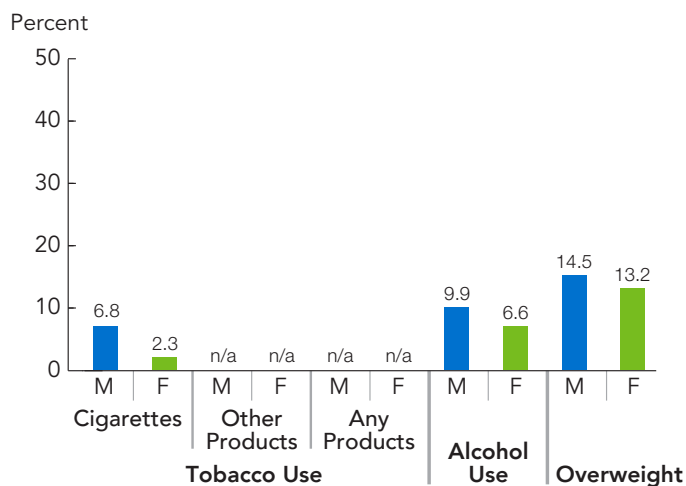
Korea, North

Tobacco Use: n/a

Alcohol Use: n/a

Overweight: n/a

Physical Inactivity: n/a



Korea, South

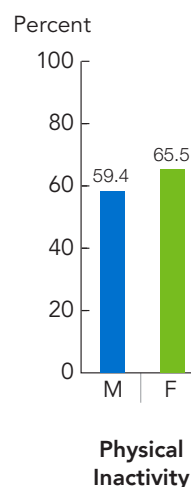
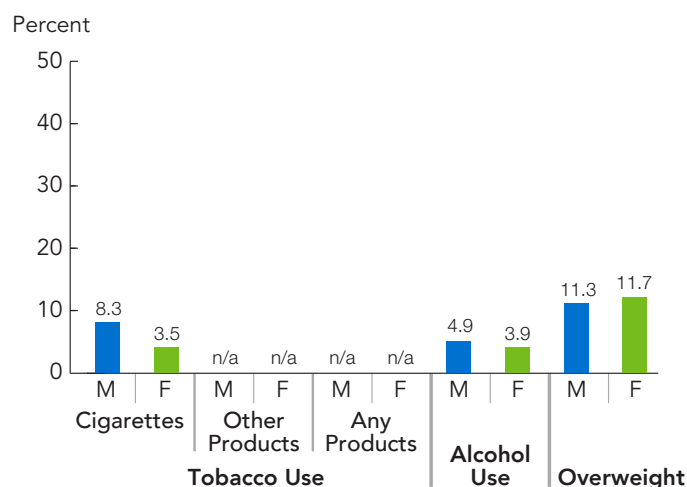
Tobacco Use: KYRBWS, 2014, grades 7-9, n=36,156

Alcohol Use: KYRBWS, 2014, grades 7-9, n=36,156

Overweight: KYRBWS, 2014, grades 7-9, n=36,156, based on Korean National Growth Charts⁴

Physical Inactivity: KYRBWS, 2014, grades 7-9, n=36,156, 7-day cut-off

Mongolia



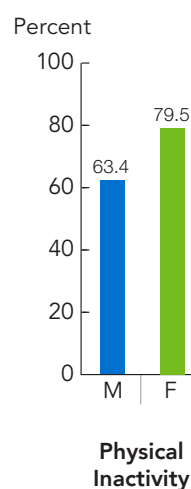
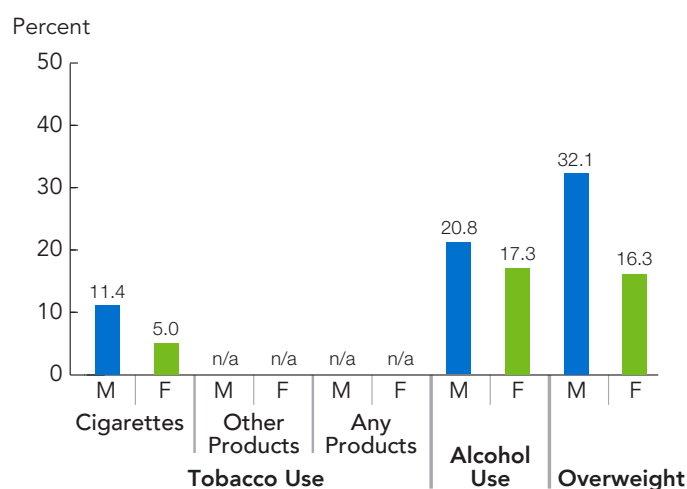
Tobacco Use: GSHS, 2013, ages 13-15, n=5,393

Alcohol Use: GSHS, 2013, ages 13-15, n=5,393

Overweight: GSHS, 2013, ages 13-15, n=5,393

Physical Inactivity: GSHS, 2013, ages 13-15, n=5,393

Taiwan



Tobacco Use: GSHS, 2012, ages 13-15, n=6,801

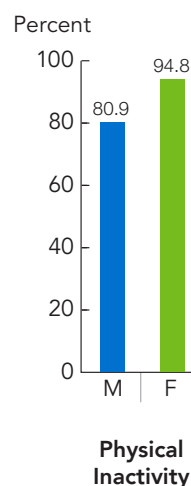
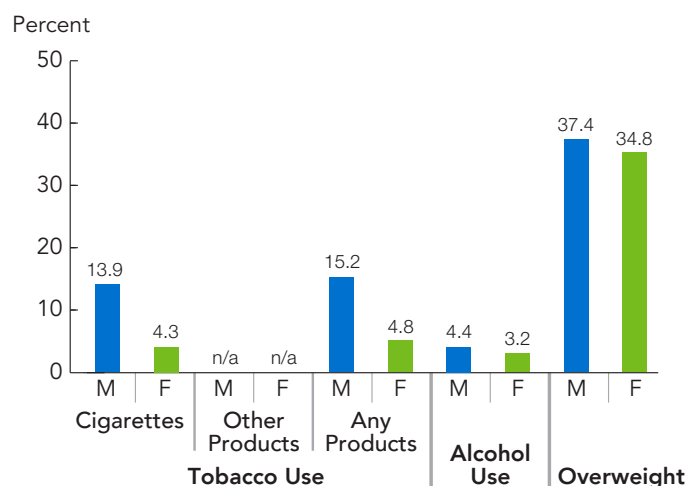
Alcohol Use: GSHS, 2012, ages 13-15, n=6,801

Overweight: GSHS, 2012, ages 13-15, n=6,801

Physical Inactivity: GSHS, 2012, ages 13-15, n=6,801

SOUTHEAST ASIA

Brunei



Tobacco Use: GSHS, 2014, ages 13-15, n=2,599

Alcohol Use: GSHS, 2014, ages 13-15, n=2,599

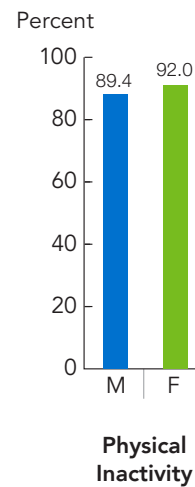
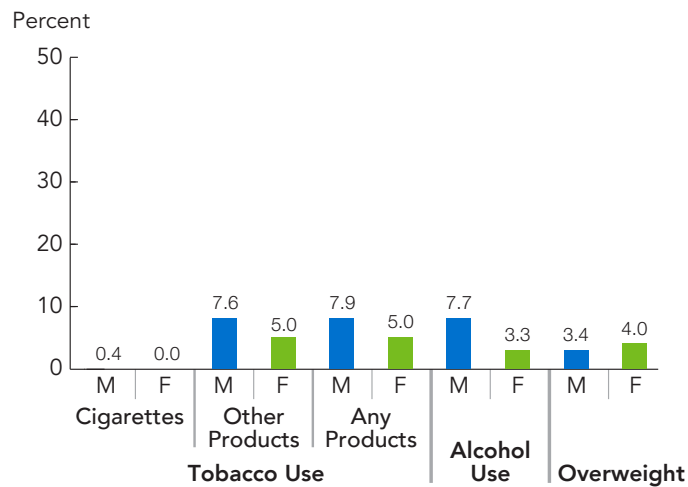
Overweight: GSHS, 2014, ages 13-15, n=2,599

Physical Inactivity: GSHS, 2014, ages 13-15, n=2,599, 7-day cut-off

Data Appendix

SOUTHEAST ASIA

Cambodia



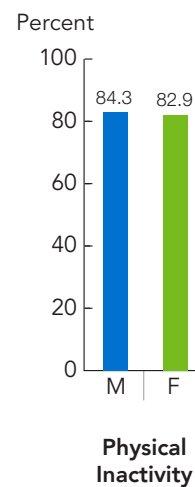
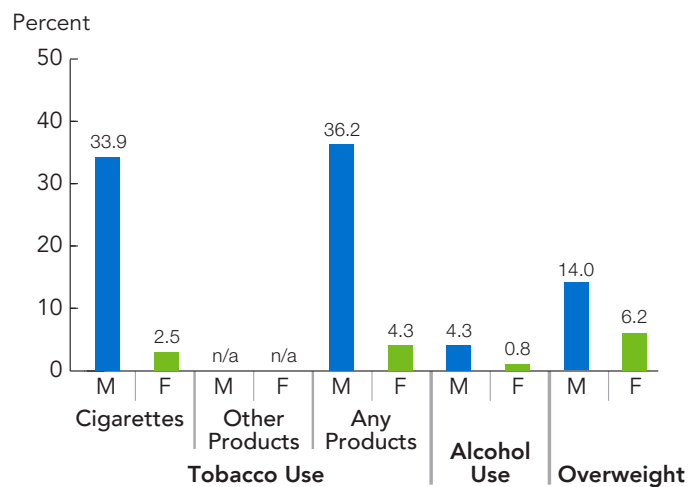
Tobacco Use: GYTS, 2010, ages 13-15, n=1,637

Alcohol Use: GSHS, 2013, ages 13-15, n=3,806

Overweight: GSHS, 2013, ages 13-15, n=3,806

Physical Inactivity: GSHS, 2013, ages 13-15, n=3,806

Indonesia



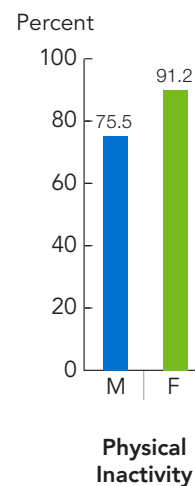
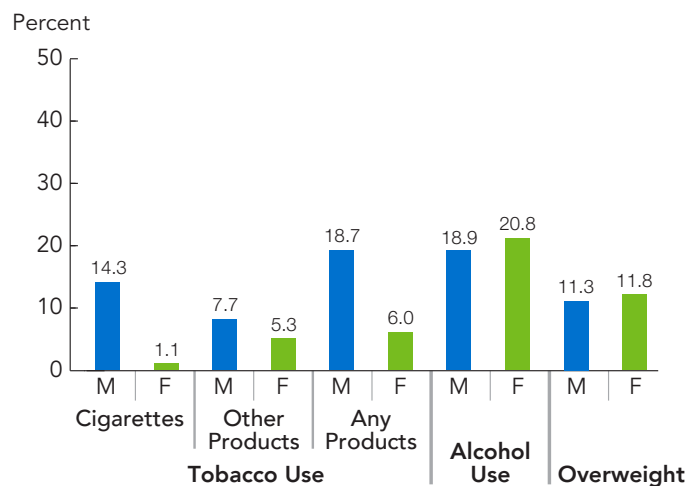
Tobacco Use: GYTS, 2014, ages 13-15, n=4,317

Alcohol Use: GSHS, 2007, ages 13-15, n=3,116

Overweight: GSHS, 2007, ages 13-15, n=3,116

Physical Inactivity: GSHS, 2007, ages 13-15, n=3,116, 7-day cut-off

Laos



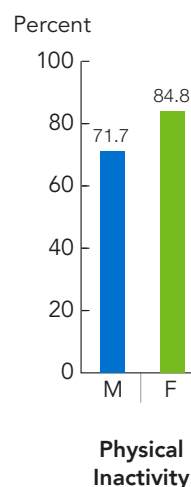
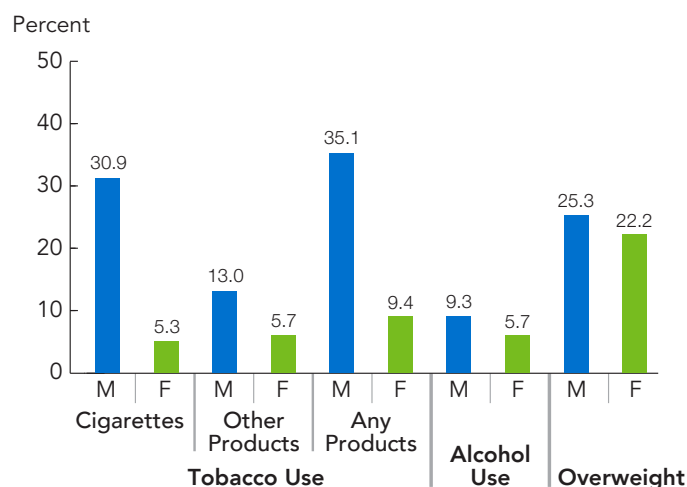
Tobacco Use: GYTS, 2011, ages 13-15, n=4,061

Alcohol Use: GSHS, 2015, ages 13-15, n=3,683

Overweight: GSHS, 2015, ages 13-15, n=3,683

Physical Inactivity: GSHS, 2015, ages 13-15, n=3,683, 7-day cut-off

Malaysia



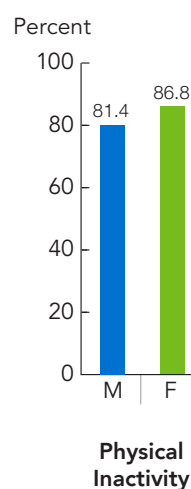
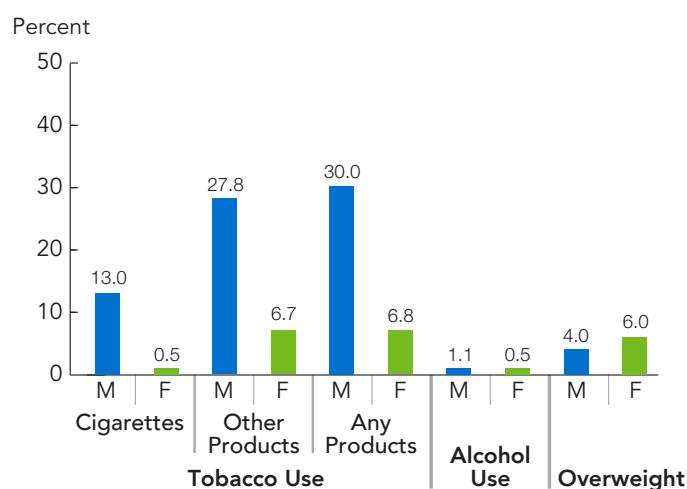
Tobacco Use: GYTS, 2009, ages 13-15, n=3,021

Alcohol Use: GSHS, 2012, ages 13-15, n=25,507

Overweight: GSHS, 2012, ages 13-15, n=25,507

Physical Inactivity: GSHS, 2012, ages 13-15, n=25,507

Myanmar



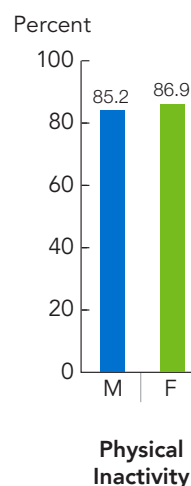
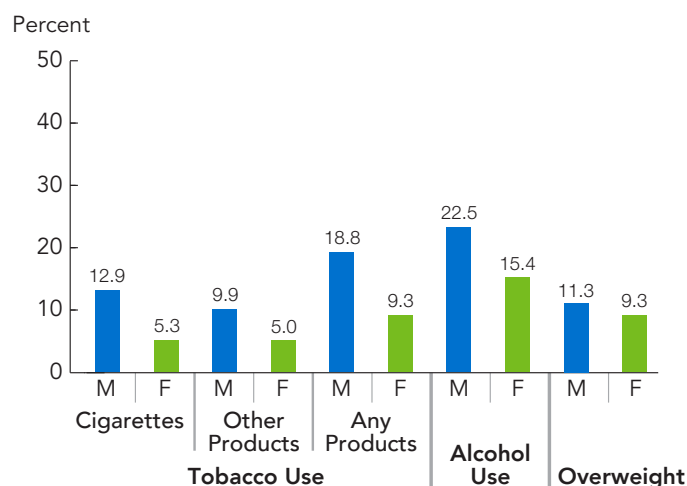
Tobacco Use: GYTS, 2011, ages 13-15, n=1,652

Alcohol Use: GSHS, 2007, ages 13-15, n=2,806

Overweight: GSHS, 2007, ages 13-15, n=2,806

Physical Inactivity: GSHS, 2007, ages 13-15, n=2,806

Philippines



Tobacco Use: GYTS, 2011, ages 13-15, n=3,708

Alcohol Use: GSHS, 2011, ages 13-15, n=5,290

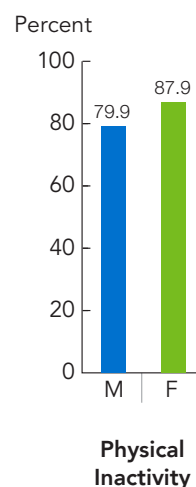
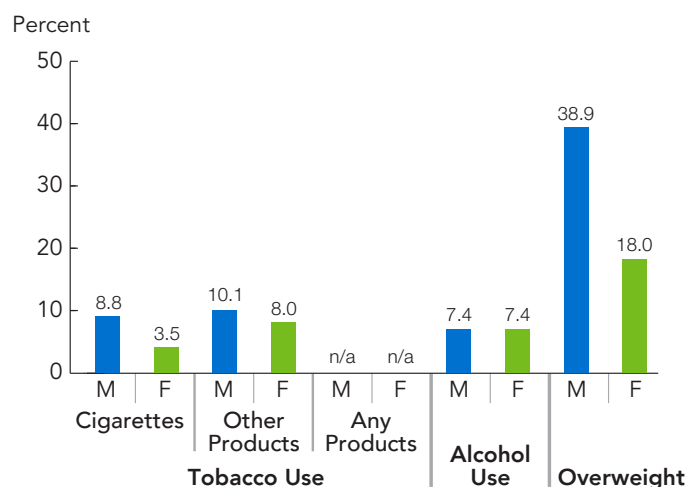
Overweight: GSHS, 2011, ages 13-15, n=5,290

Physical Inactivity: GSHS, 2011, ages 13-15, n=5,290

Data Appendix

SOUTHEAST ASIA

Singapore



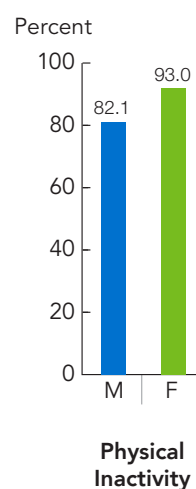
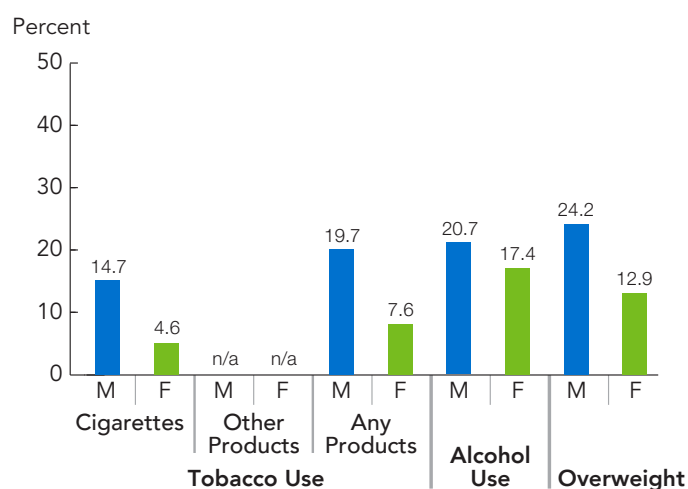
Tobacco Use: SHS, 2012, ages 13-16, sample size unknown

Alcohol Use: NHS, 2010, ages 18-29, n=789, defined as drinking alcohol on 1 or more days a week, household survey

Overweight: NHS, 2010, ages 18-29, n=789, BMI ≥ 25, household survey

Physical Inactivity: SHS, 2012, ages 13-16, sample size unknown

Thailand



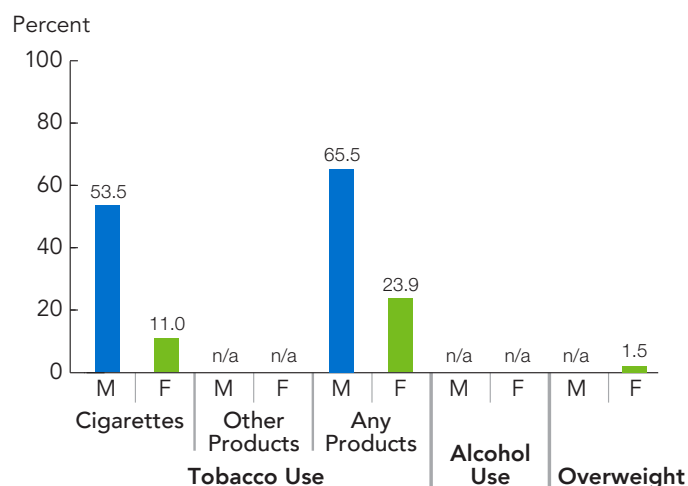
Tobacco Use: GSHS, 2015, ages 13-15, n=5,894

Alcohol Use: GSHS, 2015, ages 13-15, n=5,894

Overweight: GSHS, 2015, ages 13-15, n=5,894

Physical Inactivity: GSHS, 2015, ages 13-15, n=5,894, 7-day cut-off

Timor-Leste



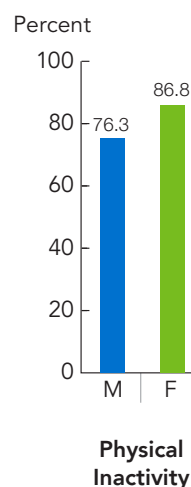
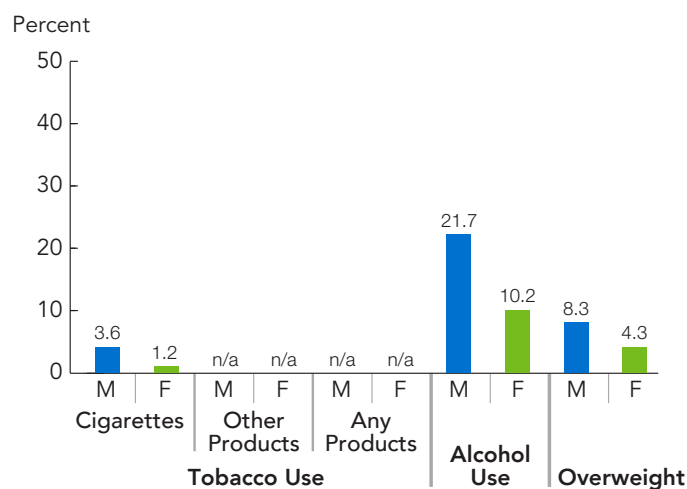
Tobacco Use: GYTS, 2013, ages 13-15, n=1,908

Alcohol Use: n/a

Overweight: DHS, 2009/10, ages 15-19, n=2,952, BMI ≥ 25, household survey

Physical Inactivity: n/a

Vietnam



Tobacco Use: GSHS, 2013, ages 13-15, n=3,331

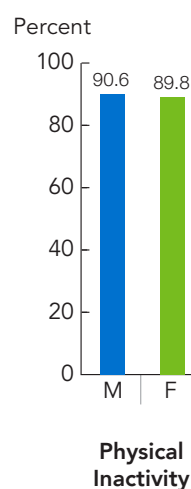
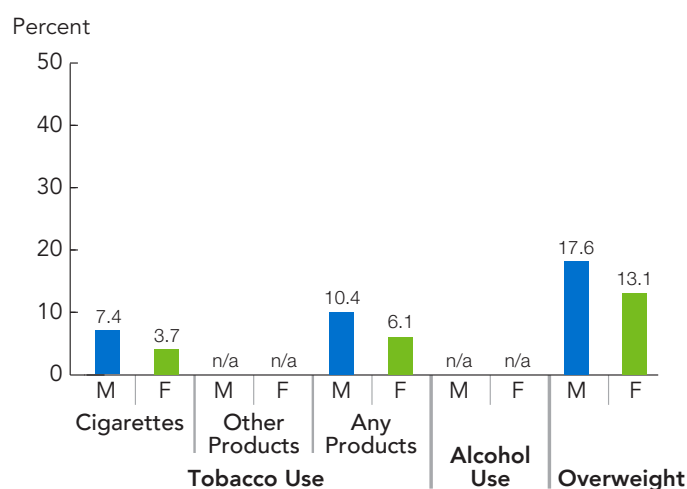
Alcohol Use: GSHS, 2013, ages 13-15, n=3,331

Overweight: GSHS, 2013, ages 13-15, n=3,331

Physical Inactivity: GSHS, 2013, ages 13-15, n=3,331

SOUTH ASIA

Afghanistan



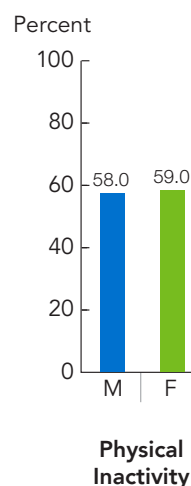
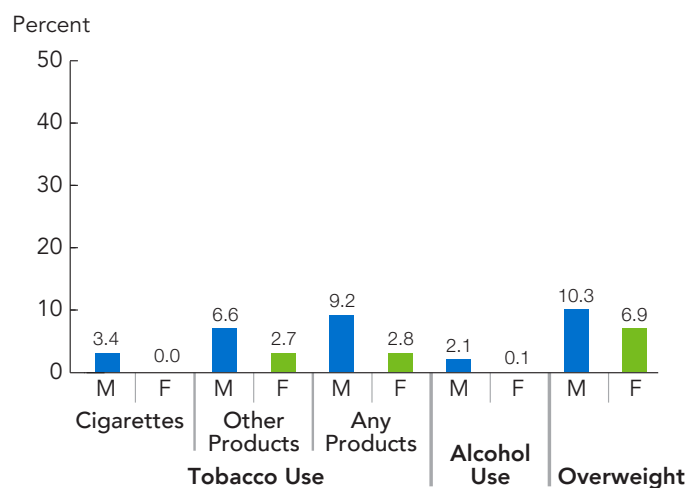
Tobacco Use: GSHS, 2014, ages 13-15, n=2,579

Alcohol Use: n/a

Overweight: GSHS, 2014, ages 13-15, n=2,579

Physical Inactivity: GSHS, 2014, ages 13-15, n=2,579, 7-day cut-off

Bangladesh



Tobacco Use: GYTS, 2013, ages 13-15, n=3,186

Alcohol Use: GSHS, 2014, ages 13-15, n=2,989

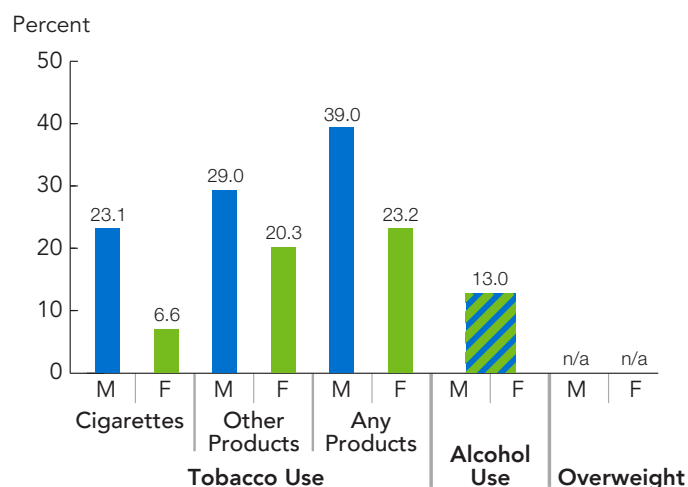
Overweight: GSHS, 2014, ages 13-15, n=2,989

Physical Inactivity: GSHS, 2014, ages 13-15, n=2,989, 7-day cut-off

Data Appendix

SOUTH ASIA

Bhutan



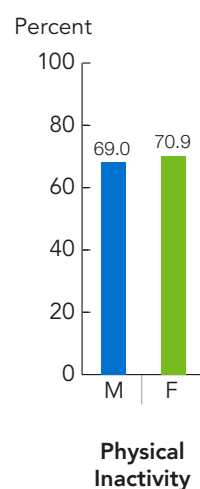
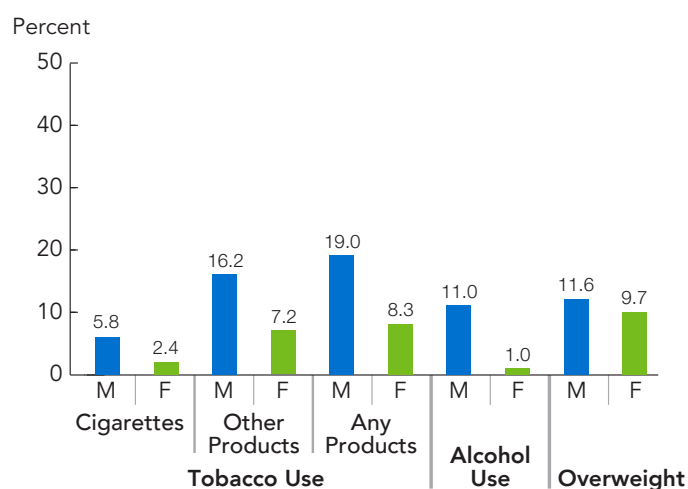
Tobacco Use: GYTS, 2013, ages 13-15, n=1,378

Alcohol Use*: [Thimphu], Norbu and Perngarn (2014), 2011, grades 7-12, n=423, no data by sex

Overweight: n/a

Physical Inactivity: n/a

India



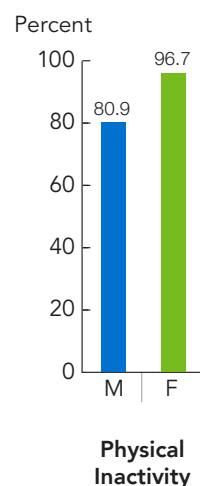
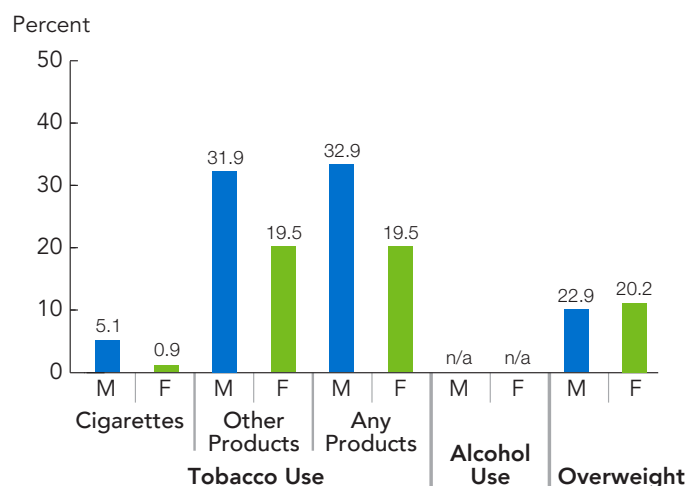
Tobacco Use: GYTS, 2009, ages 13-15, n=10,112

Alcohol Use: DHS, 2005/06, ages 15-19, n=37,819, no frequency specified, household survey

Overweight: GSHS, 2007, ages 13-15, n=8,130

Physical Inactivity: GSHS, 2007, ages 13-15, n=8,130, 7-day cut-off

Iran



Tobacco Use: GYTS, 2007, ages 13-15, n=1,153

Alcohol Use: n/a

Overweight: CASPIAN, 2011/12, ages 6-18, n=13,486

Physical Inactivity*: [Khoramabad] Sanaeinasab et al. (2013), no data year, ages 12-14, n=1,551, 7-day cut-off

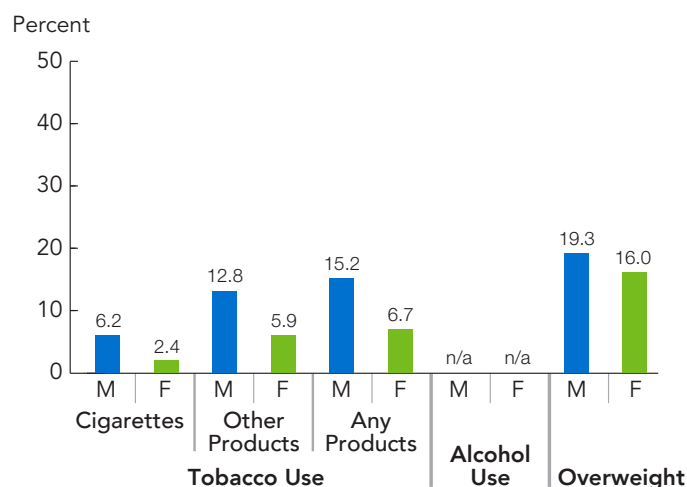
Maldives

Tobacco Use: GYTS, 2011, ages 13-15, n=1,494

Alcohol Use: n/a

Overweight: GSHS, 2014, ages 13-15, n=3,493

Physical Inactivity: n/a



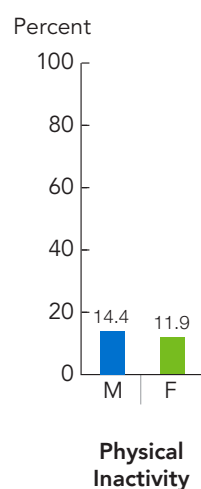
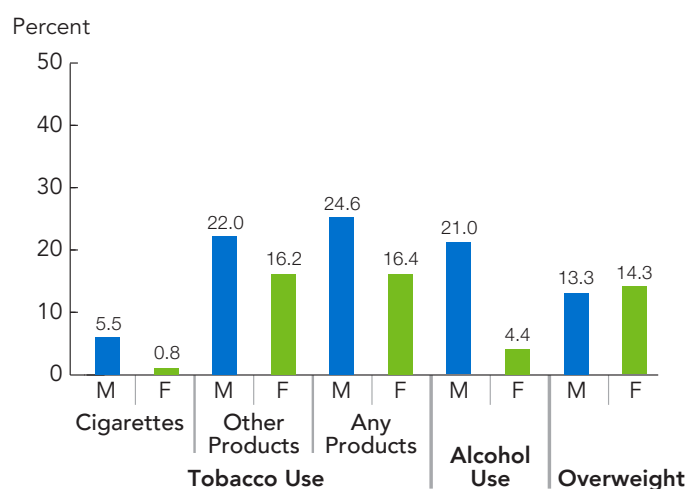
Nepal

Tobacco Use: GYTS, 2011, ages 13-15, n=1,602

Alcohol Use: STEPS-N, 2012/13, ages 15-29, n=972, household survey

Overweight: STEPS-N, 2012/13, ages 15-29, n=972, BMI ≥ 25 , household survey

Physical Inactivity: STEPS-N, 2012/13, ages 15-29, n=972, defined as not engaged in high-level physical activity using Global Physical Activity Questionnaire,⁵ household survey



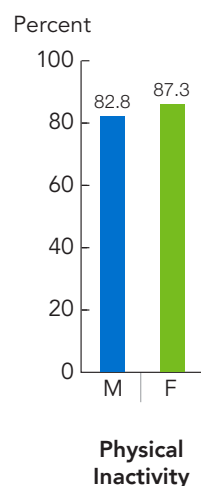
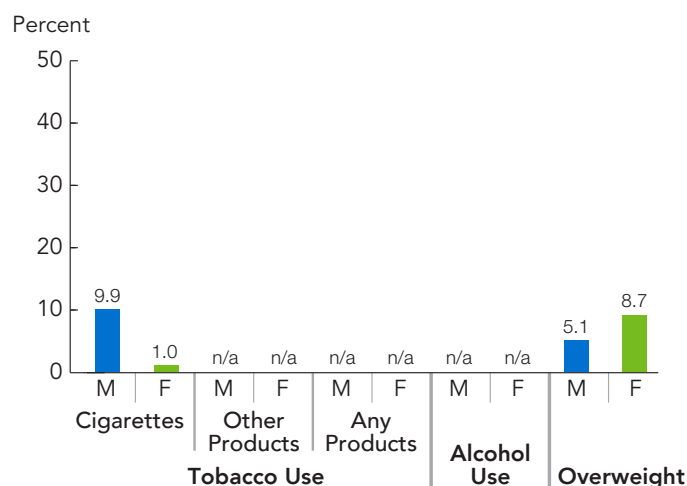
Pakistan

Tobacco Use: GSHS, 2009, ages 13-15, n=5,192

Alcohol Use: n/a

Overweight: GSHS, 2009, ages 13-15, n=5,192

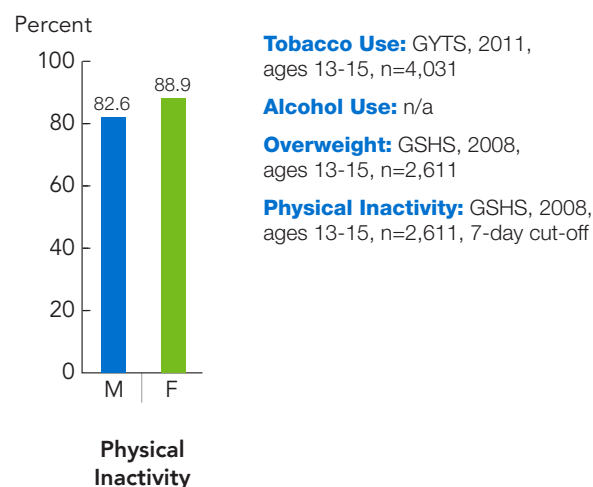
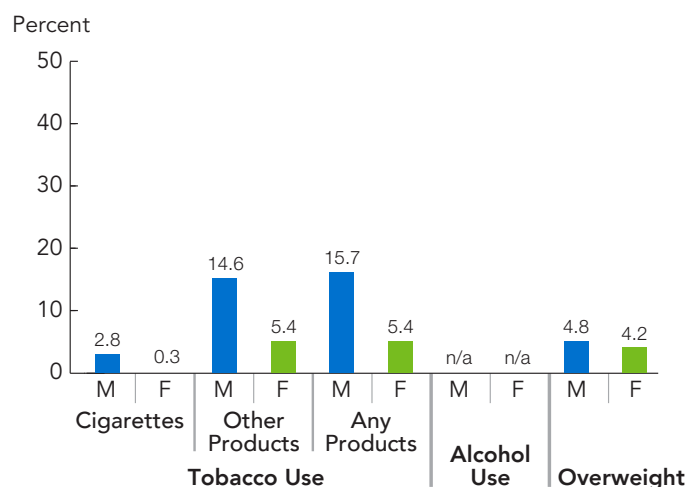
Physical Inactivity: GSHS, 2009, ages 13-15, n=5,192



Data Appendix

SOUTH ASIA

Sri Lanka



References

1. Cheng Ye Ji, "Report on Childhood Obesity in China (1)-Body Mass Index Reference for Screening Overweight and Obesity in Chinese School-Age Children," *Biomedical and Environmental Sciences* 18, no. 6 (2005): 390.
2. Tim J. Cole et al., "Establishing a Standard Definition for Child Overweight and Obesity Worldwide: International Survey," *BMJ* 320, no. 7244 (2000): 1240.
3. Ministry of Education, Culture, Sports, Science, and Technology, Japan, "The Nationwide Statistics of Physical Development for Japanese Children," (Tokyo: Printing Department of the Ministry of Finance, 1991) (in Japanese).
4. Jin Soo Moon et al., "2007 Korean National Growth Charts: Review of Developmental Process and an Outlook," *Korean Journal of Pediatrics* 51, no. 1 (2008): 1-25.
5. Ministry of Health and Population, Nepal, and WHO, "STEPwise Approach to Chronic Disease Risk Factor Surveillance Nepal" (2012/13), accessed at www.who.int/chp/steps/2012-13_Nepal_STEPS_Report.pdf?ua=1.

Data Sources

Multi-Country Surveys

- DHS** ICF International, Demographic and Health Surveys, accessed at <http://dhsprogram.com/>.
- GSHS** World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC), Global School-Based Student Health Survey, accessed at www.who.int/chp/gshs/en/.
- GYTS** WHO and CDC, Global Youth Tobacco Survey, accessed at www.who.int/tobacco/surveillance/gyts/en/.

Country-Specific Surveys

- CASPIAN** Ministry of Education and Training, Iran, Ministry of Health and Medical Education, Iran, Isfahan University of Medical Sciences, and Tehran University of Medical Sciences, Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease Study, (2011-12).
- [Results presented in] 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.
- CNSSCH** Ministries of Education, Health, Science, and Technology, People's Republic of China, State Ethnic Affairs Commission, and State Sports General Administration, Chinese National Survey on Students' Constitution and Health (2010).
- [Results presented in] Cheng Ye Ji, Tian Jiao Chen, and Working Group on Obesity in China, "Empirical Changes in the Prevalence of Overweight and Obesity Among Chinese Students From 1985 to 2010 and Corresponding Preventive Strategies," *Biomedical and Environmental Sciences* 26, no. 1 (2013): 1-12.
- HEACPFTC** Chinese University of Hong Kong Department of Sports Science and Physical Education, Community Sports Committee of Hong Kong, and Leisure and Cultural Services Department, Government of The Hong Kong Special Administrative Region, "Healthy Exercise for All Campaign—Physical Fitness Test for the Community Final Summary Report," (November 2012), accessed at www.lcsd.gov.hk/en/healthy/physical_fitness_test/common/physical_fitness_test/download/SummaryReport_en.pdf.
- KYRBWS** Ministry of Education, Korea, and Korea Centers for Disease Control and Prevention, Korea Youth Risk Behavior Web-Based Survey (2014), South Korea, accessed at <http://yhs.cdc.go.kr/new/?c=pds&s=1&gbn=viewok&sp=&sw=&ps=10&gp=1&ix=8> (in Korean).
- NHS** Ministry of Health, Singapore, Epidemiology & Disease Control Division, National Health Survey (2010), accessed at www.moh.gov.sg/content/moh_web/home/Publications/Reports/2011/national_health_survey2010.html.
- NPFHS** Ministries of Education and Health, People's Republic of China, and National Committee on Sports, National Physical Fitness and Health Surveillance.
- [Results presented in] Yi Song et al., Current Situation and Cause Analysis of Physical Activity in Chinese Primary and Middle School Students in 2010 (article in Chinese), *Beijing da xue xue bao. Yi xue ban, Journal of Peking University Health Sciences* 44, no. 3 (2012): 347-54.
- NSPACEH** Ministry of Education, Culture, Sports, Science, and Technology, Japan, National Survey Results of Physical and Athletic Capacity and Exercise Habit (2014), accessed at www.mext.go.jp/a_menu/sports/kodomo/zencyo/1353812.htm (in Japanese).
- SDUS** Narcotics Division, Security Bureau, Government of The Hong Kong Special Administrative Region, The 2014/15 Survey of Drug Use Among Students, accessed at www.nd.gov.hk/en/survey_of_drug_use_14-15.htm.
- SHS** Health Promotion Board, Government of Singapore, Students' Health Survey (2012), accessed at <https://ref.data.gov.sg/Metadata/SGMetadata.aspx?id=0414080000000014672H&mid=151139&t=TEXTUAL>.
- SRUSDS** Takashi Ohida et al., Survey Research on Underage Smoking and Drinking Situation (2012), accessed at www.med.nihon-u.ac.jp/departement/public_health/2012_CK_KI2.pdf (in Japanese).
- STEPS-N** Ministry of Health and Population, Nepal, and WHO, "STEPwise Approach to Chronic Disease Risk Factor Surveillance Nepal," (2012/13), accessed at www.searo.who.int/nepal/mediacentre/non_communicable_diseases_risk_factors_steps_survey_nepal_2013.pdf.

Other Country-Specific Studies

- Shijun Lu et al., "Drinking Patterns and the Association Between Socio-Demographic Factors and Adolescents' Alcohol Use in Three Metropolises in China," *International Journal of Environmental Research and Public Health* 12, no. 2 (2015): 2037-53.
- Tashi Norbu and Usaneya Perngparn, "Drugs and Alcohol Use by Secondary School Students in Thimphu, Bhutan," *Journal of Health Research* 28, no. 3 (2014): 173-82.
- 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.



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