

ADDENDORSTY & CARDIOVASCULAR DISEASE

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1. HOW WERE THE DATA SOURCES SELECTED FOR THIS REPORT?

Data sources were selected according to some key criteria. Primarily, sources needed to:

- a. Be well-utilized and reputable.
- b. Be based on robust methodology.
- c. Provide data according to sex, and country and/or region, urban/rural.

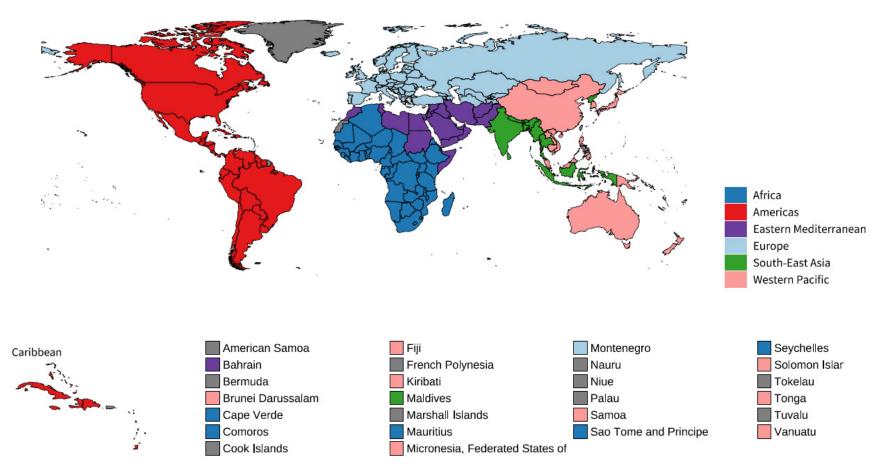
Among sources that met these criteria, those with the most complete and rich data (e.g. fewest gaps) were selected. In all cases, the most recent data available from the selected source was used.

Data on prevalence of overweight and obesity and mean BMI are from NCD Risk Factor Collaboration. Data on attributable mortality due to high-BMI are from the Global Burden of Disease.

2. GEOGRAPHICAL REGIONS CLASSIFICATION

Several different ways of grouping countries into regions exist. Three different classifications for global regions are used at different points in the report due to the need to draw from different data sets. These are noted where relevant—either in the text or figures—and include regional classification from the World Health Organization (WHO), the Global Burden of Disease , and from the NCD Risk Factor Collaboration (NCD-RisC).

2.1 WORLD HEALTH ORGANIZATION REGIONAL CLASSIFICATION



2.2 GLOBAL BURDEN OF DISEASE REGIONAL CLASSIFICATION

SUPER-REGION	REGION (COUNTRIES)
CENTRAL EUROPE, Eastern Europe, And Central Asia	Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan Central Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia, Belarus, Estonia, Latvia, Lithuania, Republic of Moldova, Russian Federation, Ukraine
HIGH-INCOME	Australasia: Australia, New Zealand High-Income Asia Pacific: Brunei Darussalam, Japan, Republic of Korea, Singapore High-Income North America: Canada, United States of America Southern Latin America: Argentina, Chile, Uruguay Western Europe: Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Greenland, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom
LATIN AMERICA And the caribbean	 Andean Latin America: Bolivia, Ecuador, Peru The Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States Virgin Islands Central Latin America: Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Venezuela Tropical Latin America: Brazil, Paraguay
SOUTH ASIA	South Asia: Bangladesh, Bhutan, India, Nepal, Pakistan

SUPER-REGION

REGION (COUNTRIES)

NORTH AFRICA AND MIDDLE EAST **North Africa and Middle East:** Afghanistan, Algeria, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, Turkey, United Arab Emirates, Yemen

SOUTHEAST ASIA, EAST Asia, and oceania

SUB-SAHARAN AFRICA

East Asia: China, Democratic People's Republic of Korea, Taiwan (Province of China)
Oceania: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu
Southeast Asia: Cambodia, Indonesia, Lao PDR, Malaysia, Maldives, Mauritius, Myanmar, Philippines, Seychelles, Sri Lanka, Thailand, Timor-Leste, Vietnam

Central Sub-Saharan Africa: Angola, Central African Republic, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon
 Eastern Sub-Saharan Africa: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Rwanda, Somalia, South Sudan, Uganda, United Republic of Tanzania, Zambia
 Western Sub-Saharan Africa: Benin, Burkina Faso, Cote d'Ivoire, Cabo Verde, Cameroon, Chad, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo Southern Sub-Saharan Africa: Botswana, Eswatini, Lesotho, Namibia, South Africa, Zimbabwe

2.3 NCD-RISC REGIONAL CLASSIFICATION

SUPER-REGION	REGION (COUNTRIES)
CENTRAL AND Eastern Europe	Central Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia Eastern Europe: Belarus, Estonia, Latvia, Lithuania, Moldova, Russian Federation, Ukraine
CENTRAL ASIA, MIDDLE East and North Africa	Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan Middle East and north Africa: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Tunisia, Türkiye, United Arab Emirates, Yemen
HIGH-INCOME WESTERN	High-income English-speaking countries: Australia, Canada, Ireland, New Zealand, United Kingdom, United States of America Northwestern Europe: Austria, Belgium, Denmark, Finland, Germany, Greenland, Iceland, Luxembourg, Netherlands, Norway, Sweden, Switzerland Southwestern Europe: Andorra, Cyprus, France, Greece, Israel, Italy, Malta, Portugal, Spain
LATIN AMERICA And the caribbean	Andean Latin America: Bolivia, Ecuador, Peru The Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago Central Latin America: Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Venezuela Southern Latin America: Argentina, Brazil, Chile, Paraguay, Uruguay

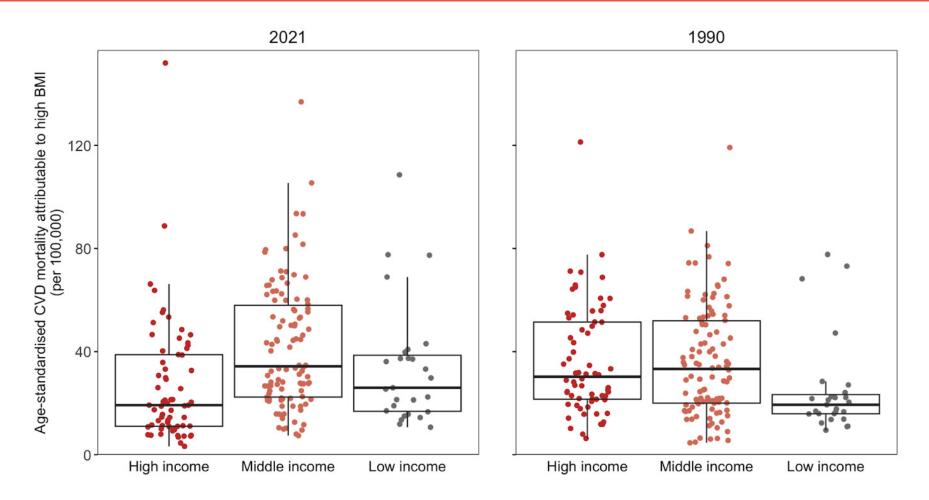
SUPER-REGION	REGION (COUNTRIES)			
OCEANIA	Melanesia: Fiji, Papua New Guinea, Solomon Islands, Vanuatu Polynesia and Micronesia: American Samoa, Cook Islands, French Polynesia, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Tokelau, Tonga, Tuvalu			
SOUTH ASIA	South Asia: Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka			
EAST AND SOUTHEAST Asia and the pacific	East Asia and the Pacific: China, Japan, Singapore, South Korea, Taiwan Southeast Asia: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Maldives, Myanmar, North Korea, Philippines, Thailand, Timor-Leste, Vietnam			
SUB-SAHARAN AFRICA	Central and southern Africa: Angola, Botswana, Central African Republic, Congo, DR Congo, Equatorial Guinea, Ga- bon, Namibia East Africa: Burundi, Comoros, Djibouti, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozam- bique, Rwanda, Somalia, South Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe West Africa: Benin, Burkina Faso, Cabo Verde, Cameroon, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo Other sub-Saharan Africa: Mauritius, Seychelles, South Africa			

3. WORLD HEALTH ORGANIZATION RECOMMENDATIONS FOR BODY MASS INDEX AND WAIST CIRCUMFERENCE CUT-OFF POINTS FOR OVERWEIGHT OR OBESITY, AND ASSOCIATION WITH DISEASE RISK

CLASSIFICATION	BODY MASS INDEX (KG/M²)	DISEASE RISK (RELATIVE TO NORMAL WEIGHT AND WAIST CIRCUMFERENCE)	
CAUCASIAN POPULATIONS		MEN <102 CM WOMEN <88 CM	MEN >102 CM WOMEN >88 CM
Underweight	<18.5	Very high	_
Healthy weight	18.5-24.9	-	High
Overweight	25.0-29.9	Increased	High
Obesity class I	30.0-34.9	High	Very high
Obesity class II (morbid obesity)	35.0-39.9	Very high	Very high
Obesity class III (severe obesity)	≥40.0	Extremely high	Extremely high
SOUTH ASIAN, CHINESE AND JAPANESE POPULATIONS		MEN <102 CM WOMEN <88 CM	MEN >102 CM WOMEN >88 CM
Underweight	<18.5	Low (increased risk of other clinical problems)	Average
Healthy weight	18.5-22.9	Average	Increased
Overweight (at risk)	23.0-24.9	Increased	Moderate
Obesity class I	25.0-29.9	Moderate	Severe
Obesity class II	≥30.0	Severe	Very Severe

Source: https://academic.oup.com/eurjpc/article/29/17/2218/6675714

4. APPENDIX FIGURE 1 – AGE-STANDARDISED CVD MORTALITY ATTRIBUTABLE TO HIGH BMI BY INCOME LEVELS, FOR BOTH SEXES COMBINED.



Source: Institute for Health Metrics and Evaluation.

Note: Country income level groups based on World Bank 2021.