



**THE STATE OF
CARDIOVASCULAR
DISEASE IN G20+
COUNTRIES**

PREPARED BY
HEALTH SYSTEMS INNOVATION LAB
AT HARVARD UNIVERSITY



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Appendix

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Appendix A

I. Review Method

Epidemiology category

We obtained data related to cardiovascular disease (CVD) prevalence, incidence, mortality, morbidity rank, disability adjusted life years, years of life lost, years lived with disability from *the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD)*.

Health system performance category

Amenable mortality due to CVD, avoidable hospital admission, cost-related adherence to medication, direct costs of CVD, economic costs of CVD, efficiency, equity

We searched Pubmed on October 7, 2021 without imposing any language restriction. We applied date restriction from 2000 to present and included only published articles. We retrieved and screened against pre-specified eligibility criteria a total of 6,559 records after duplicate removal and excluded 5,994 of these records. We screened 565 full-text reports, excluded 106. Overall, we included 459 studies and select some of those to present in the report by considering appropriateness in terms of the sample size, study design, and date of which those studies were conducted. All of these steps were done by one reviewer.

Primary and secondary preventive care

We searched Pubmed on October 7, 2021 without imposing any language restriction. We applied date restriction from 2000 to present and included only published articles. We retrieved and screened against pre-specified eligibility criteria a total of 1,413 records after duplicate removal and excluded 3,576 of these records. We screened 260 full-text reports, excluded 33. Overall, we included 227 studies and select some of those to present in the report by considering appropriateness in terms of the sample size, study design, and date of which those studies were conducted. All of these steps were done by one reviewer.

Indicators related to quality of acute care and avoidable hospital admission

We obtained data related to quality of acute care and avoidable hospital admission from the *OECD statistics 2020*.

II. Search Strategy – Pubmed

Amenable mortality due to CVD, avoidable hospital admission, cost-related adherence to medication, direct costs of CVD, economic costs of CVD, efficiency, equity

- #1 "Cardiovascular Diseases"[Mesh]
- #2 cardiovascular disease*[tw] OR CVD*[tw] OR myocardial ischemia*[tw] OR ischemic heart disease*[tw] OR "myocardial infarction"[tw] OR acute coronary syndrome*[tw] OR "ACS"[tw] OR "STEM"[tw] OR "coronary artery disease"[tw] OR myocardial reperfusion injur*[tw] OR "angina pectoris"[tw] OR "hypertension"[tw] OR "high blood pressure"[tw] OR stroke*[tw] OR cerebral infarction*[tw] OR brain infarction*[tw] OR cerebrovascular disease*[tw] OR cerebrovascular accident*[tw] OR "CVA"[tw] OR heart failure*[tw] OR heart decompensation*[tw] OR myocardial failure*[tw]
- #3 (#1 OR #2)
- #4 Avoidable hospital admission*[tw] OR avoidable admission*[tw] OR avoidable readmission*[tw] OR avoidable mortalit*[tw] OR avoidable death*[tw] OR amenable mortalit*[tw] OR amenable death*[tw] OR out-of-pocket*[tw] OR financial hardship*[tw] OR financial toxicit*[tw] OR "medication adherence"[Mesh] OR "Cost-Related Medication Nonadherence"[tw] OR "Cost-Related Medication Non-adherence"[tw] OR "Cost-related non-adherence"[tw] OR "Cost-related Nonadherence"[tw] OR income disparit*[tw] OR "Efficiency/statistics and numerical data"[Mesh] OR technical efficien*[tw] OR "Health Expenditures/statistics and numerical data"[Mesh] OR health expenditure*[tw] OR direct expenditure*[tw] OR indirect expenditure*[tw] OR direct cost*[tw] OR indirect cost*[tw] OR health care cost*[tw]
- #5 "Organisation for Economic Co-Operation and Development"[Mesh] OR "Austria"[Mesh] OR "Belgium"[Mesh] OR "Czech Republic"[Mesh] OR "Costa rica"[Mesh] OR "Denmark"[Mesh] OR "Estonia"[Mesh] OR "Finland"[Mesh] OR "France"[Mesh] OR "Germany"[Mesh] OR "Greece"[Mesh] OR "Hungary"[Mesh] OR "Iceland"[Mesh] OR "Ireland"[Mesh] OR "Italy"[Mesh] OR "Latvia"[Mesh] OR "Lithuania"[Mesh] OR "Luxembourg"[Mesh] OR "Netherlands"[Mesh] OR "Norway"[Mesh] OR "Poland"[Mesh] OR "Portugal"[Mesh] OR "Slovakia"[Mesh] OR "Slovenia"[Mesh] OR "Spain"[Mesh] OR "Sweden"[Mesh] OR "Switzerland"[Mesh] OR "United Kingdom"[Mesh] OR "Canada"[Mesh] OR "Chile"[Mesh] OR "Colombia"[Mesh] OR "Mexico"[Mesh] OR "United States"[Mesh] OR "Australia"[Mesh] OR "Japan"[Mesh] OR "Republic of Korea"[Mesh] OR "New Zealand"[Mesh] OR "Israel"[Mesh] OR "Turkey"[Mesh] OR "Saudi Arabia"[Mesh] OR "South Africa"[Mesh] OR "Russia"[Mesh] OR "India"[Mesh] OR "Indonesia"[Mesh] OR "China"[Mesh] OR "Brazil"[Mesh] OR "Argentina"[Mesh] OR "United Arab Emirates"[Mesh]
- #6 "OECD"[tw] OR "Austria"[tw] OR "Belgium"[tw] OR "Czech Republic"[tw] OR "Costa rica"[tw] OR "Denmark"[tw] OR "Estonia"[tw] OR "Finland"[tw] OR "France"[tw] OR "Germany"[tw] OR "Greece"[tw] OR "Hungary"[tw] OR "Iceland"[tw] OR "Ireland"[tw] OR "Italy"[tw] OR "Latvia"[tw] OR "Lithuania"[tw] OR "Luxembourg"[tw] OR "Netherlands"[tw] OR "Norway"[tw]

OR "Poland"[tw] OR "Portugal"[tw] OR "Slovak Republic"[tw] OR "Slovenia"[tw] OR "Spain"[tw]
OR "Sweden"[tw] OR "Switzerland"[tw] OR "United Kingdom"[tw] OR "Canada"[tw] OR
"Chile"[tw] OR "Colombia"[tw] OR "Mexico"[tw] OR "United States"[tw] OR "Australia"[tw] OR
"Japan"[tw] OR "Republic of Korea"[tw] OR "New Zealand"[tw] OR "Israel"[tw] OR "Turkey"[tw]
OR "Saudi Arabia"[tw] OR "South Africa"[tw] OR "Russia"[tw] OR "India"[tw] OR "Indonesia"[tw]
OR "China"[tw] OR "Brazil"[tw] OR "Argentina"[tw] OR "United Arab Emirates"[tw] OR "Abu
Dhabi"[tw]

#7 (#5 OR #6)

#8 (#3 AND #4 AND #7)

Primary and secondary preventive care

#1 "Cardiovascular Diseases"[Mesh]

#2 cardiovascular disease*[tw] OR CVD*[tw] OR myocardial ischemia*[tw] OR ischemic heart
disease*[tw] OR "myocardial infarction"[tw] OR acute coronary syndrome*[tw] OR "ACS"[tw]
OR "STEM"[tw] OR "coronary artery disease"[tw] OR myocardial reperfusion injur*[tw] OR
"angina pectoris"[tw] OR "hypertension"[tw] OR "high blood pressure"[tw] OR stroke*[tw] OR
cerebral infarction*[tw] OR brain infarction*[tw] OR cerebrovascular disease*[tw] OR
cerebrovascular accident*[tw] OR "CVA"[tw] OR heart failure*[tw] OR heart
decompensation*[tw] OR myocardial failure*[tw]

#3 (#1 OR #2)

#4 "Practice Patterns, Physicians'/statistics and numerical data"[Mesh] OR "Primary
Prevention"[Mesh] OR "Secondary Prevention"[Mesh] OR "Drug Prescriptions/statistics and
numerical data"[Mesh]

#5 "Hypolipidemic Agents"[Mesh] OR "Adrenergic beta-Antagonists"[Mesh] OR "Aspirin"[Mesh]

#6 statin prescri*[tw] OR LLD prescri*[tw] OR lipid lowering drug prescri*[tw] OR lipid-
lowering drug prescri*[tw] OR ASA prescri*[tw] OR aspirin prescri*[tw] OR beta-blocker
prescri*[tw]

#7 (#5 OR #6)

#8 "Organisation for Economic Co-Operation and Development"[Mesh] OR "Austria"[Mesh] OR
"Belgium"[Mesh] OR "Czech Republic"[Mesh] OR "Costa rica"[Mesh] OR "Denmark"[Mesh] OR
"Estonia"[Mesh] OR "Finland"[Mesh] OR "France"[Mesh] OR "Germany"[Mesh] OR
"Greece"[Mesh] OR "Hungary"[Mesh] OR "Iceland"[Mesh] OR "Ireland"[Mesh] OR "Italy"[Mesh]
OR "Latvia"[Mesh] OR "Lithuania"[Mesh] OR "Luxembourg"[Mesh] OR "Netherlands"[Mesh] OR
"Norway"[Mesh] OR "Poland"[Mesh] OR "Portugal"[Mesh] OR "Slovakia"[Mesh] OR
"Slovenia"[Mesh] OR "Spain"[Mesh] OR "Sweden"[Mesh] OR "Switzerland"[Mesh] OR "United

Kingdom"[Mesh] OR "Canada"[Mesh] OR "Chile"[Mesh] OR "Colombia"[Mesh] OR "Mexico"[Mesh] OR "United States"[Mesh] OR "Australia"[Mesh] OR "Japan"[Mesh] OR "Republic of Korea"[Mesh] OR "New Zealand"[Mesh] OR "Israel"[Mesh] OR "Turkey"[Mesh] OR "Saudi Arabia"[Mesh] OR "South Africa"[Mesh] OR "Russia"[Mesh] OR "India"[Mesh] OR "Indonesia"[Mesh] OR "China"[Mesh] OR "Brazil"[Mesh] OR "Argentina"[Mesh] OR "United Arab Emirates"[Mesh]

#9 "OECD"[tw] OR "Austria"[tw] OR "Belgium"[tw] OR "Czech Republic"[tw] OR "Costa rica"[tw] OR "Denmark"[tw] OR "Estonia"[tw] OR "Finland"[tw] OR "France"[tw] OR "Germany"[tw] OR "Greece"[tw] OR "Hungary"[tw] OR "Iceland"[tw] OR "Ireland"[tw] OR "Italy"[tw] OR "Latvia"[tw] OR "Lithuania"[tw] OR "Luxembourg"[tw] OR "Netherlands"[tw] OR "Norway"[tw] OR "Poland"[tw] OR "Portugal"[tw] OR "Slovak Republic"[tw] OR "Slovenia"[tw] OR "Spain"[tw] OR "Sweden"[tw] OR "Switzerland"[tw] OR "United Kingdom"[tw] OR "Canada"[tw] OR "Chile"[tw] OR "Colombia"[tw] OR "Mexico"[tw] OR "United States"[tw] OR "Australia"[tw] OR "Japan"[tw] OR "Republic of Korea"[tw] OR "New Zealand"[tw] OR "Israel"[tw] OR "Turkey"[tw] OR "Saudi Arabia"[tw] OR "South Africa"[tw] OR "Russia"[tw] OR "India"[tw] OR "Indonesia"[tw] OR "China"[tw] OR "Brazil"[tw] OR "Argentina"[tw] OR "United Arab Emirates"[tw] OR "Abu Dhabi"[tw]

#10 (#5 OR #6)

#11 (#3 AND #4 AND #7 AND #10)

III. CVD in the context of COVID-19: Characteristics of included studies

Direct costs of cardiovascular disease

Reference	Country	Definition	Year	Original currency	Exchange rate
Direct costs of cardiovascular disease					
Waters et al. (2013)	Australia	Personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2008	AUD	2008 ^a
Stevens et al. (2018)	Brazil	Personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2015	BRL	2015 ^a
Zhai et al. (2006)	China	Only personal health care for CVD (outpatient visits, physician services, inpatient stays, rehabilitation services, nurses fees, and medications).	2003	RMB	2003 ^a
OECD/The King's Fund (2020)	European Union	Only personal health care for CVD (Medications, primary care, outpatient care, acute and emergency, and inpatient care)	2015	EUR	2015 ^a
OECD Health Statistics 2020	Germany	Personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2008	EUR	2008 ^a
Matsumoto et al. (2017)	Japan	“Organizing and operating costs within the health sector, out-of-pocket expenses, patient and family input into treatment, and cost for long-term care estimated by public health insurance data and long-term care insurance data.”	2014	JPY	2014 ^a
OECD Health Statistics 2020	Korea	Personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2009	KRW	2009 ^a
Stevens et al. (2018B)	Mexico	Only personal health care for CVD (hospital care, unclear for other components)	2015	MXN	2015 ^a
Bhatnagar et al. (2015)	United Kingdom	Direct costs of cardiovascular disease include personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2012	GBP	2012 ^a

Benjamin EJ et al. (2019)	United States	Personal health care for CVD (curative care, long-term care, medical goods, rehabilitative care, and ancillary services) and collective services for CVD (prevention and public health services and health administration), but excluding spending on investments for CVD.	2019	USD	n/a
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^a Exchange rates obtained from OECD (2022), Exchange rates (indicator). doi: 10.1787/037ed317-en (Accessed on 03 December 2021).

Direct costs of ischemic heart disease

Reference	Country	Definition	Year	Original currency	Exchange rate
Direct costs of ischemic heart disease					
Zhai et al. (2006)	China	Direct medical costs including costs for outpatient visits, physician services, inpatient stays, rehabilitation services, nurses fees, and medications	2003	RMB	2003 ^a
Taylor et al. (2007)	France	Drug costs, investigation costs, revascularization costs, ward and paramedic costs	2004	EUR	2004 ^a
Taylor et al. (2007)	Germany	Drug costs, investigation costs, revascularization costs, ward and paramedic costs	2004	EUR	2004 ^a
Taylor et al. (2007)	Italy	Drug costs, investigation costs, revascularization costs, ward and paramedic costs.	2004	EUR	2004 ^a
Gochi et al. (2018)	Japan	“A medical cost directly related to the disease and includes costs associated with treatment, hospitalization, laboratory investigations, and drugs.”	2016	JPY	2016 ^a
Seo et al. (2015)	Korea	“Acute myocardial infarction medical costs were divided into three categories: health insurance costs, out-of-pocket medical expenses and drugs.”	2016	USD	n/a
Stevens et al. (2018B)	Mexico	Only personal health care for CVD (hospital care, unclear for other components)	2015	MXN	2015 ^a
Taylor et al. (2007)	Spain	Drug costs, investigation costs, revascularization costs, ward and paramedic costs.	2004	EUR	2004 ^a
Taylor et al. (2007)	United Kingdom	Drug costs, investigation costs, revascularization costs, ward and paramedic costs.	2004	EUR	2004 ^a
Bishu et al. (2020)	United States	“Total direct medical expenditure, inpatient hospital expenditure, outpatient expenditure, emergency room expenditure, prescription medicine expenditure, home health care expenditure, dental expenditure, and other medical expenses”	2016	USD	n/a

^a Exchange rates obtained from OECD (2022), Exchange rates (indicator). doi: 10.1787/037ed317-en (Accessed on 03 December 2021).

Primary cardiovascular disease prevention

Reference	Country	Study year	N	Participant	Setting	National representative
You et al. (2019)	Australia	2010 to 2015	5,107	Participants aged 45 to 69 years	The City of Busselton, Western Australia	No
Liu et al. (2020)	China	January 2012 to December 2018	1,083	Participants aged 18 years	Jinshan Hospital, Fudan University, Shanghai, China	No
Maggioni et al. (2017)	Italy	2011 to 2014	2,989,512	Population with available administrative data from 2011 to 2014	ARNO Observatory, a population-based patient-centric database capturing local Health Units well representing the whole Italian country	Yes
Urbonas et al. (2020)	Lithuania	2016 to 2017	201	Adult aged 18 to 80 years old people without a documented cardiovascular disease	“Two primary health care centers: the Clinic of Family Medicine at the Hospital of the Lithuanian University of Health Sciences Kauno Klinikos (Kaunas) and the Center of Family Medicine at the Vilnius University Hospital Santaros Klinikos (Vilnius).	No
Kleipool et al. (2019)	Netherlands	2011 to 2015	244,328	Adults aged ≥ 70 years	General practice-based setting, electronic health records of 415 Dutch general practices	Yes
Bupha-Intr et al. (2010)	New Zealand	Not reported	1,089	Women aged 40 to 74 years	Primary care office-based setting	No
Karlsson et al. (2018)	Sweden	2007 to 2014	322,046	Participants with type 2 diabetes aged ≥ 18 years	“Primary and secondary care clinic-based setting: Swedish National Diabetes Register which include 90% of all Swedish patients with type 2 diabetes age 18 or older”	No
Turner et al. (2016)	United Kingdom	January 2009 to December 2013	29,043	Participants aged 18 years and over	Primary care office-based setting, covering 6% of the UK population	No
Kumar et al. (2009)	United States	2003 to 2004	25,686	Participants aged ≥ 45 years with either established atherothrombotic disease (n = 19,069) or $>$ or =3 atherosclerosis risk factors (n = 6617)	“Primary care office-based setting in the United States, a total of 1599 sites were selected to participate. The sites spanned all US Census Regions, including the Northeast (ME, NH, VT, MA, RI, CT, NY, NJ, PA), Midwest (OH, IN, IL, MI, WI, MN, IA,	No

					MO, ND, SK, NE, KS), South (DE, MD, DC, VA, WV, NC, SC, GA, FL, KY, TN, AL, MS, AR, LA, OK, TX), and West (MT, ID, WY, CO, NM, AZ, UT, NV, WA, OR, CA, AK, HI)."	
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Appendix B: Top 10 Tables of G20+ countries

Prevalence

Table 1: Age-Standardized Prevalence of Cardiovascular Disease

Position	Country	Prevalence (Cases per 100,000 population)
1	European Union	11646.7
2	Saudi Arabia	7917.0
3	United States of America	7617.1
4	Italy	7499.4
5	Russia	7452.5
6	Canada	6798.8
7	South Africa	6740.3
8	Australia	6478.0
9	Turkey	6240.8
10	China	6176.8

Table 2: Age-Standardized Prevalence of Ischemic Heart Disease

Position	Country	Prevalence (Cases per 100,000 population)
1	Saudi Arabia	5229.0
2	European Union	3998.3
3	Russia	3577.3
4	India	3471.8
5	Turkey	3227.0
6	Australia	2930.3
7	China	2322.7
8	South Africa	2153.9
9	Mexico	2038.6
10	Italy	2032.3

Table 3: Age-Standardized Prevalence of Stroke

Position	Country	Prevalence (Cases per 100,000 population)
1	Indonesia	2097.2
2	Saudi Arabia	1967.7
3	China	1468.9
4	European Union	1428.2
5	South Africa	1413.4
6	United States of America	1388.6
7	Japan	1375.9
8	Russia	1365.7
9	Brazil	1256.6
10	Turkey	1213.6

Table 4: Age-Standardized Prevalence of Hypertensive Heart Disease

Position	Country	Prevalence (Cases per 100,000 population)
1	Indonesia	451.9
2	China	433.5
3	European Union	319.4
4	Turkey	313.1
5	United States of America	274.3
6	Italy	272.5
7	Brazil	171.5
8	South Africa	166.1
9	Germany	160.3
10	Argentina	159.6

Incidence

Table 5: Age-Standardized Incidence of Cardiovascular Disease

Position	Country	Incidence (Cases per 100,000 population)
1	European Union	1149.2
2	Russia	986.9
3	Saudi Arabia	978.4
4	India	761.3
5	Australia	721.5
6	Italy	718.8
7	United States of America	693.5
8	South Africa	677.8
9	Turkey	663.0
10	China	652.2

Table 6: Age-Standardized Incidence of Ischemic Heart Disease

Position	Country	Incidence (Cases per 100,000 population)
1	Saudi Arabia	612.6
2	Russia	470.1
3	European Union	433.1
4	India	427.4
5	Australia	360.3
6	Turkey	325.5
7	South Africa	244.2
8	Germany	242.9
9	Italy	241.1
10	China	197.4

Table 7: Age-Standardized Incidence of Stroke

Position	Country	Incidence (Cases per 100,000 population)
1	Indonesia	293.3
2	China	200.8
3	Russia	198.1
4	Saudi Arabia	193.9
5	European Union	164.0
6	South Africa	162.0
7	Japan	145.8
8	Turkey	145.6
9	Brazil	127.0
10	India	110.7

Age-Standardized Incidence of Hypertensive Heart Disease

*Data unavailable

Mortality

Table 8: Age-Standardized Mortality of Cardiovascular Disease

Position	Country	Mortality (Deaths per 100,000 population)
1	Russia	432.9
2	European Union	389.4
3	Indonesia	383.3
4	Saudi Arabia	332.1
5	China	276.9
6	India	256.4
7	South Africa	222.7
8	Turkey	217.5
9	Argentina	183.9
10	Brazil	175.7

Table 9: Age-Standardized Mortality of Ischemic Heart Disease

Position	Country	Mortality (Deaths per 100,000 population)
1	Russia	240.6
2	Saudi Arabia	205.6
3	European Union	189.1
4	India	150.5
5	Indonesia	140.3
6	Turkey	121.0
7	China	116.4
8	Mexico	100.0
9	United States of America	91.0
10	Argentina	82.1

Table 10: Age-Standardized Mortality of Stroke

Position	Country	Mortality (Deaths per 100,000 population)
1	Indonesia	196.7
2	Russia	139.8
3	China	127.2
4	European Union	104.1
5	Saudi Arabia	102.7
6	South Africa	80.6
7	India	69.5
8	Turkey	60.6
9	Brazil	58.1
10	Argentina	47.3

Table 11: Age-Standardized Mortality of Hypertensive Heart Disease

Position	Country	Mortality (Deaths per 100,000 population)
1	South Africa	34.3
2	Indonesia	30.8
3	European Union	28.3
4	Turkey	20.7
5	China	20.6
6	Argentina	14.8
7	Germany	14.2
8	Italy	13.9
9	Brazil	13.4
10	India	12.1

DALYs

Table 12: Age-Standardized DALYs of Cardiovascular Disease

Position	Country	DALYs per 100,000 population
1	Russia	8476.9
2	Indonesia	7777.6
3	Saudi Arabia	6899.2
4	India	5587.4
5	China	4938.4
6	South Africa	4290.4
7	Turkey	3982.9
8	Brazil	3769.7
9	Argentina	3496.1
10	United States of America	3220.5

Table 13: Age-Standardized DALYs of Ischemic Heart Disease

Position	Country	DALYs per 100,000 population
1	Russia	4300.7
2	Saudi Arabia	4221.8
3	India	3201.4
4	Indonesia	2809.4
5	Turkey	2128.4
6	China	1885.9
7	Mexico	1754.7
8	United States of America	1629.4
9	Brazil	1563.3
10	South Africa	1486.7

Table 14: Age-Standardized DALYs of Stroke

Position	Country	DALYs per 100,000 population
1	Indonesia	4007.6
2	Russia	2601.3
3	China	2412.5
4	Saudi Arabia	2114.9
5	South Africa	1567.9
6	India	1505.3
7	Brazil	1219.6
8	Turkey	1162.6
9	Argentina	1004.9
10	Korea	860.4

Table 15: Age-Standardized DALYs of Hypertensive Heart Disease

Position	Country	DALYs per 100,000 population
1	Indonesia	575.8
2	South Africa	574.4
3	China	312.9
4	Turkey	292.7
5	Brazil	239.8
6	Argentina	221.5
7	United States of America	212.2
8	India	211.9
9	Italy	173.1
10	Germany	166.2

YLLs

Table 16: Age-Standardized YLLs of Cardiovascular Disease

Position	Country	YLLs per 100,000 population
1	Russia	8003.4
2	Indonesia	7144.3
3	Saudi Arabia	6410.4
4	India	5300.5
5	China	4393.8
6	South Africa	3867.7
7	Turkey	3611.6
8	Brazil	3454.4
9	Argentina	3214.9
10	United States of America	2763.3

Table 17: Age-Standardized YLLs of Ischemic Heart Disease

Position	Country	YLLs per 100,000 population
1	Russia	4218.3
2	Saudi Arabia	4119.0
3	India	3146.5
4	Indonesia	2735.1
5	Turkey	2060.9
6	China	1791.6
7	Mexico	1694.7
8	United States of America	1577.7
9	Brazil	1500.6
10	South Africa	1435.1

Table 18: Age-Standardized YLLs of Stroke

Position	Country	YLLs per 100,000 population
1	Indonesia	3582.1
2	Russia	2333.3
3	China	2097.7
4	Saudi Arabia	1815.5
5	India	1391.6
6	South Africa	1360.3
7	Brazil	1098.7
8	Turkey	971.3
9	Argentina	888.0
10	Korea	648.5

Table 19: Age-Standardized YLLs of Hypertensive Heart Disease

Position	Country	YLLs per 100,000 population
1	South Africa	561.0
2	Indonesia	539.3

3	China	277.7
4	Turkey	267.2
5	Brazil	225.9
6	Argentina	208.5
7	India	203.4
8	United States of America	190.2
9	Germany	153.2
10	Italy	151.2

YLDs

Table 20: Age-Standardized YLDs of Cardiovascular Disease

Position	Country	YLDs per 100,000 population
1	Indonesia	633.3
2	China	544.5
3	Saudi Arabia	488.8
4	Russia	473.5
5	United States of America	457.2
6	South Africa	422.7
7	Canada	392.4
8	Turkey	371.3
9	Japan	354.6
10	European Union	321.7

Table 21: Age-Standardized YLDs of Ischemic Heart Disease

Position	Country	YLDs per 100,000 population
1	Saudi Arabia	102.8
2	China	94.3
3	Russia	82.4
4	Indonesia	74.3
5	Turkey	67.5
6	Brazil	62.7
7	Mexico	59.9
8	India	54.9
9	European Union	54.6
10	United States of America	51.7

Table 22: Age-Standardized YLDs of Stroke

Position	Country	YLDs per 100,000 population
1	Indonesia	425.6
2	China	314.8
3	Saudi Arabia	299.4
4	Russia	268.0

5	Japan	247.0
6	Korea	211.9
7	United States of America	210.1
8	South Africa	207.5
9	Turkey	191.2
10	Canada	154.2

Table 23: Age-Standardized YLDs of Hypertensive Heart Disease

Position	Country	YLDs per 100,000 population
1	Indonesia	36.5
2	China	35.2
3	Turkey	25.5
4	United States of America	22.0
5	Italy	21.9
6	Brazil	13.9
7	South Africa	13.4
8	Argentina	12.99
9	Germany	12.97
10	Mexico	11.2